BROWNFIELD SOLUTIONS LTD

GEO-ENVIRONMENTAL ENGINEERING EXCELLENCE

ASK REAL ESTATE MBP LIMITED

Manchester Business Park, Aviator Way

Phase II Geo-Environmental Assessment Report

BW/C6035/14972

January 2026

EXECUTIVE SUMMARY	
Location and Brief Site Description	The site is located off Aviator Way, Manchester, M22 1TG, centred on National Grid Reference 382633, 385614 The Site comprises undeveloped grassland.
Ground Conditions	Generalised ground conditions from the ground investigation comprise (top down): • Topsoil or made ground-type topsoil to between 0.20m and 0.50m bgl. • Made ground generally comprising clay with anthropogenic inclusions of brick to a maximum depth ranging from 0.75m to 1.40m bgl. Made ground was generally confined to the northwestern and southeastern quarters of the site. • Till Deposits comprising loose to medium dense sand and soft to stiff clay underlying the made ground / topsoil to maximum depths ranging from 3.00m to over 7.45m bgl (maximum depth not proven in BH05, BH07, BH08, and the trial pits). • Mudstone of the BoM proven to a maximum depth of 16.00m bgl. • Groundwater levels ranging between 0.40m and 3.00m bgl during site works. • Post site works monitoring levels ranging between ground level and 0.80m bgl.
Foundations and Floor Slabs	Piled and vibro stone column (VSC) foundations are recommended due to variable, low-strength shallow deposits. Piles should penetrate through made ground and soft / loose Till into competent horizons, with preliminary allowable loads for Ø300mm piles ranging from 165kN to 505kN depending on unit. Ground-bearing slabs may be used with suitable excavation, compaction, reinforcement, and geogrid where required; differential settlement should be accommodated with joints and isolation of vertical elements.
Concrete Classification	The results of laboratory pH and sulphate content, alongside the BRE full suite tests, indicate that sulphate class DS-1 and ACEC Class AC-1 conditions prevail.
Highways Design	Equilibrium CBR values are 2.6% for undisturbed granular Till and 0.4–5.1% (avg 1.4%) for cohesive Till; made ground plate load tests showed high variability (0.8–50.5%). Subgrade improvement may be required for both construction trafficking and permanent highways.
Site Drainage	Soakaways are not feasible due to low infiltration rates and cohesive strata; drainage design should account for groundwater levels and potential heave, with alternative dewatering methods considered during construction.
Human Health - Soils Contamination	Laboratory testing of made ground and Till samples collected from the site did not reveal any exceedances of heavy metals, PAHs, petroleum hydrocarbons, BTEX or MTBE compounds, and no asbestos fibres were detected. As such, the risk from soil contamination to the commercial end-users is considered to be low, and no further remedial action is required.
Controlled Waters	The overall risk to controlled waters is considered to be low and no further action is required.
Ground Gas	Marginally elevated carbon monoxide and flow rates were recorded; however, these are considered unrepresentative of the site's ground gas regime, being influenced by groundwater within the monitoring wells. No deep or putrescible made ground was identified and the ground conditions include significant thicknesses of cohesive soils which limit migration potential of gas. Following a lines of evidence approach, the site has been assessed as very low risk and gas protection measures are not required.
Outline Remedial Strategy	No specific remedial measures are considered necessary at the site.
Waste	Made ground – classified as non-hazardous. Natural – classified as non-hazardous.
Further Work	The following further works will be required to progress to the construction phase: • Supplementary ground investigation to confirm bedrock depth and confirm ground conditions beneath Unit 1 and 2 • Tree survey by qualified arboriculturist. • Detailed foundation design by a structural engineer. • Production of Materials Management Plan (MMP) under the CL:AIRE DoWCoP, if required.

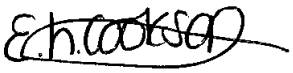
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DRAWINGS

Drawing Number	Rev	Title
13502-AEW-XX-XX-DR-A-0007	-	Proposed Site Plan – Option 5
MBP-REN-XX-FN-DR-S-01090	P01	Foundation Plan
C6035/01	B	Site Location Plan
C6035/02	B	Site Features Plan
C6035/04	-	Exploratory Hole Location Plan

APPENDICES

Appendix	Title
Photographs	Site Investigation Photographs
Appendix A	BSL Methodology and Guidance
Appendix B	Exploratory Hole Logs
Appendix C	Geotechnical Testing Results
Appendix D	Chemical Testing Results
Appendix E	Monitoring Results
Appendix F	Waste Assessment Report

1.0 INTRODUCTION

1.1 Context

This report describes a Phase I and II Geo-Environmental Assessment carried out by Brownfield Solutions Limited (BSL) for Ask Real Estate MBP Ltd on a site off Aviator Way, Manchester and has been completed in general accordance with the following guidance:

- Environment Agency guidance - Land Contamination: Risk Management (LCRM).
- BS 10175:2011+A2:2017 Investigation of Potentially Contaminated Sites.
- BS 5930: 2015+A1:2020 Code of Practice for Ground Investigations.
- BS EN 1997-1:2004+A1:2013 Eurocode 7. Geotechnical design. General rules plus UK National Annex.
- BS EN 1997-2:2007 Eurocode 7 Geotechnical design. Ground investigation and testing plus UK National Annex.

Definitions of terms and acronyms used within this report is presented in Section 11.0.

1.2 Proposed Development

The Proposed Development is for a commercial end-use comprising nine two-storey B2 (General Industry) and B8 (Storage and Distribution) units with a max height of 11.72m. The units will be used for light industrial and ancillary office spaces, with associated loading bays, landscaping works, access and car parking. Car parking will include 145 car park spaces, including 12 accessible spaces, and 18 EV charging spaces. 48 cycle parking spaces will also be included.

1.3 Previous Reports

This report should be read in conjunction with Brownfield Solutions Ltd Phase I Geo-Environmental Assessment Report (ref. BW/C6035/14703 Rev A) issued in December 2025, and RSK's Geo-environmental site assessment report (ref. 313110-02 (01)) dated October 2015. Although no reliance has been placed on the RSK report, the information it contains has been considered for guidance purposed only. Conclusions are summarised in BSL's Phase I Geo-Environmental Assessment Report.

1.4 Objectives

The objectives of this report are to determine the geo-environmental setting and ground conditions of the site, highlighting potential risks and areas of concern that may govern the development under the current planning regime.

The factual and interpretive Phase II sections of this report are produced in general accordance with the recommendations for a Tier 2 Generic Quantitative Risk Assessment as described in LCRM guidance. This assessment is also intended to fulfil the requirements of a Ground Investigation Report (GIR) as detailed in BS EN 1997-2:2007.

1.5 Scope

Following the Phase I Geo-Environmental Assessment, an exploratory intrusive investigation was undertaken to confirm the findings of the preliminary CSM and risk assessment and meet any objectives that had not been satisfied. The exploratory investigation was undertaken using trial pitting, dynamic sampling, rotary drilling, ground gas monitoring, laboratory chemical and geotechnical testing, with reporting on the findings.

A summary of previous investigations carried out at the site has also been undertaken.

1.6 Limitations

This assessment has been prepared in accordance with the relevant current legislative framework, guidance and risk assessment methodology as outlined in Appendix A. BSL is not liable for any subsequent changes in the guidance and legislation.

The findings and opinions conveyed via this report are based on information obtained from a number of sources as detailed within this report, BSL have assumed this information is correct and reliable. Nevertheless, BSL cannot and does not guarantee the authenticity or reliability of the information it has relied upon.

BSL have used reasonable skill, care and diligence for the investigation of the site and the production of this report. There may be other conditions prevailing on the site which are outside the scope of work and have not been highlighted by this assessment and therefore have not been considered by this report. Responsibility cannot be accepted for such site conditions not revealed by the assessment.

This report has been prepared for the sole use and reliance of the Client, Ask Real Estate MBP Ltd. No other third parties may rely upon or reproduce the contents of this report without the written permission of Brownfield Solutions Ltd (BSL). If any unauthorised third party comes into possession of this report, they rely on it at their own risk and BSL do not owe them any Duty of Care. This report may not be relied upon by the client or submitted to a third party for their reliance for the purposes of valuation, mortgage, insurance and regulatory approval, until all invoices have been settled in full.

The investigation carried out on the site has been conducted to provide the best information on the ground conditions within site access and budgetary constraints. The inherent variation of ground conditions allows only for definition of the actual conditions at the locations and depths of exploratory locations at the time of the investigation. Different ground conditions may exist that have not been identified within this investigation.

The recommendations in this report assume that ground levels will remain as existing, unless stated otherwise within the report. If there is to be any re-profiling (e.g. to create development platforms or flood defences) then the recommendations may not apply.

The groundwater results described are only representative of the dates on which they were recorded, and levels may vary seasonally (e.g. due to changes in weather).

This assessment has been based on the proposed planning layouts provided. Any subsequent change to the planning layout may have an impact on the validity of recommendations made within this report. Furthermore, new information, changed practices or new legislation may necessitate revised interpretation of the report after the date of its submission.

Although every effort has been made to position exploratory holes in the least sensitive areas of the site, exploratory hole positions were located approximately as part of this investigation and no guarantee can be given as to their accuracy. Consideration should be given to the possibility that exploratory holes excavated as part of this investigation and indeed any previous ground investigation work by others may be encountered beneath or within the influence of individual foundations. BSL cannot be held responsible for structural failures caused by the location of foundations of any form of structure within the influence of exploratory holes.

Where it has not been possible to reasonably use an EC7 compliant investigation technique, a practical alternative has been adopted to obtain indicative soil parameters and any interpretation is based upon engineering experience, local precedent where applicable and relevant published information.

The chemical testing carried out for this report was not scoped to comply with the requirements of the water supply company and further work may be required, unless otherwise stated.

Notwithstanding site observations concerning the presence or otherwise of archaeological issues, asbestos-containing materials (ACM) or invasive weeds (e.g. Japanese knotweed), this report does not constitute a formal survey of these potential issues.

Asbestos in structures was not covered in this report. It should be noted that an asbestos demolition survey will be required prior to any demolition of structures. If asbestos is present in soils, these will need to be dealt with in accordance with the Control of Asbestos Regulations (CAR) 2012.

The site plans enclosed in this report should not be scaled off. Any site boundary line depicted on plans does not imply legal ownership of land.

Any recommendations made in this report should be confirmed with the Regulatory Authorities prior to implementation to ensure compliance. Please note that whilst every effort has been made to pre-empt the likely requirements of the Local Authority, Environment Agency and warranty providers, they may have specific requirements that will need to be discussed and addressed at a later date.

Site specific limitations listed in section 4.2.

2.0 THE SITE

2.1 Location

The site is located off Aviator Way, Manchester, M22 1TG, centred on National Grid Reference 382633, 385614 as shown on the Site Location Plan, drawing number C6035/01.

2.2 Site Description

A site reconnaissance survey was carried out at the site on 26th March2025. The main site features and potential issues identified are detailed below and are shown on the Site Features Plan, drawing number 6035/02 Rev B. A selection of photographs from the site walkover are presented to the rear of this report.

Feature	Description
Site Area	Approximately 3.2 hectares.
Site Access	Access to the site is gained off Aviator Way to the south.
Site Overview Imagery	 Oriented North
Current Land Use and Site Features	The Site comprised undeveloped grassland. Two underground utility covers were noted in the southern area, denoting possible drainage or sewer infrastructure. A ditch was present along the grassed boundary adjoining Aviator Way. No additional features were noted during the walkover.
Potential Sources of Gross Contamination	None noted during walkover.
Vegetation / Ecology	There were sporadic mature and semi-mature trees along the Site boundaries. The Site itself was mainly surfaced with grass, with only rare shrubbery present.
Topography	The Site was generally flat, with an approximately 0.5m deep ditch present along the eastern, southern, and western boundaries.
Site Boundaries	The eastern, northern, and western boundaries were denoted by trees and hedges, while the southern boundary was open and marked by a public footpath and Aviator Way.
Surrounding Area	The Site was located within a mixed commercial and residential area, with commercial land located to the east and west and residential properties located to the north. Residential housing along Thornsgreen Road was located to the north of the Site. Existing Manchester Business Park offices were located to the east. To the south were Aviator Way, a railway, and Ringway Road West (A555), with commercial land associated with Manchester Airport located further afield. Woodhouse Lane and additional Manchester Business Park offices were located to the west.

3.0 SUMMARY OF PREVIOUS REPORTS

A summary of the relevant points from the Phase I Geo-Environmental Assessment completed by Brownfield Solutions Ltd (reference: BW/C6035/14703 Rev A) is presented below:

- The Site had been occupied by a nursery for the majority of the mapped history, and had been cleared by 2003. Historical land use in the surrounding area was predominantly residential and commercial.
- The geology comprised Till deposits (Secondary (Undifferentiated) Aquifer) over the Bollin Mudstone Member (BoM) of the Sidmouth Mudstone Formation (Secondary (B) Aquifer).
- Two faults were identified 37m and 40m to the east, both trending broadly north–south and running parallel to the eastern boundary. Any movements associated with these faults were assumed to have ceased.
- The Site was located outside any designated coalfields or brine extraction areas, and there were no records of shallow mines in or around the Site.
- The nearest watercourse was recorded as an "Inland river not influenced by normal tidal action," corresponding to the on-site ditch, which likely drains to the River Bollin (approximately 2km to the south).
- The risk to human health was considered low.
- The risk from ground gas was considered low, and the Site was not located in an area requiring radon protection measures.
- The risk to controlled waters was considered very low to low.
- The Site was recorded within a UXO moderate-risk zone. A Pre-Desk Study UXO Assessment was commissioned, which concluded that a detailed assessment and supervision were not necessary.
- Recommendations were made for an appropriate Phase II ground investigation to confirm the identified risks and to obtain information for preliminary design.

4.0 METHOD OF INVESTIGATION

4.1 Objectives

To confirm the risks to the identified receptors and confirm the ground conditions in respect to the identified geotechnical and geo-environmental risks, an appropriate intrusive investigation was undertaken as per the recommendations of the Phase I Geo-Environmental Assessment.

The aim of the fieldwork was to:

- Investigate ground conditions on the site and the potential need for detailed investigation.
- Install standpipes to allow future monitoring.
- Assess the potential contamination on the site and obtain samples for contamination screening.
- Assess the potential impact of any contamination on controlled waters.
- Obtain geotechnical information on the ground conditions at the site for preliminary foundation design and preliminary pavement design purposes.
- Give an assessment of the geo-environmental risks associated with redevelopment of the site.

4.2 Site Works

The following site works have been undertaken as part of the intrusive investigation between the dates of 10th November and 21st November 2025.

Method	No.	Range Depths (m bgl)	Purpose
Trial pits – Tracked excavator	15	0.50 – 2.80	Establish general ground conditions and gain good coverage. Obtain contamination and geotechnical samples from arisings. Establish depth and extent of made ground within the east of the site. (TP01-12 & SA01-03)
Infiltration tests (in trial pits)	3	0.50	Obtain infiltration rates for drainage design. (SA01-03)
Plate load tests	19	0.50	Obtain CBR values for highways / pavement design (PL01-19)
Dynamic sampled with rotary core follow on boreholes	4	15.00 – 16.00	Establish general ground conditions beneath the site. Allow Standard Penetration Tests (SPTs) to be carried out and obtain samples for contamination and geotechnical testing. Determine soil strengths / densities for preliminary foundation design. Obtain rock core for geotechnical testing and parameters for preliminary foundation design. Installation of ground gas and water monitoring wells. (BH01-04)
Dynamic sampled boreholes	2	2.65 – 7.45	Establish general ground conditions on site. Allow Standard Penetration Tests (SPTs) to be carried out and obtain samples for contamination and geotechnical and testing. Determine soil strengths / densities for preliminary foundation design. Installation of ground gas and water monitoring wells. (BH05 & BH07)
Rotary open hole borehole	1	6.45m	Allow Standard Penetration Tests (SPTs) to be carried out and determine soil strengths / densities for preliminary foundation design. (BH08)

The surveyed locations of the exploratory holes are indicated on the Exploratory Hole Location Plan, drawing number C6035/04. The Exploratory Hole Logs are presented in Appendix B. Due to programme constraints caused by adverse ground conditions encountered during the ground investigation, BH05, BH07, and BH08 was terminated at a shallower than scheduled depth and the planned location BH06 was abandoned entirely. Additionally, there was limited access in the northwest of the site due to dense vegetation.

The exploratory holes were logged by an experienced geo-environmental engineer in general accordance with the following guidance:

- BS 5930:2015+A1:2020 Code of Practice for Site Investigations.
- BS EN 14688-1:2018 Geotechnical Investigation and Testing – Identification and classification of soil.
- BS EN ISO 14689:2018 Geotechnical investigation and testing – Identification and classification of rock.

4.3 Sampling Strategy

Representative samples were taken from exploratory holes at regular intervals to assist in the identification of the soils and to allow subsequent laboratory testing. They were stored and transported in general accordance with BS 10175:2011+A2:2017.

The type of sample was dependent upon the stratum and the purpose of analysis in accordance with current environmental and geotechnical guidance. The distribution of samples taken across the site is recorded on the Exploratory Hole Logs.

The borehole, plate load test, and soakaway test locations were specified by the client prior to site works.

Trial pit locations were determined by reference to the conditions identified in the preliminary risk assessment with a reasonably even spacing was used to gain site coverage. No specific sampling statistics or grid were utilised in this instance.

4.4 Laboratory Testing

Representative disturbed samples were obtained for all soil types encountered. Selected samples were scheduled for testing at an approved laboratory in accordance with BS 1377 'Method of Test for Soils for Civil Engineering Purposes' and BS EN ISO 17892- Parts 1-12:2018 'Geotechnical investigation and testing. Laboratory testing of soil'.

The following tests were scheduled for geotechnical purposes:

Description	No. of Samples
Atterberg Limits	10
Point Load Testing – Axial	12
Point Load Testing – Diametral	4
Unconfined Compressive Strength (UCS).	12
PSD Wet Sieve	3
pH and Water-Soluble Sulphate	5
BRE SD-1 Full Suite	2

The Geotechnical Laboratory Testing Results are presented in Appendix C.

As part of the initial assessment for potential contamination of the site, selected samples were taken for the purpose of chemical contamination testing.

In the absence of particularly contaminative processes on site and the lack of visual evidence of potential hydrocarbon impaction representative soil samples were screened for the following general suite of determinands at a UKAS approved laboratory:

Determinand	No. of Samples
BSL Default Soil Suite: Arsenic, Cadmium, Chromium (III), Chromium (VI), Copper, Nickel, Mercury, Lead, Zinc, Selenium, speciated polycyclic hydrocarbons (PAH 16), water soluble sulphate (2:1 Extract), soil organic matter (SOM) and pH.	12
Asbestos Screen.	6
TPH CWG Suite including BTEX and MTBE.	1

The Chemical Laboratory Testing Results are presented in Appendix D.

4.5 Monitoring

Ground gas and ground water monitoring standpipes were installed in three of the boreholes as detailed in the table below.

A total of four monitoring visits were undertaken out of four proposed as part of the current scope, in line with the recommendations of BS 8485.

All gas monitoring was undertaken using either a GA5000 or GFM436 infrared gas meter with integral electronic flow analyser.

Flow measurements on each standpipe (l/hr) were taken. Measurements of the percentage volume in air (%v/v) of oxygen (O_2), carbon dioxide (CO_2) and methane (CH_4) were recorded in addition to the percentage Lower Explosive Limit (%LEL) of methane (Note: 100% LEL equates to 5% by volume), the atmospheric pressure (mb) and average temperature during the visit (°C).

Standpipes were constructed in general accordance with the relevant guidance. A summary of the installation construction is presented in the table below:

Location	Internal Diameter Pipe	Response Zone (m bgl)	Targeted Strata	Purpose
BH02	50mm HDPE	1.00 – 5.00	Till & BoM	Ground gas / groundwater
BH04	50mm HDPE	1.00 – 5.00	Till	Ground gas / groundwater
BH07	50mm HDPE	1.00 – 5.00	Till	Ground gas / groundwater

The gas monitoring visits recorded peak and steady state conditions. Peak results are those that occur on opening the valve on the borehole tap. Steady state conditions are those that occur a period of time afterwards when the initial (accumulated) gases have been purged from the borehole.

Ground gas monitoring results are presented in Appendix E of this report.

5.0 GROUND CONDITIONS

5.1 Summary

A brief summary of the ground conditions encountered is presented in the table below:

Stratum	Range Depths - Top (m bgl)	Range Depths - Base (m bgl)	Range Thickness' (m)	Brief Description
Made ground	Ground level	0.30 – 1.40	0.30 – 1.40	Made ground-type topsoil and clay with anthropogenic inclusions.
Natural topsoil	Ground level	0.20 – 0.35	0.20 – 0.35	Organic clay or sand.
Superficial geology – Till	0.20 – 1.40	3.00 – >7.45[1]	2.70 – >7.15[1]	Interbedded sands and clays.
Solid Geology – BoM	3.00 - >7.45[1]	>16.00[1]	10.00 – 12.00[1]	Mudstone.

[1] Base of strata not proven.

Details are provided in the logs in Appendix B and the individual strata are described in the sections below.

5.2 Made Ground

Made Ground – Topsoil
Made ground-type topsoil was encountered across the site from ground level to between 0.25m and 0.40m bgl, with no discernible spatial patterns noted. This generally comprised dark brown organic clay with secondary sand and gravel. Rootlets and anthropogenic inclusions of brick, concrete, plastic, glass and ceramic fragments were observed.

Made Ground – General
General made ground was encountered in nine exploratory locations (TP04, TP08, TP09, TP11, SA03, BH01, PL10, PL14, and PL15), generally confined to the northwestern and southeastern quarters of the site. This stratum was generally described as a clay with secondary sand, gravel and cobbles. Anthropogenic inclusions were typified by brick but also included concrete and metal. Cobbles were noted up to 202mm in diameter.

5.3 Natural Topsoil

Where encountered, natural topsoil was noted to depths ranging from 0.20m to 0.3m bgl, and as per the made ground-type topsoil, no spatial patterns were recorded. The general description of this material is an organic clay with secondary sand and gravel.

For the purpose of this assessment, topsoil is defined as the upper darker and more fertile layer of the soil profile which is a product of natural chemical, physical, biological and environmental processes. This does not imply compliance with BS 3882:2015.

5.4 Natural Superficial Strata - Till

The natural superficial strata, interpreted to be Till, generally consisted of interbedded soft to stiff clay and loose to medium dense sand with varying amounts of silt and gravel as minor constituents. Soil consistencies generally improved with depth. Instances of soft clay and loose sand are recorded below. Note that density of granular deposits within the trial pits is not given and is only presented on the borehole logs where an SPT was undertaken within a relevant depth.

Hole I.D.	Depth (m bgl)	Engineer Site Description
TP02	0.30 – 0.55	Soft slightly gravelly sandy CLAY.
TP03	0.30 – 1.00	Soft slightly gravelly sandy CLAY.
TP05	0.30 – 0.50	Soft slightly gravelly sandy CLAY.
TP06	0.35 – 1.90	Soft slightly sandy slightly gravelly silty CLAY.
TP07	0.50 – 1.10	Soft slightly gravelly slightly sandy silty CLAY.
TP08	1.20 – 1.90	Soft slightly gravelly sandy CLAY.
TP10	0.40 – 0.65	Soft slightly sandy silty CLAY.
	1.65 – 2.00	Soft slightly gravelly sandy silty CLAY.
TP11	1.00 – 2.00[1]	Soft slightly gravelly slightly sandy silty CLAY.
SA01	0.20 – 0.50	Soft slightly gravelly slightly sandy CLAY.
SA02	0.30 – 0.55[1]	Soft sandy gravelly CLAY.
BH02	0.60 – 2.00	Soft to very soft CLAY with secondary sand, gravel and cobbles.
BH03	0.30 – 2.75	Interbedded very soft to soft CLAY and loose SAND.
BH05	0.30 – 2.65	Soft CLAY overlying loose SAND.
BH07	0.30 – 4.00	Very soft to soft CLAY overlying interbedded medium dense sand and soft clay.
BH08	1.20 – 3.00	Very soft to soft CLAY.

[1] Base of soft / loose material not proven.

This stratum was encountered to proven depths ranging from 3.00m to 5.00m bgl in the east of the site The depth to rockhead appeared to increase toward the southwest, where depths of 7.45m (BH07) and 6.45m bgl (BH08) were reached in the Till without encountering bedrock.

5.5 Solid Geology – Bollin Mudstone Member (BoM)

The solid geology generally comprised weak partially weathered greyish brown or mottled grey and brown mudstone, interpreted as part of the BoM. Specific variances of note include a destructured weathering profile within BH01 from 5.00m to 6.00m bgl, leading to a reduction in strength of the recovered core, and the inclusion of breccia within the core recovered from BH04. As previously noted, rockhead was deepest in the southwest, with the depth of this stratum proven to 16.00m bgl.

The discontinuities described were generally horizontal to sub-horizontal, closely to medium spaced, planar and undulating, and clean.

The overall percentage of Total Core Recovery (TCR) over each core run within the boreholes varied from 49% to 100%, and averaged at 94%. Similarly, Solid Core Recovery (SCR) ranged between 49% to 100% and averaged 89%.

Rock Quality Designation (RQD) percentages ranged between 47% up to 100%, averaging 87% per run across the four boreholes where rock was sampled. This was consistent with averages for BH01, BH02, BH03, and BH04 of 90%, 86%, 87%, 85% respectively.

5.6 Groundwater

The depths to groundwater and locations present during site works are shown in the table below:

Hole I.D.	Depth During Site Works (m bgl)	Comments
BH01	3.00	Fast seepage
BH02	3.00	Fast seepage
BH03	1.20	Fast seepage
BH04	1.20	Fast seepage
BH05	1.20	Fast seepage
BH07	0.80	Fast seepage

Hole I.D.	Depth During Site Works (m bgl)	Comments
BH08	0.90	Fast seepage
TP02	1.00	Medium seepage
TP05	0.60	Medium seepage
TP06	0.40	Medium seepage
TP11	0.70	Fast seepage

Post site works monitoring has revealed the following depths to groundwater:

Well I.D.	Depth During Monitoring Period (range) (m)	
	Min	Max
Overall min/max	Ground level	0.80
BH02	Ground level	0.62
BH04	Ground level	0.35
BH07	0.43	0.80

5.7 Observations

Contamination
During the works undertaken by BSL, observations for both visual and olfactory evidence of contamination were undertaken. No evidence of contamination was observed at the site.

Stability of Excavations/Boreholes
The sides of the trial pits were often unstable, with excavation frequently terminated early due to instability.

Casing was required to prevent collapse with the granular materials during drilling of the dynamic sampled boreholes.

Obstructions
The only instance of a below ground obstruction was noted within TP07 at 0.75m bgl, detailed as a redundant concrete pipe.

6.0 TEST RESULTS

6.1 Geotechnical Laboratory Testing

Plasticity Index Analysis
Plasticity index results ranged between 15% and 22%. Associated water contents ranged between 12.0% and 24.2%.

After modification of particle size in accordance with BRE 240 the modified plasticity indices are in the range 11.0% to 20.2% indicating the cohesive soils to be of low to medium volume change potential. It is noted the only result exceeding the medium volume change threshold is within BH02, possibly indicating a localised area of less sandy clay.

Particle Size Distribution (PSD) Analyses
Three PSD tests were undertaken on BH02, BH04 and BH07 samples of the natural superficial strata. The findings generally confirm the engineer site descriptions in these locations.

Unconfined Compressive Strength (UCS) and Point Load Index
A summary of the information pertaining to the Unconfined Compressive Strength (UCS) of the intact rock material (not rock mass) related to mudstone bedrock at the site is shown in the table below. The Corrected Point Load Strength Index ($I_{s(50)}$) results have been used to derive the UCS using the relationship of:

$$UCS \approx k \times I_{s(50)}$$

Where 'k' is a correlation factor based on ISRM (1985) *Suggested Method for Determining Point Load Strength*. Given the high likelihood of anisotropy within the rock, errors of up to 100% are possible when using this correlation. Accordingly, the results should be treated with caution and appropriate engineering judgement.

Method	$I_{s(50)}$ Range (MPa)	UCS Range (MPa)	No. of results
Point Load test (axial)	0.01 – 0.08	0.18 – 1.44	12
Point Load test (diametral)	0.02 – 0.05	0.36 – 0.90	4
UCS test	N/A	0.9 – 1.1	12

* Based on aforementioned correlation.

6.2 Aggressive Ground Conditions – Geotechnical Chemical Testing

The test results for the assessment of aggressive ground conditions are presented in Appendix D. The results are summarised and assessed within Section 8.2 of this report.

6.3 In Situ Geotechnical Testing

In Situ Standard Penetration Tests
Standard Penetration Tests (SPTs) were carried out within the boreholes at regular intervals in the superficial strata. The results of the individual blows and the N-values are recorded on the Exploratory Hole Logs in Appendix B.

All SPT N values are uncorrected. Density and strength descriptors are reported in accordance with the guidelines stated in BS 5930:2015+A1:2020, incorporating requirements of BS EN ISO 14688-1:2002, BS EN ISO 14688-2:2004 and BS EN ISO 14689-1:2003.

Soil Infiltration Test Results

Soil infiltration tests were undertaken within trial pits SA01 to SA03, a summary of the results is presented in the table below. These were carried out in general accordance with BRE Digest 365 (BRE 2016) where infiltration rates allow three test runs during a working day (or where there is no infiltration), but where low infiltration rates were encountered the available time may not have been sufficient to fully comply with the BRE test method.

Where less than three tests were possible in a particular location the results provided should be considered as indicative only. Further discussion concerning the suitability of infiltration testing at the site is provided in Section 7.9.

No indicative infiltration rate has been given for the test within SA02, as the head of water increased over the duration of the test period. This is likely associated with the high groundwater table and inclement weather.

Hole I.D.	Stratum Type	Depth (m bgl)	Infiltration Rate (m/sec)		
			Test 1	Test 2	Test 3
SA01	Cohesive Till	0.50	$-1.66x10^{-07}$	N/A	N/A
SA02	Cohesive Till	0.50	N/A	N/A	N/A
SA03	Cohesive Till	0.50	$-3.13x10^{-07}$	N/A	N/A

The full test results are presented in Appendix C.

In Situ CBR Testing (Plate Load Testing)

The in situ CBR testing results are summarised in the table below:

Hole I.D.	Depth (m bgl)	Stratum Type	Equivalent CBR (%)	Modulus Subgrade Reaction K^{762} ($kN/m^2/mm$)
PL01	0.50	Cohesive Till	0.8	12.8
PL02	0.50	Cohesive Till	0.7	11.7
PL03	0.50	Cohesive Till	0.9	13.4
PL04	0.50	Cohesive Till	0.4	8.4
PL05	0.50	Cohesive Till	1.1	15.7
PL06	0.50	Cohesive Till	5.1	37.3
PL07	0.50	Cohesive Till	3.1	27.9
PL08	0.50	Cohesive Till	1.8	20.6
PL09	0.50	Granular Till	2.6	25.4
PL10	0.50	Cohesive made ground	50.5	139.9
PL11	0.50	Cohesive Till	1.2	15.9
PL12	0.50	Cohesive Till	2.1	22.6
PL13	0.50	Cohesive Till	0.6	10.5
PL14	0.50	Cohesive made ground	0.8	12.5
PL15	0.50	Cohesive made ground	0.9	13.8
PL16	0.50	Cohesive Till	0.4	9.1
PL17	0.50	Cohesive Till	0.7	12.2
PL18	0.50	Cohesive Till	1.2	16.0
PL19	0.50	Cohesive Till	1.5	18.5

The full test results are presented in Appendix C.

6.4 Geo-Environmental Testing

Chemical Laboratory Testing
The chemical test results for soils are presented in Appendix D. The results are summarised and assessed within Section 8.0 of this report.

Ground Gas Monitoring
Ground gas monitoring results are presented in Appendix E and are summarised and assessed within Section 8.0 of this report.

7.0 GEOTECHNICAL ASSESSMENT

7.1 Ground Model

The site is currently undeveloped, having previously been occupied by a nursery and greenhouses. Made ground has been noted, likely associated with the previous site uses, and a drainage ditch runs along the eastern and southern boundaries.

The ground conditions can be summarised as below (top down):

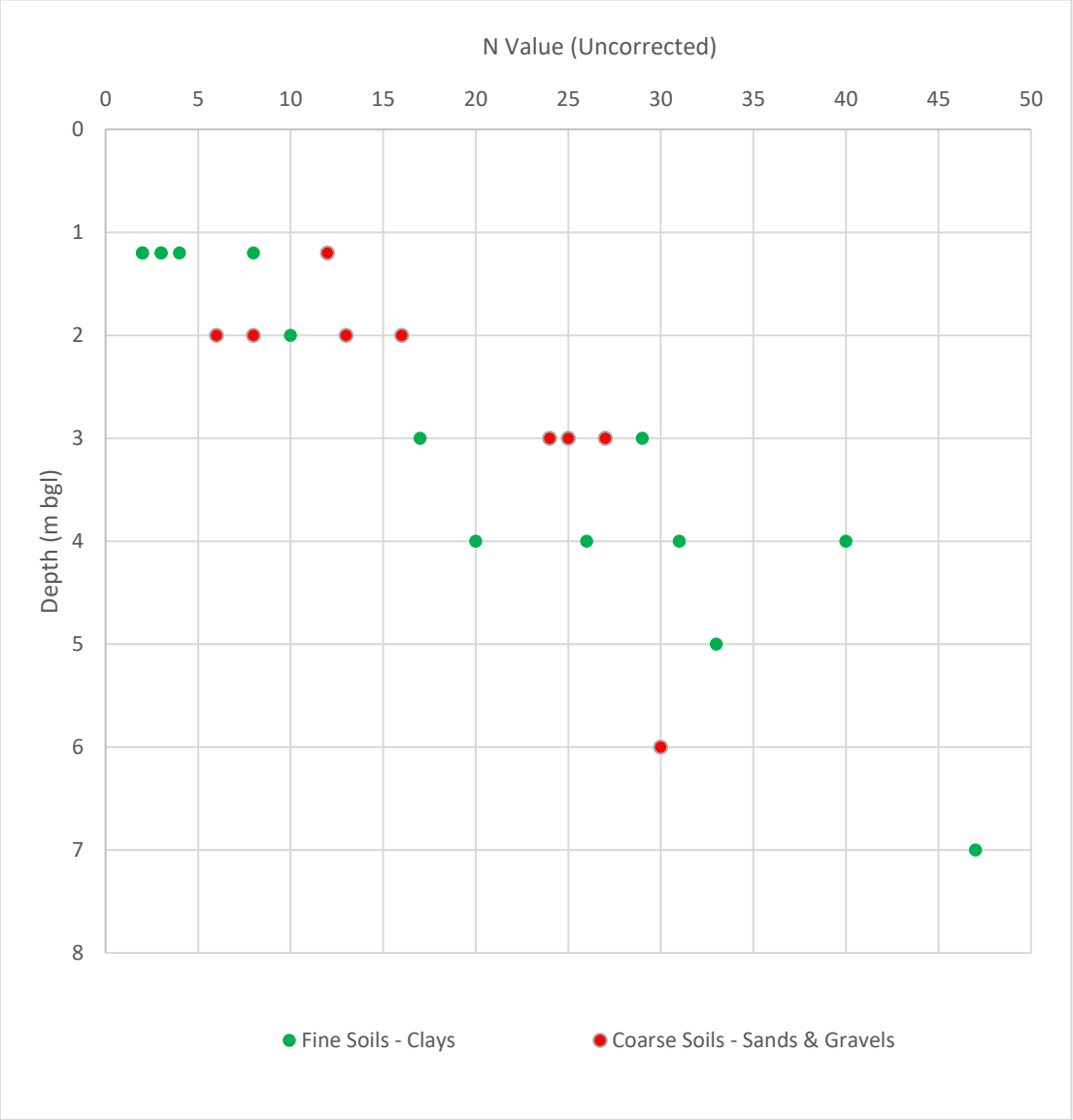
- Topsoil or made ground-type topsoil to between 0.20m and 0.50m bgl.
- Made ground generally comprising clay with anthropogenic inclusions of brick to maximum depths ranging from 0.75m to 1.40m bgl. Made ground was generally confined to the northwestern and southeastern quarters of the site.
- Till Deposits comprising loose to medium dense sand and soft to stiff clay underlying the made ground / topsoil to maximum depths ranging from 3.00m to over 7.45m bgl (maximum depth not proven in BH05, BH07, BH08, and the trial pits).
- Mudstone of the BoM proven to a maximum depth of 16.00m bgl.
- Groundwater levels ranging between 0.40m and 3.00m bgl during site works.
- Post site works monitoring levels ranging between ground level and 0.80m bgl.

The Site was recorded as being within a UXO moderate-risk zone. A Pre-Desk Study UXO Assessment was commissioned, which concluded that a detailed assessment and supervision were not necessary and the site can be reclassified as low risk.

7.2 Design Soil Parameters

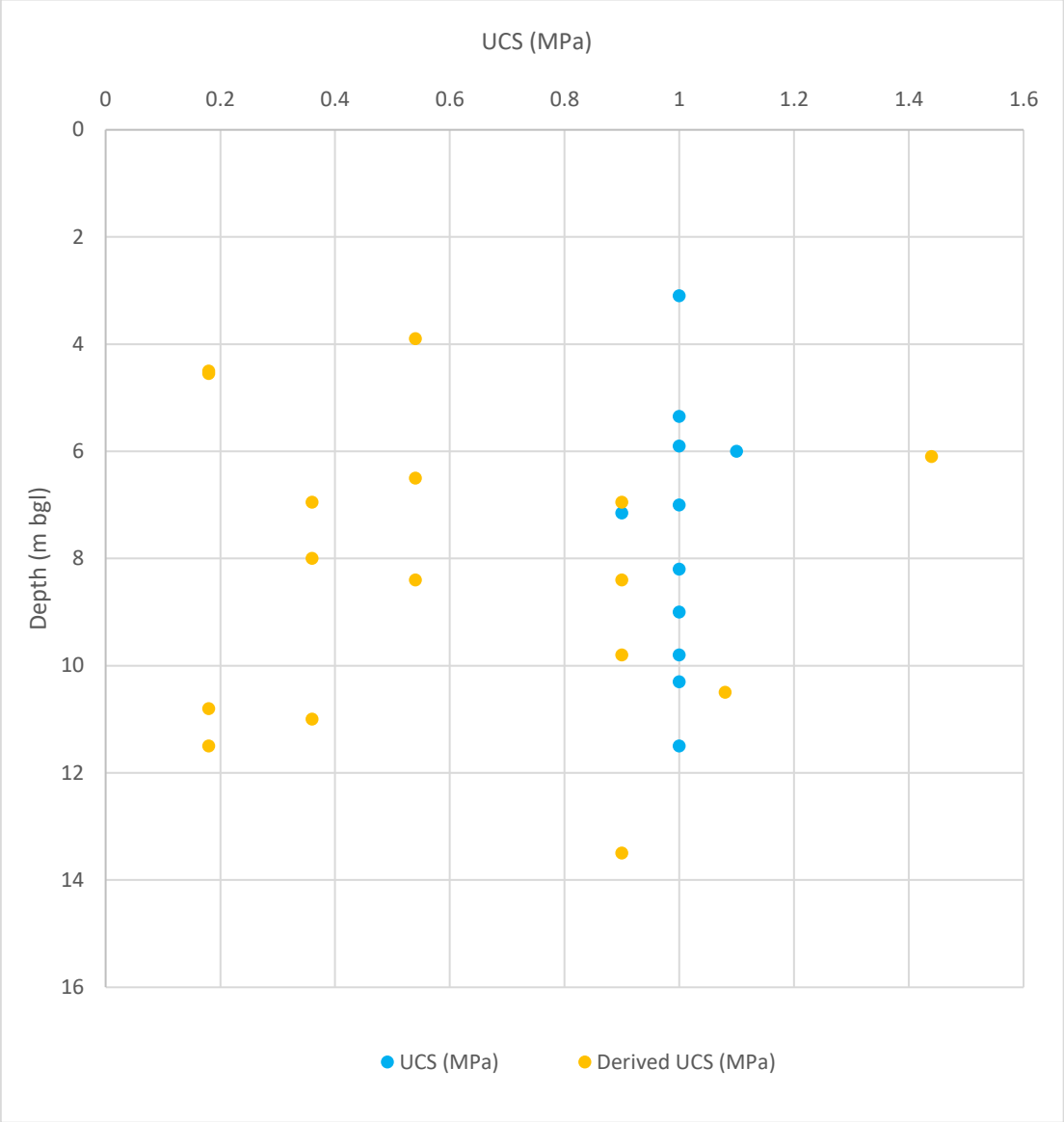
The relevant test results from the prior section have been evaluated to derive geotechnical soil parameters for the site.

A depth (m bgl) versus SPT N-Value graph is provided below to provide a profile of the cohesive and granular Till deposits underlying the site.



The above graph shows a general increase in soil strength / density as depth increases but importantly also shows the high variability of soils above 3.00m bgl, with ϕ' (angle of shearing resistance) values ranging from 31° to 38°, derived Cu (undrained shear strength) values ranging from 10kPa to 80kPa, and Mv (coefficient of volume compressibility) values ranging from 0.125m^2/MN to 1.000 m^2/MN. This was further supported by the site engineer's soil descriptions.

A graph showing UCS and derived UCS versus depth is presented below to provide a profile of the variation in UCS of the bedrock with depth.



It should be noted that the UCS testing requires a longer, intact length of core compared with the shorter specimens acceptable for point load testing. This influences the dataset, as weaker or more fractured material is less likely to provide sufficient intact core for UCS preparation. Consequently, UCS values tend to reflect the stronger and more competent portions of the rock mass, often reporting higher strengths than indicated by point load testing. This effect is clearly demonstrated by the accompanying graph, which shows UCS results (blue) clustering at higher strength values relative to the wider spread of point load data (yellow).

As is typical with mudstones, the RQD percentages obtained were variable, typically ranging from 47% to 100%.

Given the nature of the proposed development, as outlined below, together with the variable composition and strength / density of the shallow (<3.00m bgl) Till deposits, it is considered that piled or vibro stone column (VSC) foundations are likely to represent the most suitable foundation solution. The variability of the Till is expected to present a risk primarily in terms of differential and total settlement, rather than bearing capacity failure, particularly in view of the large proposed foundation pads (as shown on the Foundation Plan, drawing number MBP-REN-XX-FN-DR-S-01090-P01 dated November 2025).

Accordingly, generalised geotechnical design parameters are not provided. Preliminary design calculations have instead been undertaken for piled foundations on a unit-by-unit basis, informed by the specific ground conditions identified beneath each of the four proposed units.

7.3 Foundations

The development will comprise four two-storey steel framed structures and is considered to be classed as Geotechnical Category 2 in accordance with Eurocode 7.

Preliminary design by calculation has been undertaken to determine the design resistance of the bearing strata in the following section. Note that the made ground, present to a maximum depth of 1.40m bgl, is not considered to be a suitable bearing stratum.

Proposed structural loads are 150kPa under pads and 50 kPa under slabs (as shown on drawing number MBP-REN-XX-FN-DR-S-01090-P01 and confirmed via email by Patrick Clayton at Renaissance Ltd on 19th December 2025). The following recommendations are provisional and should be reviewed at the detailed design stage.

This assessment is based on the existing ground levels and does not take into consideration any cut / fill exercise, which should also be considered at the detailed design stage.

Ground improvement
Given the variable, low density / low strength superficial deposits, ground improvement by methods such as vibro stone columns (VSCs) should be considered. VSCs would form stiffened columns to distribute building loads and minimise total and differential settlement. The columns would be required to penetrate through the made ground and underlying soft or loose Till deposits to reach a competent horizon.

Soils with shear strengths of less than 30kPa are generally considered unsuitable for VSC installation, and a specialist contractor should be consulted to confirm the suitability of the on-site materials. Given the low shear strengths encountered to approximately 2.00m bgl, removal and replacement of the upper very soft clays with granular fill may be required to improve shaft friction and facilitate VSC installation. Design recommendations should be agreed with a specialist vibro stone column contractor.

Given the high groundwater table, bottom-fed installation methods are likely to be more appropriate. A suitable working platform will be required to support installation plant and to ensure safe execution of the foundation works.

On completion of the vibro treatment works, in-situ testing should be undertaken to confirm that the improved ground meets the required bearing capacity and deformation criteria. Further guidance is provided in BRE 391, *Specifying vibro stone columns*.

Following ground improvement, reinforced shallow foundations may be adopted, typically bearing onto the improved ground at depths of approximately 600mm. Allowable bearing capacities in the order of 125kN/m² to 150kN/m² are commonly achievable, with total and differential settlements maintained within tolerable limits; however, this should be confirmed by the ground improvement contractor.

Alternatively, a raft or semi-raft foundation may be used to distribute structural loads across the stiffened ground, with the installed columns acting as rigid inclusions to support the slab.

Piles
In view of the variable and low strength / density ground conditions, a piled solution should also be considered.

Piles should be extended through the made ground and, depending on the required loadings, Till deposits. Piles will likely utilise a combination of skin friction and end-bearing resistance, transferring the majority of the load to the Till and/or bedrock.

To fully mobilise end-bearing resistance, piles should extend a minimum of five pile diameters into the bearing stratum. Accordingly, a bored or CFA piling system is recommended to ensure adequate penetration into the mudstone. Pre-cast concrete or tubular piles driven to set may also provide sufficient bearing capacity; however, this should be confirmed with a specialist piling contractor.

The choice of piling system and the detailed design of piles are beyond the scope of this report and should be undertaken by a piling specialist. However, as a guide, preliminary calculations were undertaken for a circular 300mm (typically the smallest conventional CFA pile) diameter concrete pile, taking into account shaft resistance and end bearing resistance. The effects of negative skin friction were not accounted for. The preliminary allowable loads are shown in the table below.

Profile – Ø300mm piles	Pile Length (m)	Founding depth (m AOD)	Allowable Load (kN)
Unit 1	7.45[1]	63.75[1]	190[3]
Unit 2	7.95[1] [2]	63.05[1] [2]	165[3]
Unit 3	6.50	64.19	505
Unit 4	6.50	65.82	445

Notes:

The above does not take into consideration the effects of pile groups or the self-weight of the pile.

[1] Depth of bedrock not proven beneath Unit 1 or 2.

[2] Data taken from RSK BH01 log. Should be used as indicative information ONLY.

[3] End bearing in cohesive Till NOT bedrock.

It is recommended that further site works are undertaken targeting Unit 1 and Unit 2 to better understand the ground conditions and prove the depth to bedrock to facilitate pile design.

General aspects for all pile recommendations below:

Information gained from this ground investigation should be assessed by an experienced piling contractor such that appropriate piles are selected and designed given the site conditions that have been encountered.

Whilst detailed design is beyond the scope of this report, the following should be taken into consideration during the detailed design stage by a suitably competent contractor / engineer:

- Piles should extend a minimum of five pile diameters into the bearing stratum to fully mobilise end-bearing resistance and shaft resistance.
- Higher allowable loads than those listed in the table above could be achieved by increasing the diameter of the piles or by using pile groups.
- As groundwater was observed during the boring of the intrusive holes and monitoring, temporary casing may be required for bored piles.
- Bored piles through coarse soils will likely result in loosening, with resultant reduced shaft friction.
- Discussions should be made with the pilling contractor regarding the suitability of driven piles due to the levels of disruption to the adjacent residential and commercial properties.
- CFA piles are likely to be a suitable alternative to driven piles to reduce noise levels, although there will be additional costs associated with disposal of excess soils.
- Driven piling work should be undertaken in accordance with BS EN 12699:2015 'Execution of Special Geotechnical Work - Displacement piles', replacement piles should be carried out in accordance with BS EN 1536:2010(+A1:2015) 'Execution of Special Geotechnical Works - Bored Piles'.
- In accordance with Eurocode 7 it would be prudent to verify the compressive resistance of the strata and the pile design by static load testing on working piles to at least 1.5 times the characteristic load on more than 1% of working piles.

Working Platform

Prior to the commencement of penetrative works (piling / vibro), a working platform will be required for tracked plant. This should be designed and installed in accordance with BR470 (BRE 2004) based on the plant requirements, data and rig loadings.

7.4 Building Near Trees

The clay soils on site are of low to medium volume change potential. Where foundation excavations (or piles if adopted) encounter cohesive strata in the vicinity of existing, proposed or recently removed trees, foundations should be adjusted in full accordance with BRE 298. All foundations should be deepened below roots of greater than 5mm diameter during excavations for footings.

A survey of all trees and hedges on the site and within influencing distance of the site boundary should be undertaken to identify tree species and heights by a qualified arboriculturist in accordance with BS 5837:2012. This information will be required in order to assess the effects of trees on the cohesive strata.

Where foundation depths due to trees already present or recently removed exceeds 1.50m, there is a possibility for heave to occur on removal of the tree and guidance states that compressible material or void former is required against the inside face of the foundation, unless it can be satisfied that the soil is not desiccated.

Piles

Where foundations are constructed on clay soils within the influencing distance of trees including proposed planting, the upper section of the pile (to the recommended minimum founding depth) should be sleeved or overbored to allow for clay volume change. Bored, cast-in-place piles are well suited to counteracting heave. Driven piles are less well suited to counteracting heave and are difficult to install in stiff desiccated clay without excessive noise and vibration.

7.5 Floor Slabs

Ground bearing slabs may be adopted providing the following criteria are satisfied:

- Any other compressible or unsuitable materials (topsoil containing vegetation and organic matter, including tree roots, are excavated and either improved or removed and replaced with suitable materials.
- Any fill beneath the slab is suitable, well-compacted granular material placed in an appropriate thickness in accordance with a suitable specification (e.g. SHW Series 600) designed and supervised by an appropriately qualified engineer, with the end performance validated.
- The slab is adequately reinforced.
- Regular construction joints and ties are provided to allow for differential settlement.

The final floor slab design should be of sufficient thickness and sufficiently reinforced to accept the envisaged applied loads, without unacceptable total or differential movement.

Vertical elements within the structure, such as columns and walls will need to be isolated from the ground bearing slab in order to allow for the slab to expand against them without resulting in cracking.

Prior to the placement of the founding materials and the construction of a ground bearing floor slab, the sub-formation and formation will need to be inspected and checked by a geotechnical engineer to ensure the ground conditions are as expected. If soft spots or hard spots are identified at the formation level, they should be reported to the Geotechnical Engineer immediately and remedial actions agreed.

Incorporation of geogrid reinforcement at formation level, before granular material is placed and compacted, will likely minimise required excavation depths and help provide a suitable foundation for the ground bearing slab.

Ground floor slabs should also be designed to incorporate any ground gas protections measures, where required.

7.6 Site Preparation and Construction

Topsoil / topsoil-type made ground and subsoil should be removed from beneath all proposed buildings and hardstanding areas.

There are known services on / near the site including low pressure gas mains and electricity cables running along the northeastern and southern boundary, a BT cable mapped in the centre-south of the site, and surface water / public sewage pipes and water mains abutting the southern and western borders. A redundant concrete drainpipe is also present in the southwest corner of the site, and potentially another in the northwestern section of the site. To allow construction, all services will need to be disconnected, and any suspected dead services are confirmed as dead by testing.

Instability of the trial pit sides was observed in the natural strata and temporary shoring maybe required. Otherwise the foundation excavations will be significantly wider than anticipated and costs will be incurred for additional volumes of concrete. All excavations should be carried out in accordance with CIRIA Report 97 'Trenching Practice'.

Excavation depths should generally be readily achieved using conventional plant (JCB or similar) although high specification plant (tracked 360^{o} or similar) is recommended to maintain the build programme.

It should be noted that undertaking treatment locally or using deepened foundations (i.e. focussing only on the footprint of structures) means that the surrounding areas (roads, gardens and landscaping) are

likely to settle relative to the structures if disturbed. This risk can be mitigated by undertaking more widespread ground improvement through techniques such as dynamic compaction, surcharging or excavation and re-compaction.

To protect against the effects of heave, new drainage in cohesive soils should be designed to take account of potential ground movement, including where pipes and services which pass through substructure walls or foundations. The volume change potential on this site is low to medium and the potential ground movements that need to be considered for design are 100mm.

Recorded post site works groundwater levels ranged between ground level and 0.80m bgl and therefore will be encountered within likely excavation depths. Based on the exploratory holes logs and monitoring, it is considered that methods such as sump pumping are likely to be sufficient to deal with anticipated flows however alternative methods of dewatering may be required such as dewatering wells. A specialist dewatering contactor should be consulted for advice in this instance. Further guidance is provided in CIRIA C750 "Groundwater Control: Design and Practice". It should be noted that groundwater levels will vary seasonally and the timing of construction may influence requirements.

7.7 Concrete Classification

The soluble sulphate and pH test results have been assessed in accordance with BRE Special Digest 1 "Concrete in aggressive ground" 2005. The Design Sulphate (DS) classification and the Aggressive Chemical Environment for Concrete (ACEC) classification are presented in the table below.

For the purposes of this assessment, the groundwater has been classified as mobile given the site is underlain by variable cohesive and granular deposits, and fractured bedrock.

Stratum	No. Samples	Characteristic SO_4 (mg/l)	Characteristic pH	DS Class	ACEC Class
Topsoil & made ground topsoil	6	42	6.3	DS-1	AC-1
General made ground	3	216	6.3	DS-1	AC-1
Till	6	29	6.9	DS-1	AC-1
BoM	3	38	8.5	DS-1	AC-1

The results of the BRE SD-1 Full Suites have been used to calculate the percentage oxidisable sulphides (OS) within the Till. As the OS results are below 0.3% pyrite is unlikely to be present within the Till deposits, and no further consideration with regards to sulphide content is required.

Based on the above, the results of laboratory pH and sulphate content, alongside the BRE full suite tests, indicate that sulphate class DS-1 and ACEC Class AC-1 conditions prevail in accordance with BRE Special Digest 1 "Concrete in aggressive ground" 2005.

The specific concrete mixes (the Design Concrete Class) to be used on site will be determined by the site-specific concrete requirements in terms of the durability and structural performance. These are assessed in terms of the Structural Performance Level (SPL) and any need for Additional Protective Measures (APM) detailed in Part D of BRE Special Digest 1 with further guidance in Pt E and F.

7.8 Highways

Based on the test results, an equilibrium CBR value of 2.6% is anticipated for undisturbed granular Till, although this is based on a single test. Cohesive Till deposits exhibited CBR values ranging from 0.4% to 5.1%, averaging 1.4%. Three plate load tests were undertaken within the cohesive made ground, returning values of 50.5%, 0.8%, and 0.9%, respectively, demonstrating the variable nature of made ground deposits.

These values can be used as a guide for preliminary pavement design, unless superseded by in-situ testing at formation level undertaken by a suitably qualified geotechnical engineer. Where the CBR is found to be less than 2%, the sub-grade is unlikely to be suitable for both the trafficking of site plant and as a permanent highway foundation without improvement of the soils.

To achieve the required design CBR value, improvement works should be carried out in accordance with DMRB IAN 73/06 Rev 1 Chapter 5 and may include proof rolling, excavation and re-engineering / replacement of weaker soils, the inclusion of a geogrid or use of stabilisation techniques such as the addition of hydraulic binders (e.g. cement/lime).

Based on the fines content of the soils, they are considered to be frost susceptible, therefore highway construction should be a minimum thickness of 450mm to mitigate against the risk.

Care should be taken to ensure the stratum at formation level is protected against inclement weather, as this is likely to lead to surface deterioration and a decrease in soils strengths.

7.9 Site Drainage

The use of soakaways within the natural ground is not considered to be feasible at the site due to the low infiltration rates obtained and the presence of low permeability cohesive strata underlying the site.

8.0 GEO-ENVIRONMENTAL RISK ASSESSMENT

8.1 Introduction

The samples were tested for an assessment of the chemical contamination that may pose a risk to human health. The results were examined with reference to a selection of guidance documents as detailed in Appendix A. In this case the LQM/CIEH S4ULs and DEFRA C4SLs for a commercial end-use have been adopted as Tier 1 generic screening values.

Where samples record determinand concentrations that exceed the relevant screening values then these will be considered further.

A summary assessment sheet is presented in Appendix D alongside the chemical test results. Results are discussed in detail in the sections below.

8.2 Soils Test Results and Risk Assessment – Human Health

No metals, PAHs, TPH, BTEX or MTBE have been detected above the adopted screening criteria, and no asbestos fibres have been identified within the tested samples.

8.3 Summary – Human Health Risk Assessment

Based on the testing and assessment undertaken, no further action is required in respect to human health risks from soils contamination, based on the intended commercia end-use.

8.4 Soil, Water and Leachate Test Results – Controlled Waters

Soils
No significant contaminants were identified in soils as an indicator of potential impaction on groundwater.

8.5 Controlled Waters Risk Assessment

Groundwater / surface water testing has not been carried out based on the preliminary CSM risk assessment and the site is not considered to pose a significant risk to controlled water for the following reasons:

- No significant gross or mobile contamination has been identified on site in soils based on the results obtained as a potential indicator of groundwater contamination.
- There is no indication under present conditions of significant pollution of controlled waters and conditions following development of the site will not be any worse, indeed they may improve with increased hard cover and drainage.
- Regarding the made ground soils, the preparation of samples for leachability analysis has not been undertaken as this is an aggressive methodology and provides theoretical values which are unlikely to be representative of existing site conditions, real site leaching concentrations will be reduced significantly from that indicated by the laboratory testing, furthermore this would not be representative of post construction conditions, which will significantly reduce infiltration.
- The concentrations of leachable substances that could emanate from the site will be subject to dilution and dispersal during transport and so the risks will reduce with distance from the site and into the identified surrounding water bodies.
- The site is underlain by low permeability clays which will inhibit lateral and vertical contaminant migration.
- The site does not lie within 500m of an SPZ and there are no groundwater abstractions within 2000m.

8.6 Permanent Ground Gas and Vapours Results

A total of four ground gas monitoring visits have been carried out between the dates of 26th November month and 6th January 2026. Results are summarised in the table below:

	CH_4 (%)		CO_2 (%)		O_2 (%)		CO (ppm)		H_2S (ppm)		Steady Flow (l/hr)	
	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max
Peak	0.1	0.1	0.1	2.0	14.4	20.2	0.1	80.0	0.1	0.1	0.1	55.4
Steady	0.1	0.1	0.1	2.0	15.5	20.3					0.1	22.0

Notes: CH_4 = Methane; CO_2= Carbon dioxide; O_2= Oxygen; CO= Carbon Monoxide; H_2S= Hydrogen Sulphide; ppm= Parts Per Million.

The highest carbon dioxide concentration was recorded in BH04 (2.0% v/v) on the first visit, although concentrations elevated above the gas monitor limit of detection (LoD) were recorded within all of the wells over the monitoring programme.

A single elevated carbon monoxide reading of 80ppm was recorded during the first visit in BH07, with no other occurrence of elevated carbon monoxide noted in the other wells or during subsequent visits.

Methane and hydrogen sulphide were not recorded above the gas monitor LoD, and oxygen levels were not recorded to be especially depleted during the visits.

Very high flows were noted during the first visit in BH04 and BH07. Flows were also elevated during the second visit, but not to the same extent.

Atmospheric pressure ranged between 998mb and 1017mb over the monitoring period, with visits conducted over a range of steady, falling and rising pressure trends.

Groundwater levels were recorded above the response zones in the wells during all four visits. Following the initial visit, gas monitoring was undertaken in all boreholes on arrival at the site, with subsequent water levels found to be above the response zones. Ground water was then removed from each borehole, and readings were taken approximately 30 minutes later to allow for potential gas generation, though it is noted that in all instances the groundwater recharged to above the level of the response zones.

8.7 Ground Gas Risk Assessment

Basis of Assessment
In order to assess the ground gas situation and the requirement for ground gas precautionary measures at the site, guidance was taken from BS 8485:2015+A1:2019 'Code of Practice for the design of protective measures for methane and carbon dioxide ground gases for new buildings' and CL:AIRE Technical Bulletin TB17 'Ground Gas Monitoring and 'Worst-Case' Conditions'.

Rationale and Suitability of Dataset
As per the Phase I Geo-Environmental Assessment, in accordance with BS 8485 and as set out in Appendix A of this report, the ground gas generation potential is considered to be **low** (sources including made ground and offsite potentially backfilled ponds). The sensitivity of the development is **low** on account of the proposed commercial units.

In line with current guidance, it is recommended gas monitoring should comprise four visits over a one-month period. The required monitoring frequency has been met.

Assessment of Data

The requirement for gas monitoring was made based on risks associated with the following potential sources of ground gas:

- Made ground on site associated with historic development (former plant nursery).
- Historic Pond 10m NE, less than 15m in diameter, shown on mapping from 1872 but no longer present from 1910. This area has since been redeveloped with residential housing.
- Historic Pond 20m NE, less than 15m in diameter, shown on mapping from 1872 but no longer present from 1910. This area has since been redeveloped with residential housing.
- Historic Pond 90m S, less than 5m in diameter, shown on mapping from 1872 but no longer present on mapping from 1960. Due to a gap in historic mapping, this means it disappeared between 1909 and 1960. The location is now occupied by a railway line present in a cutting.

Elevated carbon monoxide and high flow rates were recorded during the initial site visit; however, given the high groundwater levels observed during the monitoring period, it is considered that the data set obtained is not be representative of the actual ground gas regime at the site and therefore a lines of evidence approach has been used to make an assessment of ground gas risk at the site.

The primary source of ground gas noted within the desk study is identified as made ground associated with historic development at the site which may contain putrescible materials. Following intrusive investigation works, made ground on site would found to be present to a maximum depth of 1.40m bgl, though was typically less than 0.5m bgl.

Made ground-type topsoil was encountered across the site from ground level to between 0.25m and 0.40m bgl, with no discernible spatial patterns noted. This generally comprised dark brown organic clay with secondary sand and gravel. Rootlets and anthropogenic inclusions of brick, concrete, plastic, glass and ceramic fragments were observed.

General made ground was encountered in nine exploratory locations (TP04, TP08, TP09, TP11, SA03, BH01, PL10, PL14, and PL15), generally confined to the northwestern and southeastern quarters of the site. This stratum was generally described as a clay with secondary sand, gravel and cobbles. Anthropogenic inclusions were typified by brick but also included concrete and metal. Cobbles were noted up to 202mm in diameter.

The made ground encountered did not contain putrescible materials which would be capable of generating significant quantities of hazardous ground gases, and is consistent with materials associated with construction and subsequent demolition of nursery buildings.

As part of the enabling works at the site, topsoil, including made ground topsoil, is likely to be stripped which will reduce the thicknesses of made ground present, further reducing gas generation potential.

Additionally, the proposed development will provide an inherent level of protection within the building construction, including concrete floor slabs which will limit vertical migration of gases into buildings and potential for exchange of air via roller doors / shutters which will front each building.

With regard to the offsite potential sources of ground gas. It is noted that the two ponds to the north of the site, though close in proximity, were dried up or infilled prior to 1910. In accordance with BS 8576, the gas generation potential of these ponds is considered to be very low, and any historic gas generation would have vented to atmosphere. Given the very low generation potential, this reduces the driving mechanism for ground gas migration onto the site, which is already likely to be limited due to the presence of cohesive soils which are proven across the site. Additionally, the presence of a high groundwater table,

demonstrated during the monitoring period, means that there is no pore space capable of holding a ground gas reservoir within the shallow soils.

The pond located 90m south of the site is shown on mapping as in the location of the current railway line. A review of mapping shows that the railway line is present in a cutting. It is therefore considered most likely that any backfilling of this pond would have been removed during construction of the railway. However; if any fill materials do remain in place then they are likely to have a very low to low gas generation potential which would be insufficient to drive ground gas laterally onto the site, particularly given the significant thicknesses of cohesive superficial soils present, the high groundwater table and the intervening land use which is open and would therefore promote venting of gases to the atmosphere before it would reach the site.

Whilst reliance has not been obtained for the information presented within the RSK report, contributing to a lines of evidence approach it is noted that this report included ground gas monitoring which was undertaken in autumn 2015. At that time the groundwater table was still high, with several monitoring wells flooded above response zones. Meaningful monitoring data was obtained in two locations, which indicated that CS1 conditions were present at the site and ground gas protection measures were not required in new buildings. This further supports the assessment made.

Based on the above, it is considered that risks from ground gas are very low / negligible, and the inherent protection that comes with the construction design of the proposed buildings is sufficient to mitigate any residual risk which may be present.

8.8 Qualitative Risk Assessment

The CSM has been revised based on the findings of the site investigation and laboratory testing results and these are presented overleaf. Unless stated otherwise, in respect to off-site sources, only risks that are assessed as moderate and above within the preliminary CSM have been carried forward to this section, or where a previously unidentified potential source, pathway and / or receptor has been identified from the recent site works.

Human Health						
Potential Source	Potential Pathway	Potential Receptor	Likelihood	Severity	Level of Risk	Justification
On site Made Ground Metals, PAH's, asbestos	Root uptake, ingestion, direct contact, inhalation of dusts	End-users	Unlikely	Medium	Low	Made ground was found to be present below the site. None of the tested samples were found to exhibit elevated analytes above the relevant commercial screening value. The risk is considered low.
On site Made Ground Organic contamination	Migration into/chemical attack of water supply pipelines	Water Pipelines / End users	Unlikely	Mild/Minor	Very low	No organic contamination was recorded during the site works or subsequent laboratory testing, as such the risk is considered low.
Made Ground Ground Gas (carbon dioxide and methane)	Migration into confined spaces, inhalation and asphyxiation/ explosion	End-users / property / structures	Unlikely	Mild	Very low	No deep or putrescible made ground was identified during intrusive investigations which would be capable of generating harmful ground gas, and ground conditions encountered would severely limit migration potential of gases onto and within the site. Additionally, high groundwater at the site means there is no reservoir into which ground gas can collect, and the construction design of the proposed building, including a thick floor slab, will provide inherent protection from any residual risks. The risk is currently assessed as very low and gas protection measures are not considered necessarily in new buildings at the site.

Controlled Waters						
Potential Source	Potential Pathway	Potential Receptor	Likelihood	Severity	Level of Risk	Justification
Made Ground PAH's, Metals	Overland flow, / migration through saturated zone	On-site ditch (Surface waters)	Unlikely	Medium	Low	Based on the rationale presented in Section 7.5 the potential risk to controlled waters is considered very low to low.
	Leaching through unsaturated zone / Migration through saturated zone	Till - Secondary Undifferentiated (Groundwater)	Unlikely	Mild	Very low	
	Migration through saturated zone	Bedrock - Secondary (B) Aquifer	Unlikely	Mild	Very low	

8.9 Outline Remedial Measures

No sources of contamination have been identified on the site, therefore no specific remedial measures are required for soils in respect to human health for the proposed commercial end-use.

Chemical analysis of the topsoil and Till deposits indicate these soils are likely acceptable for use as topsoil / subsoil within the proposed soft landscaped areas, however further chemical validation samples will be required to confirm this.

Utilities
The level of protection for the clean potable water supply pipes should be determined using the local water company risk assessment criteria in accordance with UKWIR.

As the site is brownfield, there is the assumption that barrier pipe would be utilised, although requirements should be confirmed by risk assessment and with the water supply company.

Ground Gas Protection Systems
The site is classified as CS1 and ground gas protection measures are not required.

No radon protection is required for new buildings at this location.

General
It is recommended that the approval of the Regulators (Local Authority/ Environment Agency) is obtained in regard to the above prior to any irrevocable action is taken at the site.

In order to facilitate the re-use or import of soils, a Design Statement and Materials Management Plan (MMP), or suitable exemptions / permits will be required (see Section 9.4 below).

A watching brief is recommended during groundworks for any unidentified sources of contamination. If any gross contaminated material is encountered works should cease in that area and BSL consulted.

8.10 Health and Safety Issues

During the reclamation and construction phases of the site development it will be necessary to protect the health and safety of site personnel. The risk to construction and ground workers is assessed in the table below:

Potential Source	Potential Pathway	Potential Receptor	Likelihood	Severity	Level of Risk
Made Ground (heavy metals & PAHs)	Ingestion, direct contact, inhalation of dusts.	Construction Workers	Unlikely	Medium	Low
Asbestos	Ingestion, direct contact, inhalation of dusts.	Construction Workers	Unlikely	Medium	Low
Ground gas	Inhalation in confined spaces/trenches	Construction Workers	Unlikely	Medium	Low

The risk from made ground will be mitigated by standard PPE including gloves. Welfare facilities should be made available to wash before hand to mouth activities.

It is noted that concentrations of carbon dioxide (an asphyxiant) in the soil exceed HSE Workplace Exposure Limits for personnel in the working environment of 1.5% for short term (15 minutes) exposure

and 0.5% for long term exposure. Furthermore, soil concentrations of oxygen are below the HSE recommendations of 18%. Carbon monoxide concentrations have been recorded in exceedance of the HSE long term exposure limit (20ppm), but not the short term (100ppm).

Soil gas concentrations are not necessarily reflected by those in the breathing zone, all contractors and maintenance workers should be made aware of the possible presence of carbon dioxide and carbon monoxide and should take all necessary health and safety precautions when working in trenches or confined spaces.

General guidance on these matters is given in the Health and Safety Executive (HSE) document "Protection of Workers and the General Public during the Redevelopment of Contaminated Land". In summary, the following measures are suggested to provide a minimum level of protection:

- All ground workers should be issued with the relevant protective clothing, footwear and gloves. These protective items should not be removed from the site and personnel should be instructed as to why and how they are to be used.
- Hand-washing and boot-washing facilities should be provided.
- Care should be taken to minimise the potential for off-site migration of contamination by the provision of dust suppression control and wheel cleaning equipment during the construction works.
- Good practices relating to personal hygiene should be adopted on the site.
- The contractor shall satisfy the Health and Safety Executive with regard to any other matters concerning the health, safety and welfare of persons on the site.

8.11 Asbestos

No asbestos was identified during the site works or in the tested samples, and the guidance below is given as information only.

Where asbestos is present a safe system of working will be required. This may include but be not limited to:

- The use of qualified personnel where required.
- Careful segregation of stockpiles on site.
- Defining transport routes.
- Cleaning down of machinery in designated areas.
- Decontamination unit for ground workers.
- Damping down of soils to prevent dust migration.

Excavations in soils containing asbestos should comply with the CL:AIRE publication 'Interpretation for Managing and working with Asbestos in Soil and Construction and Demolition Materials' (CARSOIL) and CAR 2012. All such works will need to be agreed with the regulatory bodies (HSE and/or LA).

Additional guidance is provided within the BSL methodology Guidance Note in Appendix A.

9.0 WASTE SOIL CLASSIFICATION & ASSESSMENT

9.1 Summary

BSL have undertaken a preliminary assessment of potential excavation waste to arise from the site during redevelopment to:

- Classify the excavation waste to arise as either hazardous or non-hazardous.
- Identify the most sustainable options for the wastes to arise in accordance with the waste hierarchy.
- Provide a written description of the waste required as part of the Duty of Care.
- Provide details of "hazardous properties" to complete hazardous waste consignment note (where applicable).
- Be able to provide a basic classification report to a landfill operator (where waste is destined for landfill disposal).

It should be noted that testing requirements for contaminated land risk assessment differ to those for waste classification purposes. Unless otherwise stated, the assessment in this section has been carried out to provide initial indications in respect to disposal of waste soils, however this may not be fully compliant with waste testing requirements or frequencies, with further testing potentially required.

9.2 Soils Waste Classification Procedure

As described in the 'Waste Duty of Care Code of Practice (2016)' any substance or object that the holder discards, intends to discard or is required to discard is a waste. It is the responsibility of the waste producer to classify this waste. The classification process is described in the 'Guidance on the classification and assessment of waste' WM3 and aims to determine whether the waste is Hazardous or Non-Hazardous to human health and the environment.

Waste classification should be based on soils analyses that are representative of the actual waste load. At the stage of ground investigation, the materials that will become waste have generally not been defined yet, however test data can provide a useful guide to the likely waste classification before it is generated.

Further guidance is provided in Appendix A.

The Landfill Directive (Directive 1999/31/EC on the landfilling of waste, Decision 2003/33/EC and Landfill Regulations 2005) led to the establishment of a methodology for classifying wastes. Wastes first need to be classified based on their total concentrations and classified as either hazardous or non-hazardous waste. WAC testing is only required if the end disposal route is a landfill and WAC analysis must not be used for waste classification.

Wastes can only be accepted at a landfill if they meet the relevant Waste Acceptance Criteria (WAC) for that type of landfill. A waste must comply with the WAC limits for the relevant landfill, otherwise the soil will need to be pre-treated. There are three different WAC criteria, these are:

- Inert waste.
- Stable Non-Reactive Hazardous Waste (SNRHW).
- Hazardous waste.

Details of how material should be classified for waste disposal are presented in the BSL Methodology and Guidance in Appendix A and are summarised in the table below:

	PRIOR TO LEAVING SITE			
Classification based on Total Concentrations[1]	**Non-Hazardous Waste**		**Hazardous Waste**	
	IF SOILS CANNOT BE RE-USED ELSEWHERE AND MUST GO TO LANDFILL			
WAC testing	Below inert WAC limit values	Above inert WAC limit values	Below hazardous WAC limit values[4]	> WAC limit values
Landfill requirements	INERT landfill	NON-HAZARDOUS landfill[2]	HAZARDOUS landfill	PRE-TREATMENT[3]

1 Total concentrations are defined as tests results on solids as opposed to leachate (i.e. a liquid).
2 Individual sites may have certain limit values pre-determined in their licence.
3 After pre-treatment the material characteristics may have changed to an extent that allow the soil to be re-classified.
4 Possibility that wastes could be classified as stable Nonreactive HAZARDOUS waste in non-hazardous Landfill (e.g. soils containing low concentrations of asbestos, gypsum or sulphate bearing soils).

Inert Waste
The possibility of automatic inert classification of the naturally occurring "clean" soils should be explored in accordance with Section 4.3 of the EA guidance document. See Appendix A for further guidance.

9.3 Waste Classification and Waste Acceptance Criteria (WAC)

We have reviewed the testing results and assessed them through a waste classification database (HazwasteOnline™) which allows users to code and classify waste as defined in the EWC (European Waste Catalogue) based on EC Regulation 1272/2008 on the Classification, Labelling and Packaging of Substances and Mixtures (CLP) and latest Environment Agency guidance (WM3 "Guidance on the classification and assessment of waste -Technical Guidance").

The samples tested were screened against assessment criteria within WM3 using the HazWasteOnline tool to assess whether they contained any contaminants in the hazardous range.

The Waste Classification Report presented in Appendix F.

Based on the waste classification database assessment, the made ground soils have been classified as **non-hazardous.**

Note that further testing of the soils (WAC testing) may be required on the actual arisings in order to satisfactorily categorise the soil for its suitability for disposal to landfill.

Waste Containing Asbestos
No asbestos was identified during the site works or in the tested samples, and the guidance below is given as information only.

Should soils contain asbestos, the concentration and type of asbestos identified, in addition to the chemical composition (i.e. hazardous or non-hazardous detailed above), will determine which waste code is applicable to the soils and which landfill will accept it as summarised below:

Waste	Conc. by Weight (%)	EWC 2002 Catalogue Entry Code	Waste Disposal Route
Non-hazardous containing asbestos fibres	<0.001 - <0.1%	17 05 04 (soil and stones other than those mentioned in 17 05 03*)	Non-hazardous landfill subject to achieving Waste Acceptance Criteria (WAC) for a stable non-reactive hazardous landfill site.
Hazardous containing asbestos fibres	<0.001 - <0.1%	17 05 03* (soil and stones containing dangerous substances)	Hazardous landfill subject to achieving Waste Acceptance Criteria (WAC) for a hazardous landfill site.

Waste	Conc. by Weight (%)	EWC 2002 Catalogue Entry Code	Waste Disposal Route
Non-hazardous soils containing asbestos fibres	<0.1%	17 05 03* (soil and stones containing dangerous substances)	Hazardous landfill authorised to receive asbestos, or in a stable non-reactive hazardous waste cell at a non-hazardous landfill authorised to receive asbestos.
Non-hazardous Soils containing ACM (Mechanically separable)	>0.1%	17 06 05 (construction material containing asbestos) 17 05 04 (soil and stones other than those mentioned in 17 05 03*)	ACMs disposed of at a hazardous landfill authorised to receive asbestos, or in a stable non-reactive hazardous waste cell at a non-hazardous landfill authorised to receive asbestos. Soils should be disposed of at a non-hazardous landfill subject to achieving Waste Acceptance Criteria (WAC) for a stable non-reactive hazardous landfill site.
Hazardous soils containing ACM	>0.1%	17 05 03* (soil and stones containing dangerous substances)	Hazardous landfill subject to achieving Waste Acceptance Criteria (WAC) for a hazardous landfill site.

General
Following the classification of waste materials, the options available for the waste can be considered in the context of the waste hierarchy as below:

- Onsite re-use (with or without prior treatment) under suitable exceptions/permits.
- Offsite processing for recycling or recovery e.g. screening.
- Offsite disposal (with or without prior treatment) i.e. landfill.

Where feasible, efforts should be made to retain soils for onsite re-use to minimise costs and maximise the sustainability of projects.

If any gross hydrocarbon contaminated material is encountered during the construction phase, it is possible that this may be classified as hazardous and testing should be undertaken at that time.

Where it is necessary to dispose material off site it is recommended that materials are segregated and sufficient time is allowed to further classify the actual soil arisings that constitute the waste, including discussion with landfill sites and waste transfer stations to find the best disposal route. It is illegal to dilute and mix soils without a suitable permit.

Where possible, the option that the soils could be recycled at a suitable local waste treatment plant or transfer station rather than a landfill disposal route should be explored.

9.4 Re-use of Soils

By definition in law, any material excavated from the ground becomes waste at the moment of excavation. If that soil (now a “waste”) is then placed on another part of the development site (or used on another development site) without an appropriate materials management plan, permit or exemption being in place, by law this material is defined as “illegally deposited waste”.

In order to comply with UK legislation and avoid excessive costs, if the re-use of soils is proposed on site, this should be done in accordance with the relevant exemptions or permits in place.

Soils Re-use Under DoWCoP
One of the main industry mechanisms for allowing the re-use of soils in construction is the CL:AIRE “Development Industry Code of Practice for the Definition of Waste” (CL:AIRE DoWCoP) also known as a

Materials Management Plan (MMP). Further guidance is provided in the BSL Methodology and Guidance in Appendix A.

In order to re-use soils under the DoWCoP, there are four key criteria that need to be met:

- The aims and objectives of the project meet the requirements of the Waste Framework Directive (does not harm human health or the environment).
- The soils can be demonstrated to be suitable for use (backed up by chemical/geotechnical testing and assessment).
- There is certainty of use (planning consents are in place alongside materials tracking, which should be in place as part of good site practice in any case).
- Quantity (the quantity of materials used should be known).

Information on existing site levels, proposed levels, volumes generated (e.g. foundation / drainage excavation arisings) would need to be known in order to complete the MMP.

If the DoWCoP is the chosen route, the MMP should be in place and declared by a Qualified Persons (QP) before works commence, otherwise excavated soils could constitute an illegal deposit of waste and enforcement action could be taken by the EA and HMRC.

Once the project is complete, a verification report detailing soils re-use/import will need to be produced and submitted to CL:AIRE, which may be subject to a random audit process. Sites found to be non-complaint with the CoP can be referred to the EA for further investigation.

Note that for re-use of landfilled materials or mining wastes, the DoWCoP may not apply and a Waste Recovery Permit (or others) may be required. Liaison with the Environment Agency would be needed on a case by case basis to determine the best option.

Re-use of soils containing asbestos should comply with the CL:AIRE publication 'Interpretation for Managing and working with Asbestos in Soil and Construction and Demolition Materials' (CAR-SOIL™) and CAR 2012.

In terms of the re-use of brick/concrete crush materials, the DoWCoP does cover aggregates, but only on the site of origin, and the EA WRAP aggregate Quality Protocol might best apply to ensure quality standards, which are discussed further below.

Soils Re-use under Exemptions and Permits

Other potentially suitable re-use mechanisms may include U1 Exemptions, WRAP quality protocols (for aggregates) or Waste Framework Directive (WFD) Exclusions, amongst other mechanisms. Further details are provided in Appendix A.

10.0 CONCLUSIONS

10.1 Geo-Environmental

Geo-Environmental – Human Health – Soils
Laboratory testing of made ground and Till samples collected from the site did not reveal any exceedances of heavy metals, PAHs, petroleum hydrocarbons, BTEX or MTBE compounds, and no asbestos fibres were detected.

As such, the risk from soil contamination to the commercial end-users is considered to be low, and no further remedial action is required.

Geo-Environmental – Ground Gases
Elevated carbon monoxide and flow rates were recorded; however, these are considered unrepresentative of the site's ground gas regime, being influenced by groundwater within the monitoring wells. No deep or putrescible made ground was identified and the ground conditions include significant thicknesses of cohesive soils which limit migration potential of gas. Following a lines of evidence approach, the site has been assessed as very low risk and gas protection measures are not required.

Geo-Environmental – Controlled Waters
The overall risk to controlled waters is considered to be low and no further action is required.

Waste
Waste classification for the made ground at the site has revealed the tested soils to be non-hazardous.

10.2 Geotechnical

Foundations
Piled and vibro stone column (VSC) foundations are recommended due to variable, low-strength shallow deposits. Piles should penetrate through made ground and soft / loose Till into competent horizons, with preliminary allowable loads for Ø300mm piles ranging from 165kN to 505kN depending on unit.

Floor slabs
Ground-bearing slabs may be used with suitable excavation, compaction, reinforcement, and geogrid where required; differential settlement should be accommodated with joints and isolation of vertical elements.

Concrete classification
The results of laboratory pH and sulphate content, alongside the BRE full suite tests, indicate that sulphate class DS-1 and ACEC Class AC-1 conditions prevail.

Highways
Equilibrium CBR values are 2.6% for undisturbed granular Till and 0.4–5.1% (avg 1.4%) for cohesive Till; made ground plate load tests showed high variability (0.8–50.5%). Subgrade improvement may be required for both construction trafficking and permanent highways.

Drainage (SuDS)
Soakaways are not feasible due to low infiltration rates and cohesive strata; drainage design should account for groundwater levels and potential heave, with alternative dewatering methods considered during construction.

10.3 Further Work

The following further work is considered necessary to progress the site to construction phase:

- Supplementary ground investigation to confirm bedrock depth and confirm ground conditions beneath Unit 1 and 2
- Tree survey by qualified arboriculturist.
- Detailed foundation design by a structural engineer.
- Production of Materials Management Plan (MMP) under the CL:AIRE DoWCoP, if required.

11.0 ABBREVIATIONS AND DEFINITIONS

GLOSSARY	
Term / Abbreviation	**Definition**
AST	Above Ground Storage Tank.
B(a)P	Benzo (a) Pyrene.
BGS	British Geological Survey.
BRE	Building Research Establishment.
BS	British Standard.
BSL	Brownfield Solutions Ltd.
BTEX	Benzene, Toluene, Ethylbenzene, Xylenes.
CBR	California Bearing Ratio (used in pavement/highways design).
CAR 2012	Control of Asbestos Regulations (2012).
CBCB	Cheshire Brine Compensation Board.
CBCD	Cheshire Brine Compensation District.
CBR	California Bearing Ratio.
CIEH	Chartered Institute of Environmental Health.
CIRIA	Construction Industry Research Association.
CL:AIRE	Contaminated Land: Applications in Real Environments.
CLEA	Contaminated Land Exposure Assessment.
CLO	Contaminated Land Officer.
COMAH	Control of Major Accident Hazards.
Contamination	Presence of a substance which is in, on or under land, and which has the potential to cause significant harm or to cause significant pollution of controlled water. There is no assumption in this definition that harm results from the presence of the contamination. Naturally enhanced concentrations of harmful substances can fall within this definition of contamination. Contamination may relate to soils, surface water, groundwater or ground gas.
Controlled Waters	Inland freshwater (any lake, pond or watercourse above the freshwater limit), water contained in underground strata and any coastal water between the limit of highest tide or the freshwater line to the three-mile limit of territorial waters.
CPT	Cone Penetration Test.
CSM	Conceptual Site Model. A schematic hypothesis of the nature and sources of contamination, potential migration pathways (including description of the ground and groundwater) and potential receptors, developed on the basis of the information from the preliminary investigation and refined during subsequent phases of investigation and which is an essential part of the risk assessment process. The conceptual site model is initially derived from the information obtained by the preliminary investigation (i.e. the Phase I Geo-Environmental Assessment). This conceptual model is used to focus subsequent investigations, where these are considered to be necessary, in order to meet the objectives of the investigations and the risk assessment. The results of intrusive investigations can provide additional data that can be used to further refine the conceptual site model.
DCP	Dynamic Cone Penetrometer.
DNAPL	Dense Non-Aqueous Phase Liquid.
DoWCoP	Definition of Waste Code of Practice.
DWS	Drinking Water Standard.
EA	Environment Agency.
EHO	Environmental Health Officer.
EQS	Environmental Quality Standard.

GLOSSARY	
Term / Abbreviation	**Definition**
GAC	Generic Assessment Criteria.
GDR	Geotechnical Design Report.
GFR	Geotechnical Feedback Report.
GIR	Ground Investigation Report.
GSV	Gas Screening Value.
Harm	Adverse effect on the health of living organisms, or other interference with ecological systems of which they form part, and, in the case of human health, including property/structures and water supply pipelines.
Hazard	Inherently dangerous quality of a substance, procedure or event.
HDPE	High Density Polyethylene.
HSV	Hand Shear Vane.
K	Modulus of Subgrade Reaction.
LCRM	Land Contamination: Risk Management (EA guidance).
LNAPL	Light Non-Aqueous Phase Liquid (petrol, diesel, kerosene).
LOD	Limit of Detection (for particular method adopted).
MMP	Materials Management Plan.
Mv	Modulus of Volume of Compressibility.
ND	Not Detected.
NHBC	National House Building Council.
NR	Not Recorded.
OS	Ordnance Survey.
PAH	Polycyclic Aromatic Hydrocarbon.
Pathway	Mechanism or route by which a contaminant comes into contact with, or otherwise affects, a receptor.
PCB	Poly-Chlorinated Biphenyl.
PCSM	Preliminary Conceptual Site Model.
pH	Scale used to specify how acidic or basic a water-based solution is.
PHC	Petroleum Hydrocarbons.
PID	Photo Ionisation Detector.
PNEC	Predicted No-Effect Concentration.
Precision	Level of agreement within a series of measurements of a parameter.
PSD	Particle Size Distribution.
PVC	Polyvinyl Chloride.
Receptor	Human health, living organisms, ecological systems, controlled waters (surface waters and groundwater within aquifers), atmosphere, structures and utilities that could potentially be adversely affected by contaminant(s).
Risk	Probability of the occurrence, magnitude and consequences of an unwanted adverse effect on a receptor.
Risk Assessment	Process of establishing, to the extent possible, the existence, nature and significance of risk.
Sampling	Methods and techniques used to obtain a representative sample of the material under investigation.
SOM	Soil Organic Matter.
Source	Location from which contamination is, or was, derived. This could possibly be the location of the highest soil, groundwater or gas concentration of the contaminant(s).
SPT	Standard Penetration Test.
SVOCs	Semi Volatile Organic Compounds.
TOC	Total Organic Carbon.

GLOSSARY	
Term / Abbreviation	**Definition**
TPH CWG	Total Petroleum Hydrocarbon (Criteria Working Group).
TVOCs	Total volatile organic compounds.
UCS	Unconfined Compressive Strength.
Uncertainty	Parameter, associated with the result of a measurement that characterises the dispersion of the values that could reasonably be attributed to the measurement.
UST	Underground Storage Tank.
UXO	Unexploded Ordnance.
VCCs	Vibro Concrete Columns.
VSCs	Vibro Stone Columns
VOCs	Volatile Organic Compounds.
WAC	Waste Assessment Criteria.
WFD (in waste context)	Waste Framework Directive.
WFD (in water context)	Water Framework Directive.
Units	**Definition**
°	Degrees
Φ	Phi angle (in degrees)
g/l	Grams per Litre
Km	Kilometres
kPa	Kilo Pascal (Equivalent to kN/m^2)
$KN/m^2/mm$	Kilo Newton per metered squared per millimeter
kN/m^2	Kilo Newtons per metre squared
kPa	Kilo Pascal (Equivalent to kN/m^2)
l/hr	Litres per hour
MJ/kg	Mega joule per kilogram
MN	Mega Newton
M^2/MN	Mega Newton per metre squared
M	Metres
m bgl	Metres Below Ground Level
m OD	Metres Ordnance Datum (sea level)
µg/l	Micrograms per Litre (parts per billion)
µm	Micrometre
mb	Millibars (atmospheric pressure)
mg/kg	Milligrams per kilogram (parts per million)
mg/m^3	Milligram per metre cubed
mm	Millimetre
ppb	Parts Per Billion
Ppm	Parts Per Million

12.0 REFERENCES

References used in the production of this report are listed below; note not all of the below are relevant to the subject site and may not have been utilised.

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DRAWINGS



NOTES

AEWTP026C

- All dimensions and levels are to be checked on site.
- Any discrepancies are to be reported to the architect before any work commences
- This drawing shall not be scaled to ascertain any dimensions. Work to figured dimensions only.
- This drawing shall not be reproduced without express written permission from AEW.
- Title overlay drawings and ownership boundaries are produced using all reasonable endeavors. AEW cannot be responsible for the accuracy or scale discrepancy of base plans supplied to them.
- All works are to be undertaken in accordance with Building Regulations and the latest British Standards.
- All proprietary materials and products are to be used strictly in accordance with the manufacturers recommendations.

CDM 2015

Client notified of duties:

Principal Designer: **Client**

Unless noted below, all known hazards have been highlighted on the drawing:

Schedule of Accommodation

Unit	Ground Floor GIA	First Floor Office GIA	Total Office %	TOTAL UNIT GIA	Office NIA	"NET" Office %	Ground Floor GEA	First Floor Office GEA	TOTAL UNIT GEA	Car Parking (Accessible)	Parking Ratio (spaces / GIA m²)
Unit 1A	1,488 m² / 16,017ft²	192m² / 2,067ft²	13.3%	**1,680m² / 18,084ft²**	144m² / 1,550ft²	10.0%	1,552m² / 16,706ft²	231m² / 2,486ft²	**1,783m² / 19,192ft²**	32 (2)	1:51
Unit 1B	1,736m² / 18,686ft²	216m² / 2,325ft²	12.9%	**1,952m² / 21,011ft²**	168m² / 1,808ft²	10.0%	1,808m² / 19461ft²	259m² / 2,788ft²	**2,067m² / 22,249ft²**	24(2)	1:79
UNIT 1 TOTAL				**3,632m² / 39,095ft²**					**3,850m² / 41441ft²**	57 (4)	1:62
Unit 2A	800m² / 8,611ft²	120m² / 1,292ft²	15.0%	**920m² / 9,903ft²**	84m² / 1,163ft²	10.5%	850m² / 9,149ft²	147m² / 1,582ft²	**997m² / 10,732ft²**	13 (1)	1:71
Unit 2B	480m² / 5,167ft²	96m² / 1,033ft²	20.0%	**576m² / 6,200ft²**	60m² / 646ft²	12.5%	504m² / 5,425ft²	119m² / 1,281ft²	**623m² / 6,706ft²**	10 (1)	1:58
Unit 2C	480m² / 5,167ft²	96m² / 1,033ft²	20.0%	**576m² / 6,200ft²**	60m² / 646ft²	12.5%	504m² / 5,425ft²	119m² / 1,281ft²	**623m² / 6,706ft²**	10 (1)	1:58
UNIT 2 TOTAL				**2,072m² / 22,303ft²**					**2,243m² / 24,144ft²**	33 (3)	1:63
Unit 3A	1,000m² / 10,764ft²	144m² / 1,550ft²	14.4%	**1,144m² / 12,314ft²**	108m² / 1,163ft²	10.8%	1,053m² / 11,334ft²	172m² / 1,851ft²	**1,225m² / 13,186ft²**	20 (1)	1:57
Unit 3B	800m² / 8,611ft²	120m² / 1,292ft²	15.0%	**920m² / 9,903ft²**	84m² / 1,163ft²	10.5%	832m² / 8,956ft²	144m² / 1,550ft²	**976m² / 10,506ft²**	14 (1)	1:66
Unit 3C	600m² / 6,458ft²	96m² / 1,033ft²	16.0%	**696m² / 7,491ft²**	60m² / 646ft²	10.0%	637m² / 6,857ft²	119m² / 1,281ft²	**756m² / 8,138ft²**	11 (1)	1:63
UNIT 3 TOTAL				**2,760m² / 29,709ft²**					**2,957m² / 31,829ft²**	45 (3)	1:61
Unit 4	1,392m² / 14,983ft²	188m² / 2,024ft²	13.5%	**1,580m² / 17,007ft²**	140m² / 1,504ft²	10.0%	1470m² / 15,823ft²	218m² / 2,347ft²	**1,688m² / 18,170ft²**	22 (2)	1:69
GRAND TOTAL	8,776m² / 9,4464ft²	1,268m² / 13,649ft²		**10,044m² / 108,113ft²**	908m² / 9,774ft²		9,210m² / 99136ft²	1,528m² / 16,447ft²	10,738m² / 115,583ft²	157 (12)	1:63

Key:

- Site Boundary 7.90acres / 3.20ha
- Existing trees to be removed
- Existing Trees
- Landscape area to be retained & enhanced
- Enhanced Landscape Bund
- Proposed Acoustic Fencing
- Office - estimated NET area
- Office - estimated core area

Key:

0 5 10 15 20 25m

Scale 1:500 @ A1

Rev	Date	Drawn by:	Checked by:
P05	22/09/25	AG	AS
Unit 1 and 4 areas updated, gates and fence removed			
P04	17/04/25	TW	CF
Highway Consultant Alterations			
P03	28/02/25	AS	AS
Office areas updated			
P02	06/02/25	AS	AS
GEA areas updated			
P01	29/01/25	TW	AS
Initial issue			

Status: S2 — Purpose of Issue: For Information

drawing stage: **Feasibility**

client: **Ask Real Estate**

project: **Aviator Way, Manchester Business Park**

drawing title: **Proposed Site Plan Option 05**

date: 29/01/25 — drawn: TW

scale@A1: 1:500 — checked: AS

Rev: **P05**

Job No: **13502-AEW-XX-XX-DR-A-0007**

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MAIN PORTAL FRAME PAD FOUNDATION LOADING - SLIDING GOVERNS SO PADS SIZED ON MIN VERTICAL LOADS AND MAX HORIZONTAL

NOTES:

1. REFER TO DRAWING ***-REN-**-XX-DR-S-00010 FOR GENERAL NOTES.

MIN VERTICAL REACTIONS
TYPICAL UNRESTRAINED
F_z
G_k =70
Q_k = 40
W_k = MAX UPLIFT 30

TYPICAL RESTRAINED F_z
G_k = 40
Q_k = 20
W_k = MAX UPLIFT 30

BRACED BAY
G_k = 60
Q_k = 40
W_k = MAX UPLIFT 45

WORST CASE REACTIONS
TYPICAL UNRESTRAINED
F_z
G_k = 180
Q_k = 130

TYPICAL RESTRAINED F_z
G_k = 70
Q_k = 50

BRACED BAY
G_k = 100
Q_k = 65

WORST CASE REACTIONS
TYPICAL UNRESTRAINED
F_z
G_k = 20
Q_k = 16
W_k = 0

TYPICAL RESTRAINED F_z
G_k = 20
Q_k = 16
W_k = 0

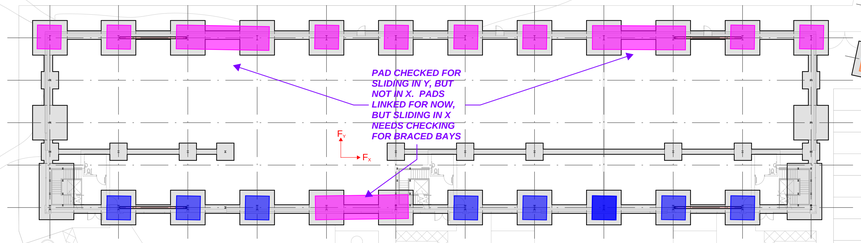
BRACED BAY
G_k = 20
Q_k = 16
W_k = 0

TYPICAL UNRESTRAINED
USE 1800x1800x750 PAD
(Tedds calc 4) C30/37
B16s@200 B1, B2

TYPICAL RESTRAINED
USE 2200x2200x750 PAD
(Tedds calc 5) C30/37
B16s@200 B1, B2

TYPICAL BRACED
USE 2200x2200x750 PAD
(Tedds calc 6) C30/37
B16s@200 B1, B2

MAX ULS UPLIFT FORCE = 5kN



MIN VERTICAL REACTIONS
TYPICAL UNRESTRAINED
F_z
G_k = 50
Q_k = 30
W_k = MAX UPLIFT 30

TYPICAL RESTRAINED F_z
G_k = 80
Q_k = 50
W_k = MAX UPLIFT 35

BRACED BAY
G_k = 60
Q_k = 30
W_k = MAX UPLIFT 40

WORST CASE REACTIONS
TYPICAL UNRESTRAINED
F_z
G_k = 200
Q_k = 140

TYPICAL RESTRAINED F_z
G_k = 90
Q_k = 60

BRACED BAY
G_k = 200
Q_k = 140

WORST CASE REACTIONS
TYPICAL UNRESTRAINED
F_z
G_k = 30
Q_k = 25
W_k = 0

TYPICAL RESTRAINED F_z
G_k = 30
Q_k = 25
W_k = 0

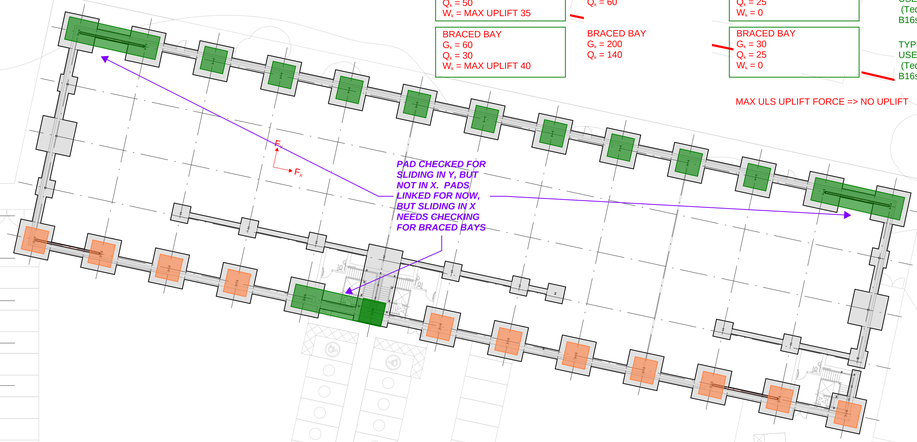
BRACED BAY
G_k = 30
Q_k = 25
W_k = 0

TYPICAL UNRESTRAINED
USE 2750x2750x750 PAD
(Tedds calc 7) C30/37
B16s@175 B1, B2

TYPICAL RESTRAINED
USE 2500x2500x750 PAD
(Tedds calc 8) C30/37
B16s@175 B1, B2

TYPICAL BRACED
USE 2500x2500x750 PAD
(Tedds calc 8) C30/37
B16s@175 B1, B2

MAX ULS UPLIFT FORCE => NO UPLIFT



NOTES FOR DRAWING WORK:

PADS FOR SCHEDULING:

PF01 , 02 etc SIZE AS PER NOTES ON MARKUP (ALL 750mm DEEP) RC30/37 / RF QUANT LEAVE BLANK I WILL FILL THIS IN

ALL TOC FOUNDATIONS TO BE SET 450mm BELOW SLAB SSL

Woodhouse Lane

71.0m

WOODHOUSE LANE

vertical load
fire boundary condition
PVA
Lateral loads - take kick out force out of Tekla
Sliding
Overturning
Uplift

GABLE END / PARTY WALL PADS:

SLIDING CRITICAL:

GRAVITY LOADS
Gk = 1kN/m2 ELEVATION FACADE (7.65m x 10m H = 76.5m2 = 76.5kN

LATERAL LOADS
WIND LOAD = -1.25kPa (Zone 8)
76.5/2 x 1.25 = 48kN

TEDDS CALC 13

ADOPT 1.8x1.8x0.750 (typ, also adopt for internal 'party wall' cols)

INTERNAL OFFICE COL LTD:

AREA FLOOR SUPPORTED AT LEVEL 01

= 8m x 6.5m = 52m2

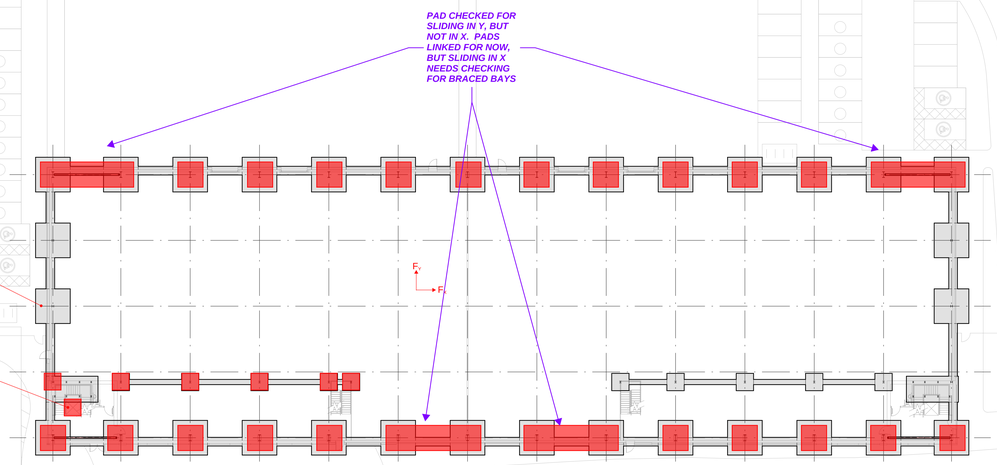
G_k = 5.0kPa say
Q_k = 2.5kPa + 1kPa
TOT = 8.5kPa

Internal Facade Line Load = 1kN/m2 on elevation (firemaster) x 6m height = 6kN/m Gk

Gk TOT = 260 + 48 = 308kN
Qk TOT = 182kN

PAD OFFICE SAY = **2.0m x 2.0m x 0.75m** (BP CIRCA 125kPa)

LIFT PIT BASES SAY 3.0m x 3.0m x 0.75m TOC TO MATCH ALL OTHER FOUNDS (PLATFORM LIFT SO NO PIT)



MIN VERTICAL REACTIONS
TYPICAL UNRESTRAINED
F_z
G_k = 180
Q_k = 130
W_k = MAX UPLIFT 90

TYPICAL RESTRAINED F_z
G_k = 100
Q_k = 60
W_k = MAX UPLIFT 70

BRACED BAY
G_k = 100
Q_k = 40
W_k = MAX UPLIFT 130

MAX VERTICAL REACTIONS
TYPICAL UNRESTRAINED F_z

G_k = 225
Q_k = 165

TYPICAL RESTRAINED F_z
G_k = 110
Q_k = 70

BRACED BAY
G_k = 120
Q_k = 90

WORST CASE REACTIONS
TYPICAL UNRESTRAINED
F_z
G_k = 50
Q_k = 35
W_k = 10

TYPICAL RESTRAINED F_z
G_k = 40
Q_k = 35
W_k = 0

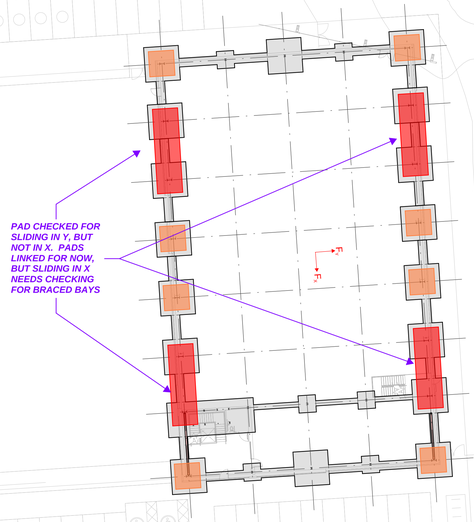
BRACED BAY
G_k = 40
Q_k =35
W_k = 0

WORST CASE REACTIONS

TYPICAL UNRESTRAINED
USE 3000x3000x750 PAD
(Tedds calc 1) C30/37
B16s@200 B1, B2

TYPICAL RESTRAINED F_z
USE 3000x3000x750 PAD
(Tedds calc 2) C30/37
B16s@200 B1, B2

BRACED BAY
USE 3000x3000x750 PAD
(Tedds calc 3) C30/37
B16s@200 B1, B2



MIN VERTICAL REACTIONS
TYPICAL UNRESTRAINED
F_z
G_k = 90
Q_k = 60
W_k = MAX UPLIFT 110

TYPICAL RESTRAINED F_z
G_k = 50
Q_k = 25
W_k = MAX UPLIFT 40

BRACED BAY
G_k = 70
Q_k = 40
W_k = MAX UPLIFT 100

WORST CASE REACTIONS
TYPICAL UNRESTRAINED
F_z
G_k = 110
Q_k = 80

TYPICAL RESTRAINED F_z
G_k = 90
Q_k = 60

BRACED BAY
G_k = 135
Q_k = 60

WORST CASE REACTIONS
TYPICAL UNRESTRAINED
F_z
G_k = 30
Q_k = 25
W_k = 0

TYPICAL RESTRAINED F_z
G_k = 30
Q_k = 25
W_k = 0

BRACED BAY
G_k = 30
Q_k = 25
W_k = 0

TYPICAL UNRESTRAINED
USE 2750x2750x750 PAD
(Tedds calc 10) C30/37
B16s@175 B1, B2

TYPICAL RESTRAINED
USE 2750x2750x750 PAD
(Tedds calc 11) C30/37
B16s@175 B1, B2

BRACED BAY
USE 3000x3000x750 PAD
(Tedds calc 12) C30/37
B16s@200 B1, B2

MAX ULS UPLIFT FORCE = 25kN

Drain

ASSUMPTIONS

- CHARACTERISTIC FRICTION ANGLE OF 20 DEG
- ABP 150kN/m²
- PADS SIZED FOR MINIMUM VERTICAL FORCES AND MAX HORIZONTAL

TO DO
- GABLE END PADS (VERTICALLY SLOTTED HEAD CONNECTION SO SIZE FOR MAX WIND AS DETAILED IN SUPERSTRUCTURE SCHEME CALCS)
- PARTY WALL PADS (VERTICALLY SLOTTED HEAD CONNECTION SO SIZE FOR MAX INTERNAL WIND AS DETAILED IN SUPERSTRUCTURE SCHEME CALCS)
- OFFICE PADS (SIZE FROM TEKLA REACTIONS)
- GROUND BEAMS??
- GROUND FLOOR SLAB
- MARK UP SUBSTRUCTURE SITE WIDE PLAN AND ALL GROUND FLOOR BLOCKS FOR ALEX KEMPLEY
- REVIEW TREE INFLUENCE ZONE

Rev:	Description:	Date:	By:	Chkd:
P01	STAGE 3 ISSUE	30.11.25	AK	PC

renaissance
Renaissance Associates Ltd
Carvers Warehouse
77 Dale Street
Manchester
M1 2HG

Project:
MANCHESTER BUSINESS PARK

Drawing Title:
FOUNDATION PLAN

CHECK PRINT

Status:

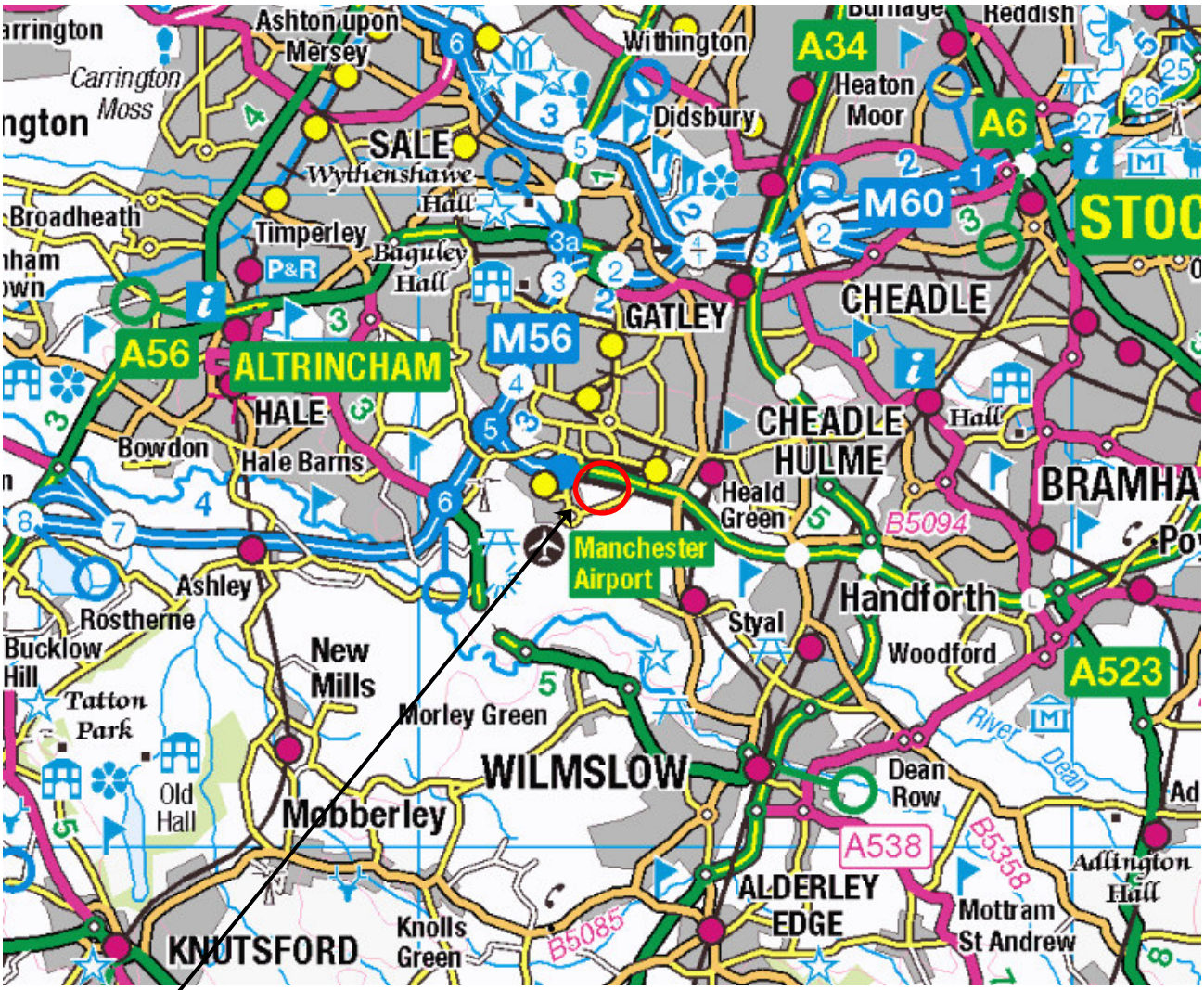
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A0	NOV 25	AK	RC PC

Scale: 1 : 250 | Project No: 2501-01

Project Code: | Originator: | Volume: | Level: | Type: | Role: | Category / Number: | Rev:

MBP - REN - XX - FN - DR - S - 01090 - P01

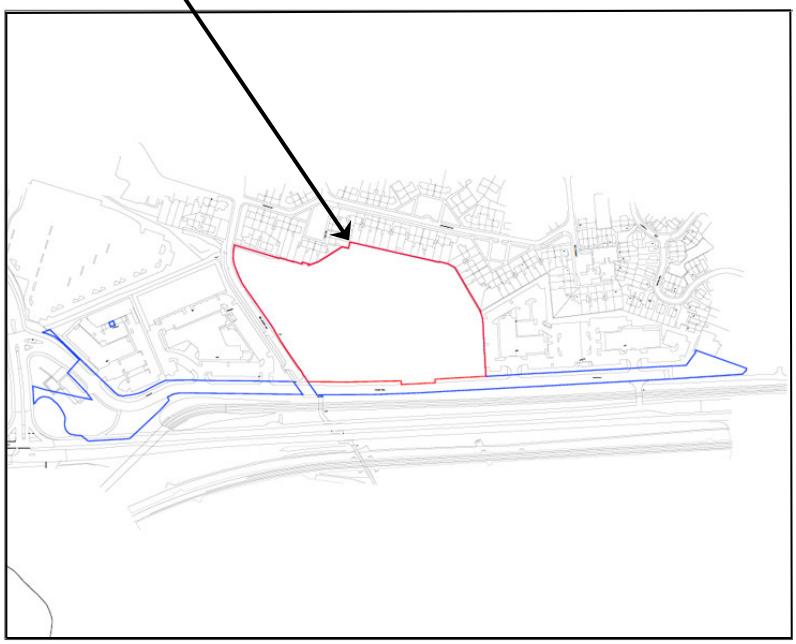
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SITE LOCATION

NEAREST POSTCODE: M22 5TG

SITE ENTRANCE WHAT3WORDS: ///PRUDE.NOUN.CRACKING



REV	DATE	DESCRIPTION	BY	CKD
B	15/01/2026	Format updates	BW	DV

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GEO-ENVIRONMENTAL ENGINEERING EXCELLENCE

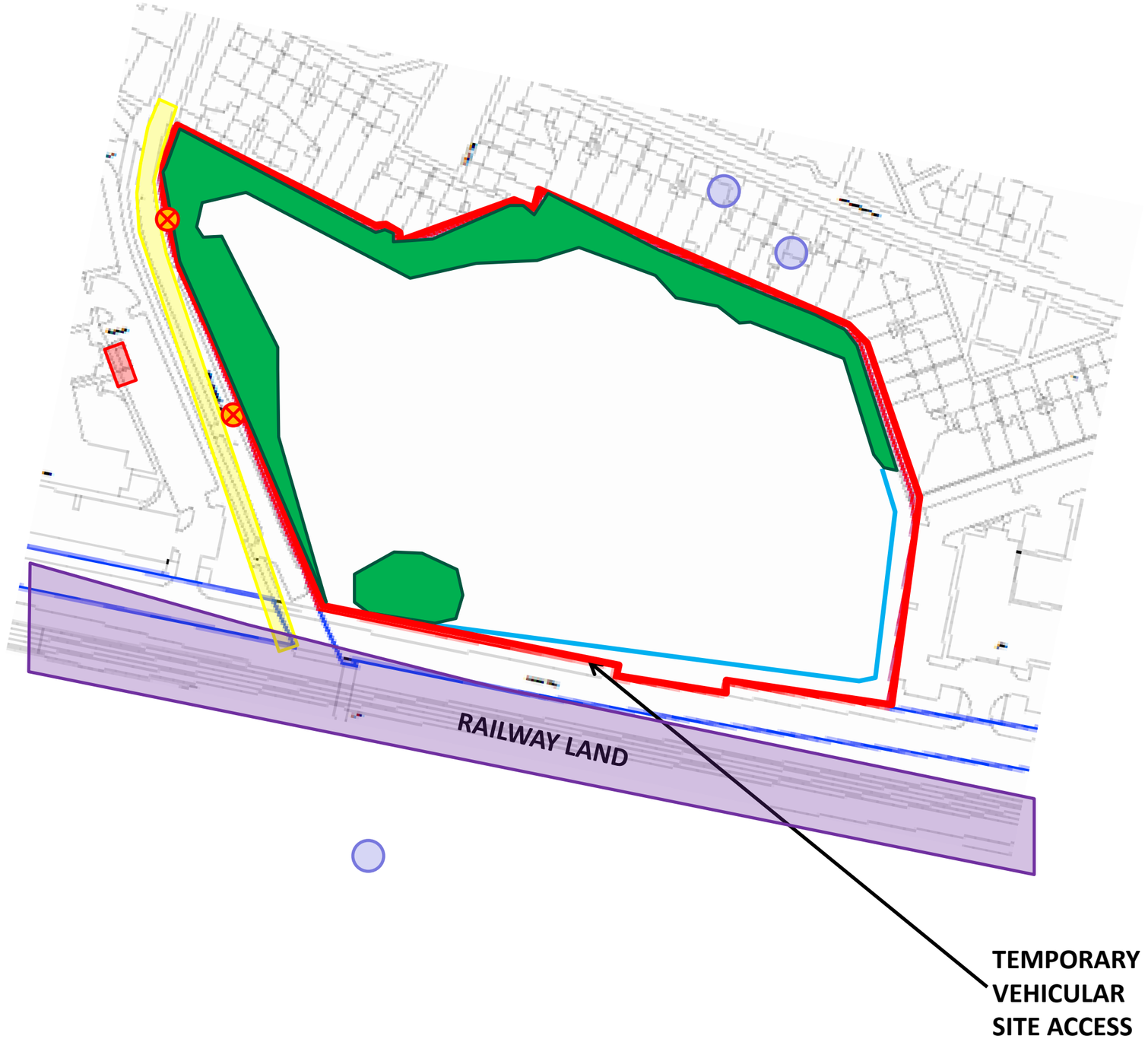
CLIENT
ASK REAL ESTATE MBP LTD

PROJECT TITLE
MANCHESTER BUSINESS PARK, AVIATOR WAY

DRAWING TITLE
SITE LOCATION PLAN

DRAWING No.	REVISION	SCALE	DATE
C6035/01	B	NTS	15/01/2026

DRAWN BY	CHECKED BY
BW	DV



KEY

- APPROXIMATE SITE BOUNDARY
- TREES & SHRUBS
- PEDESTRIAN SITE ACCESS
- DRAINAGE DITCH
- ELECTRICITY SUBSTATION
- PEDESTRIAN ACCESS ONLY
- HISTORIC POND

NOTES

1. ALL DIMENSIONS TO BE CHECKED ON SITE BEFORE COMMENCING WORKS. ANY DISCREPANCIES ARE TO BE REPORTED TO THE ARCHITECT & ENGINEER FOR VERIFICATION. FIGURED DIMENSIONS ONLY ARE TO BE TAKEN FROM THIS DRAWING.
2. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL RELEVANT ENGINEERS REPORTS. THIS DRAWING IS COPYRIGHT OF BSL.
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REV	DATE	DESCRIPTION	BY	CKD
A	02/12/2025	Updates for Client.	BW	DV
B	15/01/2026	Format updates.	BW	DV

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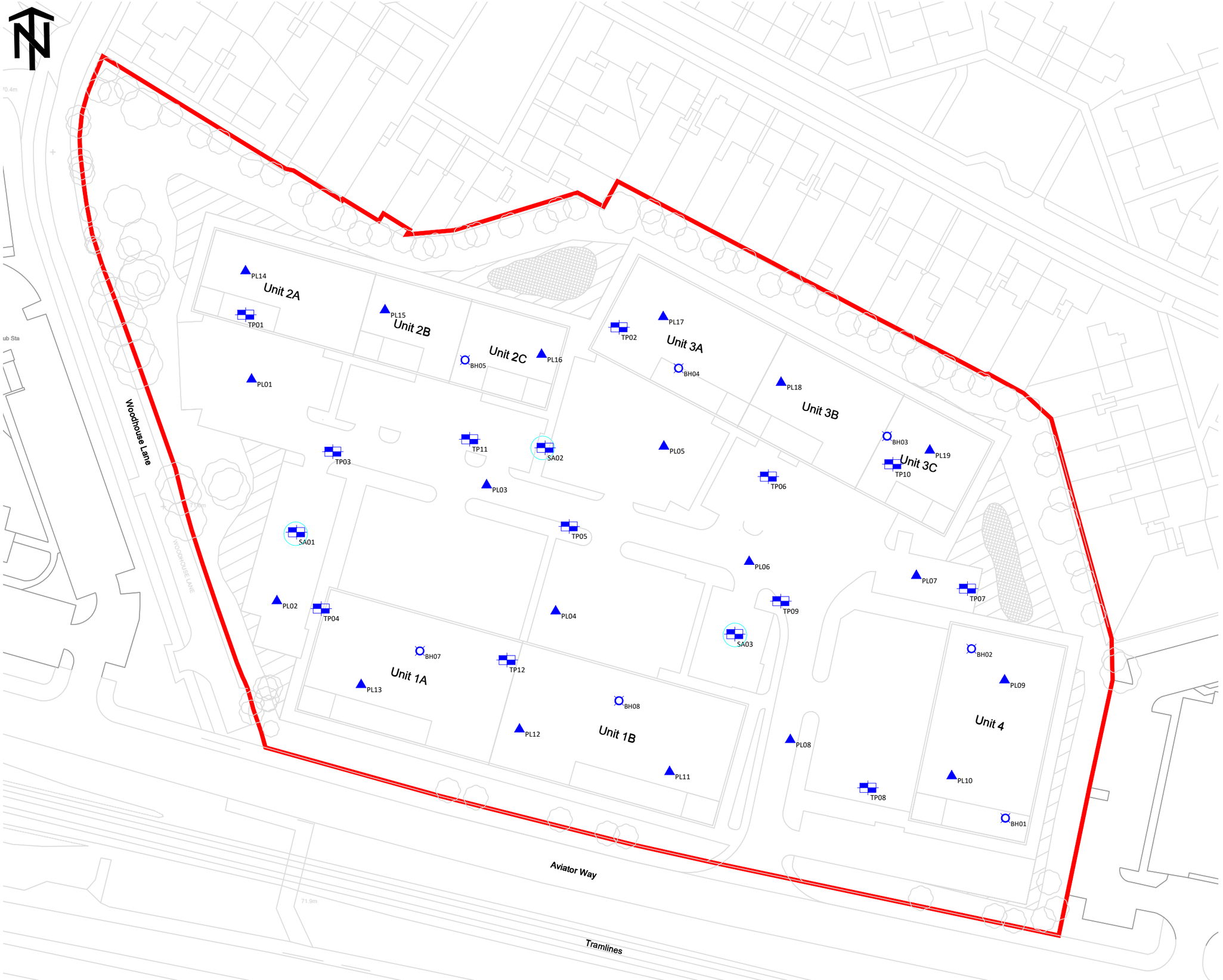
CLIENT
ASK REAL ESTATE MBP LTD

PROJECT TITLE
MANCHESTER BUSINESS PARK, AVIATOR WAY

DRAWING TITLE
SITE FEATURES PLAN

DRAWING No.	REVISION	SCALE	DATE
C6035/02	B	NTS	15/01/2026

DRAWN BY	CHECKED BY
BW	DV



KEY

- BOREHOLE
- TRIAL PIT
- SOAKAWAY
- PLATE LOAD TEST

NOTES

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REV	DATE	DESCRIPTION	BY	CKD
C	02/12/25	Trial pit locations added.	BW	AH
D	15/01/26	Trial pit 12 added and drawing number updated.	BW	DV

BROWNFIELD SOLUTIONS LTD

CLIENT

ASK REAL ESTATE MBP LIMITED

PROJECT TITLE

MANCHESTER BUSINESS PARK, AVIATOR WAY

DRAWING TITLE

EXPLORATORY HOLE PLAN

DRAWING No.	REVISION	SCALE	DATE
C6035/04	D	NTS	15/01/26

DRAWN BY	CHECKED BY
BW	DV

PHOTOGRAPHS



Photograph 1: Site Entrance.



Photograph 2: General Site Conditions.



Photograph 3: General Site Conditions.



Photograph 4: General Site Conditions.



Photograph 5: General Site Conditions.



Photograph 6: General Site Conditions.



Photograph 7: Redundant pipe.



Photograph 8: BH02 monitoring well.



Photograph 9: BH04 monitoring well.



Photograph 10: BH07 monitoring well.



Photograph 11: BH01 Core Sample.



Photograph 12: BH01 Core Sample.



Photograph 13: BH01 Core Sample.



Photograph 14: BH01 Core Sample.



Photograph 15: BH02 Core Sample.



Photograph 16: BH02 Core Sample.



Photograph 17: BH02 Core Sample.



Photograph 18: BH02 Core Sample.



Photograph 19: BH03 Core Sample.



Photograph 20: BH03 Core Sample.



Photograph 21: BH03 Core Sample.



Photograph 22: BH03 Core Sample.



Photograph 23: BH03 Core Sample.



Photograph 24: BH03 Core Sample.



Photograph 25: BH04 Core Sample.



Photograph 26: BH04 Core Sample.



Photograph 27: BH04 Core Sample.



Photograph 28: BH04 Core Sample.



Photograph 29: BH03 Core Sample.



Photograph 30: BH03 Core Sample.

APPENDIX A

BSL Methodology and Guidance

BSL Phase I Geo-Environmental Assessment Reports - Methodology and Guidance

Background

This Appendix provides information on the approaches, methods and guidance used by Brownfield Solutions Ltd in the preparation of this report.

The term 'geo-environmental' is used to describe aspects relating to ground-related environmental issues (such as potential soils and groundwater contamination). The term 'geotechnical' is used to describe aspects relating to the physical nature of the site (such as foundation requirements). It should be noted that this is an integrated investigation and these two main aspects are related, unless otherwise specified within the report.

Phase I reports are written in general accordance with the description of a Preliminary Investigation as defined in BS10175:2011+A2:2017 and are also produced in general accordance with the recommendations for a Tier 1 Preliminary Risk Assessment as described in LCRM guidance.

The first stage of the investigation and assessment of a site is the Preliminary Investigation/Tier 1 Preliminary Risk Assessment, often referred to as a Phase 1 Desk Study, comprising a desk study and walk-over survey and collation of desk-based searches, which culminates in the Preliminary Risk Assessment and the development of a preliminary/initial **Conceptual Site Model (CSM)**. From this are identified any potential geotechnical and geo-environmental hazards and the qualitative degree of risk associated with them. In the case of the geotechnical hazard identification, this is referred to as the **Ground Model.**

From the geo-environmental perspective, the hazard Identification process uses professional judgement to evaluate all the hazards in terms of possible contaminant linkages (of source-pathway-receptor). Possible contaminant linkages are potentially unacceptable risks in terms of the current contaminated land regime legal framework and require either remediation or further assessment. These are normally addressed via intrusive ground investigation and generic risk assessment as part of Phase II investigations and reports.

The second stage is the Ground Investigation, Generic Risk Assessment and Geotechnical Interpretation. This represents the further assessment mentioned above. The Ground Investigation comprises field work and laboratory testing based on the findings of the Preliminary Risk Assessment, to reduce uncertainty in the geotechnical and geo-environmental hazard identification. This may include an exploratory, a detailed or/and supplementary Investigations as described in BS 10175:2011+A2:2017. Phase II Assessments are produced in general accordance with the recommendations for a Tier 2 Generic Quantitative Risk Assessment as described in LCRM guidance and are also intended to fulfil the requirements of a Ground Investigation Report (GIR) as detailed in BS EN 1997-2:2007.

Contaminated Land - Legislative Background

Land contamination can be addressed in several ways, e.g. during planning, under Part 2A, following an incident, during an investigation into environmental damages, or during the application of an environmental permit, or its surrender.

For the planning process the key test is **as a minimum the site cannot be determined as contaminated land**, e.g. there is not significant harm, significant possibility of significant harm to human health or that there is not significant harm to, or the significant possibility that the pollution of controlled waters will occur.

Environmental liabilities and risks have been evaluated in terms of a source -pathway - target relationship in accordance with the approach set out in:

- The 1995 Environment Act.
- The Contaminated Land Statutory Guidance, DEFRA – April 2012.
- The Contaminated Land (England) Regulations 2006.
- The Contaminated Land (England) Amendment Regulations 2012.
- Water Resources Act.
- Water Framework Directive.
- Environmental Damage Regulations.
- Environment Agency (EA) - Land Contamination Risk Management (LCRM) 2019.

Contaminated land is defined within the legislative framework as land which is in such condition by reason of substances in, on or under the land that:

1) Significant harm is being caused or there is a significant possibility of such harm being caused.
2) Significant pollution of controlled waters is being or is likely to be caused.

The potential for harm is based on the presence of three factors:

Source - substances that are potential contaminants or pollutants that may cause harm.
Pathway - a potential route by which contaminants can move from the source to the receptor, and the impact of that migration on the source e.g., attenuation.
Receptor - a receptor that may be harmed, for example the water environment, humans and water, considering the sensitivity of the receptor.

Where a source, pathway and target are all present a pollutant linkage exists and there is potential for harm to be caused.



Where any one of the “pollution linkages” between the above is absent there is deemed to be no risk.

The presence of a source does not automatically imply that a contamination problem exists, since contamination must be defined in terms of pollutant linkages and unacceptable risk of harm. The nature and importance of both pathways and receptors are site specific and will vary according to the intended end use of the site, its characteristics and its surroundings.

The key principle which supports the S-P-R approach is ‘suitable for use’ criteria. This requires remedial action only where contamination is considered to pose unacceptable actual or potential risks to health or the environment and, taking into account the proposed use of the site.

Relevant Guidance Documents
This report has been prepared in accordance with the list of guidance below, however the list is not exhaustive:

- DETR: Circular 02/2000: Environmental Protection Act 1990: Part IIA: Contaminated land. 2012.
- Environment Agency technical advice to third parties on Pollution of Controlled Waters for Part IIA of the EPA1990, May 2002.
- BS 10175:2011+A2:2017.
- Environment Agency (EA) - Land Contamination Risk Management (LCRM). 2019.
- Groundwater Protection https://www.gov.uk/government/collections/groundwater-protection
- UK Technical Advisory Group (UKTAG) - - Water Framework Directive
- Incidents and their classification: the Common Incident Classification Scheme (CICS) – Used by the Environment Agency to classify pollution incidents.

Relevant Legislative Documents
The following is a non-exhaustive list of legislative framework documents that has been considered in the production of this report:

- The Environmental Protection Act 1990: Part 2A Contaminated Land Statutory Guidance (2012).
- The Environment Protection Act (1990).
- The Water Resources Act (1991).
- The Environment Act (1995).
- The Contaminated Land (England) Act (2000).
- The Pollution Prevention and Control (England and Wales) Regulations (2000).
- The Landfill Regulations (England and Wales) Regulations (2002).
- The Landfill (England and Wales) (Amendment) Regulations (2004).
- Contaminated Land (England) Regulations (2012).
- The Environmental Damage (Prevention and Remediation) Regulations (2009).
- Environmental Permitting Regulations (England and Wales) Regulations (2010).
- The Water Environment (Water Framework Directive) (England and Wales) Regulations (2017).
- Health and Safety at Work Act.
- National Planning Policy Framework (NPPF) – latest version.

Contaminated Land Risk Assessment Approach

Contaminated Land Risk Assessment is a technique that identifies and considers the associated risk, determines whether the risks are significant and whether action needs to be taken. The four main stages of risk assessment are:



LCRM outlines the framework to be followed for risk assessment in the UK. The framework is designed to be consistent with UK legislation and policies including planning. The starting point of the risk assessment is to identify the context of the problem and the objectives of the process. Under LCRM, three tiers of risk assessment exist – Stage/Tier Preliminary Risk Assessment, Stage 2 Generic Quantitative Assessment and Stage 3 Detailed Quantitative Assessment.

Further information can be found at the below site:
https://www.gov.uk/government/publications/land-contamination-risk-management-lcrm

Formulating and developing a conceptual model for the site is an important requirement of risk assessment, this supports the identification and assessment of pollutant linkages. Development of the conceptual model forms the main part of preliminary risk assessment, and the model is subsequently refined or revised as more information and understanding is obtained through the risk assessment process.

Risk is a combination of the likelihood of an event occurring and the magnitude of its consequences. Therefore, both the likelihood and the consequences of an event must be taken into account when assessing risk.

The risk assessment process needs to take into account the degree of confidence required in decisions. Identification of uncertainties is an essential step in risk assessment.

The likelihood of an event is classified on a four-point system using the following terms and definitions from CIRIA C552, with reference to Incidents and their classification: the Common Incident Classification Scheme (CICS), Environmental Protection Act 1990: Part 2A – Contaminated Land Statutory Guidance 2012 and other guidance as appropriate which will be detailed within the main body of the report if applied.

The likelihood of a given receptor being impacted is related to a number of factors, e.g. the geology which could inhibit contaminant migration. For example, a site with a significant thickness of clay between it and a receptor may reduce migration of contamination via the subsurface, which will reduce the likelihood of a given receptor being impacted. The geology or drainage for example could offer a preferential pathway e.g. mines shafts/faults increasing the likelihood and potential magnitude of an impact. The depth of contamination will also affect the exposure pathway, for example petroleum hydrocarbons at depth are unlikely to reach a receptor via dermal contact but could via vapour pathways which will influence the likelihood of an impact being felt e.g. if there are no buildings on site.

The terms and definitions used for the assessment of the likelihood are provided below:

High likelihood: There is a pollution linkage and an event appears very likely in the short term and almost inevitable over the long term, or there is evidence at the receptor of harm or pollution.
Examples - Extensive areas with concentrations above saturation limits for mobile contamination e.g. petroleum hydrocarbons within the water table.

Likely: There is a pollution linkage and all the elements are present and in the right place, which means it is probable that an event will occur. Circumstances are such that the event is not inevitable, but possible in the short term and likely over the long term.
Examples – Localised areas of contaminants with concentrations above saturation limits for mobile contamination e.g. localised petroleum hydrocarbons within the water table; shallow contamination above relevant human health generic assessment criteria is present with little or no hardstanding,

Low likelihood: There is a pollution linkage and circumstances are possible under which an event could occur. However, it is by no means certain even over a longer period such event would take place, and is less likely in the short term.
Examples - A thickness/distance of low permeability deposits preventing contaminant migration to a receptor is present; a site is mostly covered hard standing preventing exposure to soil contamination.

Unlikely: There is a pollution linkage but circumstances are such that it is improbable the event would occur even in the long term.
Examples – A site is underlain by a substantial thickness of low permeability clays, between the source and potential receptors which will inhibit significantly, but not completely rule out migration to sensitive receptors.

The severity is also classified using a system based on CIRIA C552, with reference to Incidents and their classification: the Common Incident Classification Scheme (CICS), Environmental Protection Act 1990: Part 2A – Contaminated Land Statutory Guidance 2012 and other guidance as appropriate which will be detailed within the main body of the report, if applied. The terms and definitions are:

Severe: Short term (acute) risk to human health likely to result in 'significant harm' as defined by the Environment Protection Act 1990, Part IIA. Short-term risk of pollution of sensitive water resources. Catastrophic damage to buildings or property. A short-term risk to a particular ecosystem or organism forming part of that ecosystem (note definition of ecosystem in 'Draft Circular on Contaminated Land', DETR 2000);
Examples – High concentrations of contaminant on surface of recreation area, major spillage of contaminants from site into controlled waters, explosion causing building to collapse.

Medium: Chronic damage to human health ('significant harm' as defined in DETR 2000). Pollution of sensitive water resources. A significant change in a particular ecosystem or organism forming part of that ecosystem (note definition of ecosystem in 'Draft Circular on Contaminated Land', DETR 2000);
Examples - Concentrations of contaminants exceed the generic assessment criteria, leaching of contaminants from a site to a Principal or Secondary Aquifer, death of species within a designated nature reserve.

Mild: Pollution of non-sensitive water resources. Significant damage to crops, buildings, structures and services ('significant harm' as defined in 'Draft Circular on Contaminated Land', DETR 2000). Damage to sensitive buildings, structures, services or the environment.
Examples – Pollution of non-classified groundwater or damage to buildings rendering it unsafe to occupy.

Minor: harm, not necessarily significant harm, which may result in financial loss or expenditure to resolve. Non-permanent health effects to human health (easily prevented by use of personal protective clothing etc). Easily repairable effects of damage to buildings, structures and services.
Examples – Presence of contaminants at such concentrations PPE is required during site work, loss of plants in landscaping scheme or discolouration of concrete.

Once the likelihood and severity have been determined, a risk category can be assigned using the table below.

		Consequences			
		Severe	Medium	Mild	Minor
Probability	Highly likely	Very high	High	Moderate	Moderate/low
	Likely	High	Moderate	Moderate/low	Low
	Low likelihood	Moderate	Moderate/low	Low	Very low
	Unlikely	Moderate/low	Low	Very Low	Very low
	Negligible	Negligible Risk / No Linkage			

Definitions of the risk categories obtained from the above table are as follows together with an assessment of the further work that might be required:

Very high: There is a high probability that severe harm could arise to a designated receptor from an identified hazard or there is evidence that severe harm is currently happening. This risk, if realised, could result in substantial liability. Urgent investigation and remediation are likely to be required.

High: Harm is likely to arise to a designated receptor from an identified hazard. Realisation of the risk is likely to present a substantial liability. Urgent investigation is required and remedial works may be necessary in the short term and are likely over the longer term.

Moderate: It is possible that harm could arise to a designated receptor from an identified hazard. However, it is either relatively unlikely that any such harm would be severe, or if any harm were to occur it would be more likely to be relatively mild. Investigation is normally required to clarify the risk and determine the liability. Some remedial works may be required in the longer term.

Low: It is possible that harm could arise to a designated receptor from an identified hazard, but it is likely that this harm, if realised, would at worst normally be mild.

Very Low: There is a low possibility that harm could arise to a receptor. In the event of such harm being realised, it is not likely to be severe.

Some linkages may be identified which constitutes a theoretical connection between a source and a receptor, but professional judgement shows them not to be possible for some reason. These are labelled 'negligible risk' and 'no linkage' in the summary table, which give rise to an overall **negligible** risk category and no further action is required.

Ground Gas Risk Assessment

BS8485:2015+A1:2019, BS 8576:2013, CL:AIRE RB17, and NHBC 'Hazardous Ground Gas - An essential guide for housebuilders' 2023, are the current guidance which gives up-to-date advice on all aspects of permanent ground gas risk. BS8576 alongside CIRIA C682 also provides guidance on assessment of hydrocarbon vapour intrusion.

The CL:AIRE publication 'Good Practice for Coal Mine Gas Emissions" 2021 provides guidance on the assessment of risks from mine gas sources.

The above all outline good practice in investigation, the collection of relevant data and monitoring programmes in a risk-based approach to ground gas contamination. The aim of the guidance is for a consistent approach to decision making, particularly relating to the scope of protective design measures on a site-specific basis.

Legislative Framework
BS8485:2015+A1:2019, BS 8576:2013 and CIRIA C665 provides technical guidance, however they also recognise the context into which the guidance has to be employed. Government policy is based upon a "suitable for use approach", which is relevant to both the current and proposed future use of land. When considering the current use of land, Part IIA of the Environment Protection Act 1990 provides the regulatory regime. The presence of hazardous ground gases could provide the "source" in a "pollutant linkage" which could lead the regulator to determine that considerable harm or there is a significant possibility of such harm being caused. Under such circumstances, the regulator would determine the land to be "contaminated land" under the provisions of the Act, setting out the process of remediation as described in the DETR Circular 02/2000 *Statutory guidance on contaminated land*.

Generation Potential of Sources
BS 8576:2013 Figure 6 provides a basis for assessing the generation potential from sources identified as part of the Phase I Assessment. These are summarised below:

Generation Potential	Typical Sources
Very Low	• Natural carbonate soil and strata, e.g. chalk and limestone. • Natural soil strata with a low degradable organic content, e.g. alluvium, peat. • In-filled pond less than 15 m diameter, in-filled before 1930s to 1940s. • Made ground with low degradable organic content (e.g. up to 5% organic material such as pieces of wood, pieces of paper, rags, etc. with a high proportion of ash and no food or other easily degradable waste). • Mine workings shallow or shaft (where there is clear evidence that they are flooded). • Inert landfill sites.
Low	• Natural soil strata with a high degradable organic content (DOC). • Made ground with total organic carbon (TOC) up to 6% (e.g. dock silt, no food or other easily degradable waste). • Foundry sand (includes phenolic binders, rags and wood that decay, albeit at low rates). • Landfill 1945 to mid 1960s (see also Moderate below).
Moderate	• Sewage sludge. • Mine workings – unflooded, more than 50 years since last worked (gas is liberated from coal when mine workings are excavated; this continues for up to about 50 years). • Landfill 1945 to mid 1960s (this could also be "low" or, if disturbed, "high").
High	• Landfill mid 1960s to early 1990s. • Mine workings – unflooded – less than 50 years since last worked.
Very High	• Municipal landfill sites. • Landfill early 1990s onward.

Frequency and Duration of Monitoring

BS8576 notes to determine where and how to monitor ground gases requires consideration of credible pathways of possible exposure of the receptors, taking into account what is known about the geology and hydrogeology, building construction and services layout, foreseeable events such as flooding, changes in groundwater level, climate change, extreme weather conditions, the closure of mines, and possible changes to the gas regime caused by future development.

The monitoring period for a specific site should cover the "worst case" scenario. A "worst case" scenario will typically occur during falling atmospheric pressure and, in particular, weather conditions such as rainfall, frost and dry weather.

The benefits of additional information and whether it is likely to change the scope of gas protection should be considered, as are the consequences of failing to characterise adequately pollutant linkages. Investigations concerned with ground gas are required to provide monitoring data sufficient to allow prediction of worst case conditions enabling the confident assessment of risk and subsequent design of appropriate gas protection schemes. Monitoring programmes should not be an academic exercise in data collection. CL:AIRE publication TB17 "Ground Gas Monitoring and 'Worst-Case' Conditions" provides further guidance.

Below are matrices that will aid in determining an appropriate number of gas monitoring visits and the length of monitoring period.

Typical/idealised periods of monitoring

		Generation of Potential Source				
		Very Low	Low	Moderate	High	Very High
Sensitivity of Development	Low (Commercial)	1 month	2 months	3 months	6 months	12 months
	Moderate (Apartments)	2 months	3 months	6 months	12 months	24 months
	High (Low rise Residential)	3 months	6 months	6 months	12 months	24 months

Typical/idealised frequency of monitoring/Number of Visits Required

		Gas Generation of Potential Source				
		Very Low	Low	Moderate	High	Very High
Sensitivity of Development	Low (Commercial)	4	6	6	12	12
	Moderate (Apartments)	6	6	9	12	24
	High (Low rise Residential)	6	9	12	24	24

Notes

1 Generation potential of sources based on descriptions within BS 8576:2013.

2 At least two sets of readings should be at low and falling atmospheric pressure (but not restricted to periods below <1000 mb) known as worst case conditions. Historical data can be used as part of the data set (Table 5.5b).

RB17 Approach

CL:AIRE RB17 (Card et al 2012) is a pragmatic approach to ground gas risk assessment and was developed because gas concentration, pressure and flow rate measured in a well headspace may not be representative of the conditions in the surrounding formation.

In these low-risk situations, the approach is to use the conceptual site model and the estimation of the likely gas generation from a source to identify where or if gas monitoring is required to better define the risks.

Under this approach, for sites with natural soils only with no credible methane source, then no action is required (no monitoring or gas protection measures) as this represents Characteristic Situation 1 (CS1).

Radon
Advice on radon protection in England is provided by the UK Health Security Agency, https://www.ukradon.org/information/ukmaps and by the BRE (BR 211 (Scivyer 2023)).

Areas of the country can be categorised according to the percentage of existing homes where radon is present above the Action Level:

- 0-1% lower probability.
- 1-3% and 3-10% intermediate probability.
- >10% higher probability.

Basic radon protection measures are required in new buildings and extensions in areas of England and Wales where 3-10% of properties exceed the Action Level and full radon protection measures where >10% exceed the Action Level.

Unexploded Ordnance (UXO) Guidance

Clients have a legal duty under the CDM 2015 Regulations to provide designers and contractors with project-specific health and safety information needed to identify hazards and risks. This includes the possibility of unexploded ordnance (UXO) being encountered on the site. Further details are given in CIRIA report C681.

BSL carry out non-specialist UXO screening exercises by considering any evidence of UK defence activities on or near the site evident from gathered desk study information and the unexploded aerial delivered bomb (UXB) online risk maps produced by Zetica. Other data sources are available, but as a first stage screening exercise the freely available online Zetica maps have been used. The level of risk stated is that determined by Zetica, a company experienced and considered competent in the assessment of UXO.

Geotechnical Guidance

A preliminary risk assessment of geotechnical hazards is carried out at the desk study stage and confirmed (or amended) at the ground investigation stage. The desk-based stage my include the requirements for a Coal Mining Risk Assessment (CMRA) which specifically assesses the risks from mining induced instability and related issues in high risk development areas: https://www.gov.uk/guidance/planning-applications-coal-mining-risk-assessments

APPENDIX B

Exploratory Hole Logs

BROWNFIELD SOLUTIONS LTD

Borehole Log

Cable Percussion with Rotary Core No.

BH01

Sheet 1 of 4

PROJECT NO:	C6035	**CO-ORDS:**	382729E, 385548N
PROJECT NAME:	MANCHESTER BUSINESS PARK, AVIATOR WAY	**LEVEL:**	72.32m OD
CLIENT:	ASK REAL ESTATE MBP LIMITED	**DATES:**	10/11/25 - 11/11/25

Hole Type: CP+RC

Scale: 1:25

Logged: MB **Checked:** DV

Well	Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m OD)	Legend	Stratum Description
		Depth (m)	Type	Results				
					0.30	72.02		MADE GROUND: Grass over dark brown slightly gravelly clayey fine to coarse SAND with frequent rootlets. Gravel is sub-angular to sub-rounded fine to medium of brick, mudstone and siltstone (TOPSOIL).
					0.70	71.61		MADE GROUND: Soft brown slightly sandy gravelly CLAY with low cobble content. Sand is fine to coarse. Gravel is sub-angular to sub-rounded fine to coarse of mudstone, brick, and concrete. Cobbles are angular to sub-angular up to 100mm in diameter of concrete and brick.
		1.20	SPT	N=12 (1,3/2,4,4,2)	1.20	71.11		Light yellowish brown slightly gravelly SAND. Sand is fine to coarse. Gravel is sub-angular to sub-rounded fine to medium of siltstone, mudstone and rare coal.
								Medium dense yellowish brown slightly gravelly clayey SAND. Sand is fine to coarse. Gravel is sub-angular to sub-rounded fine to medium of siltstone and mudstone.
								1.60m bgl: Greyish brown and slightly clayey from 1.60m bgl.
		2.00	SPT	N=9 (1,1/1,2,3,3)				
					2.20	70.11		Firm brown slightly gravelly slightly sandy CLAY. Sand is fine to coarse. Gravel is sub-angular to sub-rounded fine to coarse of siltstone and mudstone.
	▽	3.00	SPT	N=24 (3,3/3,6,6,9)	3.00	69.32		Medium dense brown slightly gravelly SAND. Sand is fine to coarse. Gravel is sub-angular to sub-rounded fine to medium of siltstone and mudstone.
					3.40	68.92		Very stiff brown slightly gravelly slightly sandy CLAY. Sand is fine to coarse. Gravel is sub-angular to sub-rounded fine to coarse of siltstone and mudstone.
		4.00	SPT	N=40 (4,9/10,10,10,10)				

1.0 2.0 3.0 4.0

Remarks

1. Clearance of services by BSL engineer using CAT & genny, and hand-dug inspection pit excavated to 1.20m bgl. 2. Dynamic sampled to 5.00m bgl. 3. Coring from 5.00m to 15.00m bgl. 4. Borehole terminated at target depth. 5. Groundwater encountered at 3.00m bgl. 6. No visual or olfactory evidence of contamination noted. 7. No installation, backfilled with bentonite.

ES = Environmental Sample
D = Disturbed Sample
B = Bulk Sample
LB = Large Bulk Sample
U = Undisturbed Sample
UT = Undisturbed Thin Wall Sample
SPT = Standard Penetration Test
PID = Photoionization Detector (ppm)
PPM = Part Per Million
HSV = Hand Shear Vane

BROWNFIELD SOLUTIONS LTD

Borehole Log

Cable Percussion with Rotary Core No.

BH01

Sheet 2 of 4

PROJECT NO:	C6035	**CO-ORDS:**	382729E, 385548N
PROJECT NAME:	MANCHESTER BUSINESS PARK, AVIATOR WAY	**LEVEL:**	72.32m OD
CLIENT:	ASK REAL ESTATE MBP LIMITED	**DATES:**	10/11/25 - 11/11/25

Hole Type: CP+RC

Scale: 1:25

Logged	Checked
MB	DV

Well	Water Strikes	Sample and In Situ Testing					Depth (m)	Level (m OD)	Legend	Stratum Description
		Depth (m)	Type	Results						
		5.00	SPT	100 (5,5/50 for 285mm)	N>50	100	5.00	67.32		Extremely weak greyish brown destructured MUDSTONE. *5.00-6.00m bgl: Discontinuities are horizontal, medium spaced, planar, smooth and clean.*
		5.00 - 6.00	3							
				89	89	89	6.00	66.32		Weak greyish brown partially weathered MUDSTONE. *6.00-7.50m bgl: Discontinuities are horizontal, close to medium spaced, planar, smooth and clean.*
		6.00 - 7.50	7							
			NR							*7.34m - 7.50m bgl: No recovery.*
				100	92	92				
			1							*7.50-7.68m bgl: Discontinuities are horizontal to sub-horizontal (45°), medium spaced, planar, smooth and clean.*
			NI							*7.68-7.80m bgl: Non-intact recovered as gravel . Gravel is angular to sub-angular fine to medium of mudstone.*
		7.50 - 9.00	2							*7.80 - 9.00m bgl: Discontinuities are horizontal to sub-horizontal (45°), medium spaced, planar, smooth and clean.*
				100	100	100				*9.00-10.50m bgl: Discontinuities are horizontal to sub-horizontal (45°) medium spaced, planar, smooth and clean.*
		9.00 - 10.50								
				TCR	SCR	RQD				

5.0 6.0 7.0 8.0 9.0

Remarks

1. Clearance of services by BSL engineer using CAT & genny, and hand-dug inspection pit excavated to 1.20m bgl. 2. Dynamic sampled to 5.00m bgl. 3. Coring from 5.00m to 15.00m bgl. 4. Borehole terminated at target depth. 5. Groundwater encountered at 3.00m bgl. 6. No visual or olfactory evidence of contamination noted. 7. No installation, backfilled with bentonite.

ES = Environmental Sample
D = Disturbed Sample
B = Bulk Sample
LB = Large Bulk Sample
U = Undisturbed Sample
UT = Undisturbed Thin Wall Sample
SPT = Standard Penetration Test
PID = Photoionization Detector (ppm)
PPM = Part Per Million
HSV = Hand Shear Vane

BROWNFIELD SOLUTIONS LTD

Borehole Log

Cable Percussion with Rotary Core No.

BH01

Sheet 3 of 4

PROJECT NO:	C6035	**CO-ORDS:**	382729E, 385548N
PROJECT NAME:	MANCHESTER BUSINESS PARK, AVIATOR WAY	**LEVEL:**	72.32m OD
CLIENT:	ASK REAL ESTATE MBP LIMITED	**DATES:**	10/11/2025 - 11/11/2025

Hole Type: CP+RC

Scale: 1:25

Logged: MB **Checked:** DV

Well	Water Strike	Depth (m)	Type / FI	Coring TCR (%)	Coring SCR (%)	Coring RQD (%)	Depth (m)	Level (m OD)	Legend	Stratum Description
			4	100	97	97				*10.50-10.67m bgl: Discontinuities are horizontal to sub-horizontal, medium spaced, planar, smooth and clean.*
			NI							*10.67-10.71m bgl: Non-intact recovered as gravel . Gravel is angular to sub-angular fine to medium of mudstone.*
		10.50 - 12.00	10							*10.71-12.00m bgl: Discontinuities are horizontal, close to medium spaced, planar, smooth and clean.*
				83	73	57				*12.00-13.50m bgl: Discontinuities are sub horizontal (25°), medium spaced, planar, undulating rough.*
			NI							*12.50 - 12.65m bgl: Non-intact recovered as gravel . Gravel is angular to sub-angular fine to medium of mudstone.*
		12.00 - 13.50	6							*12.65 - 13.50m bgl: Discontinuities are sub horizontal (25°), medium spaced, planar, undulating rough.*
			NR							*13.25 - 13.50m bgl: No recovery.*
			8	100	93	93				*13.50-14.15m bgl: Discontinuities are horizontal to sub-horizontal (25°), closely spaced, planar, undulating rough.*
		13.50 - 15.00	NI							*14.15 - 14.25m bgl: Non-intact recovered as gravel . Gravel is angular to sub-angular fine to medium of mudstone.*
			5							*14.25 - 15.00m bgl: Discontinuities are horizontal to sub-horizontal (25°), closely spaced, planar, undulating rough.*

10.0
11.0
12.0
13.0
14.0

Remarks

1. Clearance of services by BSL engineer using CAT & genny, and hand-dug inspection pit excavated to 1.20m bgl. 2. Dynamic sampled to 5.00m bgl. 3. Coring from 5.00m to 15.00m bgl. 4. Borehole terminated at target depth. 5. Groundwater encountered at 3.00m bgl. 6. No visual or olfactory evidence of contamination noted. 7. No installation, backfilled with bentonite.

ES = Environmental Sample
D = Disturbed Sample
B = Bulk Sample
LB = Large Bulk Sample
U = Undisturbed Sample
UT = Undisturbed Thin Wall Sample
SPT = Standard Penetration Test
PID = Photoionization Detector (ppm)
PPM = Part Per Million
HSV = Hand Shear Vane

BROWNFIELD SOLUTIONS LTD

Borehole Log

Cable Percussion with Rotary Core No.

BH01

Sheet 4 of 4

PROJECT NO:	C6035	**CO-ORDS:**	382729E, 385548N
PROJECT NAME:	MANCHESTER BUSINESS PARK, AVIATOR WAY	**LEVEL:**	72.32m OD
CLIENT:	ASK REAL ESTATE MBP LIMITED	**DATES:**	10/11/2025 - 11/11/2025

Hole Type	Scale	Logged	Checked
CP+RC	1:25	MB	DV

Well	Water Strike	Depth (m)	Type / FI	Coring TCR (%)	Coring SCR (%)	Coring RQD (%)	Depth (m)	Level (m OD)	Legend	Stratum Description
							15.00	57.32		End of Borehole at 15.00m

15.0
16.0
17.0
18.0
19.0

Remarks

1. Clearance of services by BSL engineer using CAT & genny, and hand-dug inspection pit excavated to 1.20m bgl. 2. Dynamic sampled to 5.00m bgl. 3. Coring from 5.00m to 15.00m bgl. 4. Borehole terminated at target depth. 5. Groundwater encountered at 3.00m bgl. 6. No visual or olfactory evidence of contamination noted. 7. No installation, backfilled with bentonite.

ES = Environmental Sample
D = Disturbed Sample
B = Bulk Sample
LB = Large Bulk Sample
U = Undisturbed Sample
UT = Undisturbed Thin Wall Sample
SPT = Standard Penetration Test
PID = Photoionization Detector (ppm)
PPM = Part Per Million
HSV = Hand Shear Vane

BROWNFIELD SOLUTIONS LTD

Borehole Log

Cable Percussion with Rotary Core No.

BH02

Sheet 1 of 4

PROJECT NO:	C6035	**CO-ORDS:**	382721E, 385589N
PROJECT NAME:	MANCHESTER BUSINESS PARK, AVIATOR WAY	**LEVEL:**	71.47m OD
CLIENT:	ASK REAL ESTATE MBP LIMITED	**DATES:**	11/11/25

Hole Type: CP+RC

Scale: 1:25

Logged: BW **Checked:** DV

Well	Water Strikes	Sample and In Situ Testing: Depth (m)	Type	Results	Depth (m)	Level (m OD)	Legend	Stratum Description
		0.10-0.40	ES					MADE GROUND: Grass over dark brown slightly gravelly sandy silty CLAY. Sand is fine to coarse. Gravel is sub-angular to sub-rounded fine to coarse of mudstone, brick, glass, plastic and concrete (TOPSOIL).
					0.40	71.07		
								Light grey slightly gravelly clayey fine to coarse SAND. Gravel is sub-angular to sub-rounded fine to coarse of mudstone.
					0.60	70.87		
								Soft light orangish grey slightly gravelly sandy CLAY with low cobble content. Sand is fine to coarse. Gravel is sub-angular to sub-rounded fine to coarse of mudstone, quartz and limestone. Cobbles are sub-angular to sub-rounded up to 100mm in diameter of mudstone.
		1.20-1.65 1.20	D SPT	N=3 (1,0/1,0,1,1)	1.20	70.27		
		1.50-1.60	ES					Very soft brown slightly gravelly slightly sandy CLAY. Sand is fine to coarse. Gravel is sub-angular to sub-rounded fine to medium of mudstone and rare coal.
		2.00-2.45 2.00	D SPT	N=10 (1,1/1,3,3,3)				*2.00m bgl: Firm from 2.00m bgl*
	▽	3.00-3.45 3.00	D SPT	N=27 (2,3/5,6,7,9)				
		3.20-3.50	ES		3.20	68.27		Medium dense brown slightly gravelly fine to coarse SAND. Gravel is sub-angular to sub-rounded fine to medium of mudstone and quartz.
					3.50	67.97		Firm brown slightly gravelly slightly sandy CLAY. Sand is fine to coarse. Gravel is sub-angular to sub-rounded fine to coarse of mudstone.
		4.00-4.45 4.00	D SPT	49 N≥50 47 (5,7/60 for 285mm)	4.00	67.47		Weak partially weathered brown mottled grey MUDSTONE. *4.00-4.72m bgl: Discontinuities are horizontal, close to medium spaced, planar, smooth and clean.*
		4.00 - 5.50	2					*4.72-5.50m bgl: No recovery*
				TCR SCR RQD				

1.0 2.0 3.0 4.0

Remarks

1. Clearance of services by BSL engineer using CAT & genny, and hand-dug inspection pit excavated to 1.20m bgl. 2. Dynamic sampled to 4.00m bgl. 3. Coring from 4.00m to 16.00m bgl. 4. Borehole terminated at target depth. 5. Groundwater encountered at 3.00m bgl. 6. No visual or olfactory evidence of contamination noted. 7. Installation to 5.00m bgl: 1.00m plain and 4.00m slotted HDPE 50mm pipe.

ES = Environmental Sample
D = Disturbed Sample
B = Bulk Sample
LB = Large Bulk Sample
U = Undisturbed Sample
UT = Undisturbed Thin Wall Sample
SPT = Standard Penetration Test
PID = Photoionization Detector (ppm)
PPM = Part Per Million
HSV = Hand Shear Vane

BROWNFIELD SOLUTIONS LTD

Borehole Log

Cable Percussion with Rotary Core No.

BH02

Sheet 2 of 4

PROJECT NO:	C6035	**CO-ORDS:**	382721E, 385589N
PROJECT NAME:	MANCHESTER BUSINESS PARK, AVIATOR WAY	**LEVEL:**	71.47m OD
CLIENT:	ASK REAL ESTATE MBP LIMITED	**DATES:**	11/11/2025

Hole Type	Scale	Logged	Checked
CP+RC	1:25	BW	DV

Well	Water Strike	Depth (m)	Type / FI	Coring TCR (%)	Coring SCR (%)	Coring RQD (%)	Depth (m)	Level (m OD)	Legend	Stratum Description
			NR							
			0	100	93	93				*5.50-5.65m bgl: Discontinuities are horizontal, close to medium spaced, planar, smooth and clean.*
			NI							*5.65 - 5.75m bgl: Non-intact recovered as gravel . Gravel is angular to sub-angular fine to medium of mudstone.*
		5.50 - 7.00	3							*5.75-7.00m bgl: Discontinuities are horizontal, close to medium spaced, planar, smooth and clean.*
		7.00 - 8.50	2	100	100	100				*7.00-8.50m bgl: Discontinuities are horizontal, close to medium spaced, planar, smooth and clean.*
		8.50 - 10.00	0	100	100	100				*8.50-10.00m bgl: Discontinuities are horizontal to sub-horizontal (45°) medium spaced, planar, smooth and clean.*

5.0
6.0
7.0
8.0
9.0

Remarks

1. Clearance of services by BSL engineer using CAT & genny, and hand-dug inspection pit excavated to 1.20m bgl. 2. Dynamic sampled to 4.00m bgl. 3. Coring from 4.00m to 16.00m bgl. 4. Borehole terminated at target depth. 5. Groundwater encountered at 3.00m bgl. 6. No visual or olfactory evidence of contamination noted. 7. Installation to 5.00m bgl: 1.00m plain and 4.00m slotted HDPE 50mm pipe.

ES = Environmental Sample
D = Disturbed Sample
B = Bulk Sample
LB = Large Bulk Sample
U = Undisturbed Sample
UT = Undisturbed Thin Wall Sample
SPT = Standard Penetration Test
PID = Photoionization Detector (ppm)
PPM = Part Per Million
HSV = Hand Shear Vane

BROWNFIELD SOLUTIONS LTD

Borehole Log

Cable Percussion with Rotary Core No.

BH02

Sheet 3 of 4

PROJECT NO:	C6035	**CO-ORDS:**	382721E, 385589N
PROJECT NAME:	MANCHESTER BUSINESS PARK, AVIATOR WAY	**LEVEL:**	71.47m OD
CLIENT:	ASK REAL ESTATE MBP LIMITED	**DATES:**	11/11/2025

Hole Type: CP+RC

Scale: 1:25

Logged: BW **Checked:** DV

Well	Water Strike	Depth (m)	Type / FI	Coring TCR (%)	Coring SCR (%)	Coring RQD (%)	Depth (m)	Level (m OD)	Legend	Stratum Description
				100	100	100				
		10.00 - 11.50	4							*10.00-11.50m bgl: Discontinuities are horizontal, close to medium spaced, planar, smooth and clean.*
				100	78	78				
		11.50 - 13.00	0							
			NI							*11.00 - 12.00m bgl: Non-intact recovered as gravel . Gravel is angular to sub-angular fine to medium of mudstone.*
			1							*11.50-12.22m bgl: Discontinuities are horizontal and vertical, very close to closely spaced, planar, smooth and clean.*
			NI							*12.22 - 12.30m bgl: Non-intact recovered as gravel . Gravel is angular to sub-angular fine to medium of mudstone.*
			2							
			NI							*12.55 - 12.70m bgl: Non-intact recovered as gravel . Gravel is angular to sub-angular fine to medium of mudstone.*
			0							*12.70 - 13.00m bgl: Discontinuities are horizontal and vertical, very close to closely spaced, planar, smooth and clean.*
				98	90	88				
		13.00 - 14.50	1							*13.00-13.28m bgl: Discontinuities are horizontal, very close to closely spaced, planar, smooth.*
			NI							*13.28-13.35m bgl: Non-intact recovered as gravel . Gravel is angular to sub-angular fine to medium of mudstone.*
			1							*13.35-13.45m bgl: Discontinuities are vertical, closely spaced, planar, smooth and clean.*
			NI							*13.45-13.50m bgl: Non-intact recovered as gravel . Gravel is angular to sub-angular fine to medium of mudstone.*
			6							*13.50-14.37m bgl: Discontinuities are vertical, closely spaced, planar, smooth and clean.*
				83	83	83				
			NI							*14.37 - 14.40m bgl: No recovery.*
			0							*14.40 - 14.50m bgl: Discontinuities are horizontal, medium spaced, planar, smooth and clean.*
										14.50-14.60m bgl: Non-intact recovered as gravel . Gravel is angular to sub-angular fine to medium of mudstone.

10.0 11.0 12.0 13.0 14.0

Remarks

1. Clearance of services by BSL engineer using CAT & genny, and hand-dug inspection pit excavated to 1.20m bgl. 2. Dynamic sampled to 4.00m bgl. 3. Coring from 4.00m to 16.00m bgl. 4. Borehole terminated at target depth. 5. Groundwater encountered at 3.00m bgl. 6. No visual or olfactory evidence of contamination noted. 7. Installation to 5.00m bgl: 1.00m plain and 4.00m slotted HDPE 50mm pipe.

ES = Environmental Sample
D = Disturbed Sample
B = Bulk Sample
LB = Large Bulk Sample
U = Undisturbed Sample
UT = Undisturbed Thin Wall Sample
SPT = Standard Penetration Test
PID = Photoionization Detector (ppm)
PPM = Part Per Million
HSV = Hand Shear Vane

BROWNFIELD SOLUTIONS LTD

Borehole Log

Cable Percussion with Rotary Core No.

BH02

Sheet 4 of 4

PROJECT NO:	C6035	**CO-ORDS:**	382721E, 385589N
PROJECT NAME:	MANCHESTER BUSINESS PARK, AVIATOR WAY	**LEVEL:**	71.47m OD
CLIENT:	ASK REAL ESTATE MBP LIMITED	**DATES:**	11/11/2025

Hole Type: CP+RC

Scale: 1:25

Logged: BW

Checked: DV

Well	Water Strike	Depth (m)	Type / FI	Coring TCR (%)	Coring SCR (%)	Coring RQD (%)	Depth (m)	Level (m OD)	Legend	Stratum Description
		14.50 - 16.00	NR							*14.80-14.90m bgl: No Recovery*
			2							*14.90-15.62m bgl: Discontinuities are horizontal, medium spaced, planar, smooth and clean.*
			NI							*15.62-15.67m bgl: Non-intact recovered as gravel . Gravel is angular to sub-angular fine to medium of mudstone.*
			1							*15.67-16.00m bgl: Discontinuities are vertical, close to medium spaced, planar, smooth and clean.*
							16.00	55.47		End of Borehole at 16.00m

15.0
16.0
17.0
18.0
19.0

Remarks

1. Clearance of services by BSL engineer using CAT & genny, and hand-dug inspection pit excavated to 1.20m bgl. 2. Dynamic sampled to 4.00m bgl. 3. Coring from 4.00m to 16.00m bgl. 4. Borehole terminated at target depth. 5. Groundwater encountered at 3.00m bgl. 6. No visual or olfactory evidence of contamination noted. 7. Installation to 5.00m bgl: 1.00m plain and 4.00m slotted HDPE 50mm pipe.

ES = Environmental Sample
D = Disturbed Sample
B = Bulk Sample
LB = Large Bulk Sample
U = Undisturbed Sample
UT = Undisturbed Thin Wall Sample
SPT = Standard Penetration Test
PID = Photoionization Detector (ppm)
PPM = Part Per Million
HSV = Hand Shear Vane

BROWNFIELD SOLUTIONS LTD

Borehole Log

Cable Percussion with Rotary Core No.

BH03

Sheet 1 of 4

PROJECT NO:	C6035	**CO-ORDS:**	382701E, 385640N
PROJECT NAME:	MANCHESTER BUSINESS PARK, AVIATOR WAY	**LEVEL:**	70.87m OD
CLIENT:	ASK REAL ESTATE MBP LIMITED	**DATES:**	12/11/25

Hole Type: CP+RC

Scale: 1:25

Logged: BW **Checked:** DV

Well	Water Strikes	Sample and In Situ Testing: Depth (m)	Type	Results	Depth (m)	Level (m OD)	Legend	Stratum Description
		0.20-0.30	ES		0.30	70.57		MADE GROUND: Grass over dark brown slightly sandy CLAY with occasional rootlets and rare glass. Sand is fine to coarse (TOPSOIL).
		0.80	D		0.85	70.02		Soft grey slightly gravelly sandy CLAY with low cobble content. Sand is fine to coarse. Gravel is sub-rounded to rounded fine to coarse of sandstone. Cobbles are sub-angular up to 90mm of mudstone.
	▽	1.20-1.65 1.20	D SPT	N=2 (1,0/1,0,1,0)	1.30	69.57		Orange mottled greyish brown slightly clayey SAND with rare gravel. Sand is fine to coarse.
		2.00-2.45 2.00	D SPT	N=6 (1,1/1,2,2,1)	2.00	68.87		Very soft greyish brown slighlty gravelly slighlty sandy silty CLAY. Sand is fine to coarse. Gravel is sub-angular to sub-rounded fine to medium of mudstone, limestone and rare coal.
		3.00	SPT	N>50 89 89 89 (5,7/50 for 295mm)	2.75	68.12		Loose reddish brown slightly gravelly clayey fine to coarse SAND. Gravel is sub-angular to sub-rounded fine to medium of sandstone and mudstone.
		3.00 - 4.50	2		3.00	67.87		Stiff brown gravelly sandy CLAY. Sand is fine to coarse. Gravel is sub-angular to sub-rounded fine to coarse of mudstone, limestone and sandstone.
			NI					Weak brown mottled grey partially weathered MUDSTONE.
			NR					*3.00-4.34m bgl: Discontinuities are horizontal, medium spaced, planar, smooth and clean.*
				87 87 87				*4.28 - 4.32m bgl: Non-intact recovered as gravel . Gravel is angular to sub-angular fine to medium of mudstone.*
								4.34-4.50 No Recovery.
								4.50-5.80m bgl: Discontinuities are horizontal, medium spaced, planar, smooth and clean.
				TCR SCR RQD				

1.0 2.0 3.0 4.0

Remarks

1. Clearance of services by BSL engineer using CAT & genny, and hand-dug inspection pit excavated to 1.20m bgl. 2. Dynamic sampled to 3.00m bgl. 3. Coring from 3.00m to 15.00m bgl. 4. Borehole terminated at target depth. 5. Groundwater encountered at 1.20m bgl. 6. No visual or olfactory evidence of contamination noted. 7. No installation, backfilled with bentonite.

ES = Environmental Sample
D = Disturbed Sample
B = Bulk Sample
LB = Large Bulk Sample
U = Undisturbed Sample
UT = Undisturbed Thin Wall Sample
SPT = Standard Penetration Test
PID = Photoionization Detector (ppm)
PPM = Part Per Million
HSV = Hand Shear Vane

BROWNFIELD SOLUTIONS LTD

Borehole Log

Cable Percussion with Rotary Core No.

BH03

Sheet 2 of 4

PROJECT NO:	C6035	**CO-ORDS:**	382701E, 385640N
PROJECT NAME:	MANCHESTER BUSINESS PARK, AVIATOR WAY	**LEVEL:**	70.87m OD
CLIENT:	ASK REAL ESTATE MBP LIMITED	**DATES:**	12/11/2025

Hole Type: CP+RC

Scale: 1:25

Logged: BW **Checked:** DV

Well	Water Strike	Depth (m)	Type / FI	Coring TCR (%)	Coring SCR (%)	Coring RQD (%)	Depth (m)	Level (m OD)	Legend	Stratum Description
		4.50 - 6.00	6							
			NR	100	100	100				*5.80-6.00m bgl: No recovery.*
		6.00 - 7.50	3							*6.00-7.50m bgl: Discontinuities are vertical, medium spaced, planar, smooth and clean.*
		7.50 - 9.00	9	93	91	77				*7.50-8.90m bgl: Discontinuities are horizontal, close to medium spaced, planar, smooth and clean.*
			NR	100	97	97				*8.90-9.00m bgl: No recovery.*
		9.00 - 10.50	6							*9.00-10.50m bgl: Discontinuities are horizontal, medium spaced, planar, smooth and clean.*

5.0
6.0
7.0
8.0
9.0

Remarks

1. Clearance of services by BSL engineer using CAT & genny, and hand-dug inspection pit excavated to 1.20m bgl. 2. Dynamic sampled to 3.00m bgl. 3. Coring from 3.00m to 15.00m bgl. 4. Borehole terminated at target depth. 5. Groundwater encountered at 1.20m bgl. 6. No visual or olfactory evidence of contamination noted. 7. No installation, backfilled with bentonite.

ES = Environmental Sample
D = Disturbed Sample
B = Bulk Sample
LB = Large Bulk Sample
U = Undisturbed Sample
UT = Undisturbed Thin Wall Sample
SPT = Standard Penetration Test
PID = Photoionization Detector (ppm)
PPM = Part Per Million
HSV = Hand Shear Vane

BROWNFIELD SOLUTIONS LTD

Borehole Log

Cable Percussion with Rotary Core No.

BH03

Sheet 3 of 4

PROJECT NO:	C6035	**CO-ORDS:**	382701E, 385640N
PROJECT NAME:	MANCHESTER BUSINESS PARK, AVIATOR WAY	**LEVEL:**	70.87m OD
CLIENT:	ASK REAL ESTATE MBP LIMITED	**DATES:**	12/11/2025

Hole Type: CP+RC

Scale: 1:25

Logged: BW **Checked:** DV

Well	Water Strike	Depth (m)	Type / FI	Coring TCR (%)	Coring SCR (%)	Coring RQD (%)	Depth (m)	Level (m OD)	Legend	Stratum Description
				83	83	82				
		10.50 - 12.00	NR							*10.5-10.70m bgl: No recovery.*
			8							*10.8-12.00m bgl: Discontinuities are horizontal, medium spaced, planar, smooth and clean.*
			NR	97	95	85				*11.95 - 12.00m bgl: No recovery.*
		12.00 - 13.50	2							*12.0-12.60m bgl: Discontinuities are horizontal, close to medium spaced, planar, smooth.*
			NR							*12.42 - 12.46m bgl: No recovery.*
			NI							*12.46 - 12.49m bgl: Non-intact recovered as gravel . Gravel is angular to sub-angular fine to medium of mudstone.*
			4							*12.6-12.80m bgl: Discontinuities are horizontal to sub-horizontal (45°), close to medium spaced, planar, smooth and clean.*
										12.8-13.50m bgl: Discontinuities are horizontal, close to medium spaced, planar, smooth and clean.
			NI	100	86	82				*13.50 - 13.70m bgl: Non-intact recovered as gravel . Gravel is angular to sub-angular fine to medium of mudstone.*
		13.50 - 15.00	7							*13.5-15.00m bgl: Discontinuities are horizontal, medium spaced, planar, smooth and clean.*

10.0
11.0
12.0
13.0
14.0

Remarks

1. Clearance of services by BSL engineer using CAT & genny, and hand-dug inspection pit excavated to 1.20m bgl. 2. Dynamic sampled to 3.00m bgl. 3. Coring from 3.00m to 15.00m bgl. 4. Borehole terminated at target depth. 5. Groundwater encountered at 1.20m bgl. 6. No visual or olfactory evidence of contamination noted. 7. No installation, backfilled with bentonite.

ES = Environmental Sample
D = Disturbed Sample
B = Bulk Sample
LB = Large Bulk Sample
U = Undisturbed Sample
UT = Undisturbed Thin Wall Sample
SPT = Standard Penetration Test
PID = Photoionization Detector (ppm)
PPM = Part Per Million
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BROWNFIELD SOLUTIONS LTD

Borehole Log

Cable Percussion with Rotary Core No.

BH03

Sheet 4 of 4

PROJECT NO:	C6035	**CO-ORDS:**	382701E, 385640N
PROJECT NAME:	MANCHESTER BUSINESS PARK, AVIATOR WAY	**LEVEL:**	70.87m OD
CLIENT:	ASK REAL ESTATE MBP LIMITED	**DATES:**	12/11/2025

Hole Type	Scale	Logged	Checked
CP+RC	1:25	BW	DV

Well	Water Strike	Depth (m)	Type / FI	Coring TCR (%)	Coring SCR (%)	Coring RQD (%)	Depth (m)	Level (m OD)	Legend	Stratum Description
							15.00	55.87		End of Borehole at 15.00m

15.0
16.0
17.0
18.0
19.0

Remarks

1. Clearance of services by BSL engineer using CAT & genny, and hand-dug inspection pit excavated to 1.20m bgl. 2. Dynamic sampled to 3.00m bgl. 3. Coring from 3.00m to 15.00m bgl. 4. Borehole terminated at target depth. 5. Groundwater encountered at 1.20m bgl. 6. No visual or olfactory evidence of contamination noted. 7. No installation, backfilled with bentonite.

ES = Environmental Sample
D = Disturbed Sample
B = Bulk Sample
LB = Large Bulk Sample
U = Undisturbed Sample
UT = Undisturbed Thin Wall Sample
SPT = Standard Penetration Test
PID = Photoionization Detector (ppm)
PPM = Part Per Million
HSV = Hand Shear Vane

BROWNFIELD SOLUTIONS LTD

Borehole Log

Cable Percussion with Rotary Core No.

BH04

Sheet 1 of 4

PROJECT NO:	C6035	**CO-ORDS:**	382650E, 385656N
PROJECT NAME:	MANCHESTER BUSINESS PARK, AVIATOR WAY	**LEVEL:**	70.69m OD
CLIENT:	ASK REAL ESTATE MBP LIMITED	**DATES:**	13/11/25 - 14/11/25

Hole Type: CP+RC

Scale: 1:25

Logged: BW **Checked:** DV

Well	Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m OD)	Legend	Stratum Description
		Depth (m)	Type	Results				
		0.00-0.30	ES					Grass over brown slightly gravelly slightly sandy CLAY with occasional rootlets. Sand is fine to coarse. Gravel is sub-angular to sub-rounded of mudstone (TOPSOIL).
					0.30	70.39		Light greyish brown slightly gravelly clayey fine to coarse SAND. Gravel is sub-angular to sub-rounded fine to coarse of mudstone.
		0.60	D		0.60	70.09		Firm greyish brown slightly sandy CLAY. Sand is fine to coarse.
	▽	1.20-1.65 1.20	D SPT	N=8 (1,1/1,2,2,3)				
					1.65	69.04		Medium dense reddish brown fine to coarse SAND.
		2.00-2.20 2.00-2.45 2.00	ES D SPT	N=13 (2,1/0,2,5,6)				
		3.00-3.45 3.00	D SPT	N=29 (5,5/6,6,8,9)	3.00	67.69		Stiff mottled greyish reddish brown slightly gravelly CLAY. Gravel is sub-angular to sub-rounded fine to medium of mudstone and limestone.
		4.00	SPT	N=20 (5,6/7,5,4,4)				

1.0 2.0 3.0 4.0

Remarks

1. Clearance of services by BSL engineer using CAT & genny, and hand-pit excavated to 1.20m bgl. 2. Dynamic sampled to 5.00m bgl. 3. Coring from 5.00m to 15.00m bgl. 4. Borehole terminated at target depth. 5. Groundwater encountered at 1.20m bgl. 6. No visual or olfactory evidence of contamination noted. Installation to 5.00m bgl: 1.00m plain and 4.00m slotted HDPE 50mm pipe.

ES = Environmental Sample
D = Disturbed Sample
B = Bulk Sample
LB = Large Bulk Sample
U = Undisturbed Sample
UT = Undisturbed Thin Wall Sample
SPT = Standard Penetration Test
PID = Photoionization Detector (ppm)
PPM = Part Per Million
HSV = Hand Shear Vane

BROWNFIELD SOLUTIONS LTD

Borehole Log

Cable Percussion with Rotary Core No.

BH04

Sheet 2 of 4

PROJECT NO:	C6035	**CO-ORDS:**	382650E, 385656N
PROJECT NAME:	MANCHESTER BUSINESS PARK, AVIATOR WAY	**LEVEL:**	70.69m OD
CLIENT:	ASK REAL ESTATE MBP LIMITED	**DATES:**	13/11/25 - 14/11/25

Hole Type: CP+RC

Scale: 1:25

Logged: BW **Checked:** DV

Well	Water Strikes	Sample and In Situ Testing Depth (m)	Type	Results	Depth (m)	Level (m OD)	Legend	Stratum Description
		5.00	SPT	N>50 (11,12/50 for 255mm)	5.00	65.69		Weak brown mottled grey partially weathered MUDSTONE with breccia throughout.
			NR	80 67 67				*5.00-5.20m bgl: No recovery.*
			NI					*5.20-5.33m bgl: Non-intact recovered as gravel . Gravel is angular to sub-angular fine to medium of mudstone.*
		5.00 - 6.00	9					*5.33-6.00m bgl: Discontinuities are horizontal to sub-horizontal (45°), close to medium spaced, planar, rough, and clean.*
			NI	100 89 73				*6.00-7.33m bgl: Discontinuities are sub-horizontal (45°) and vertical, close to medium spaced, planar, rough, and clean*
		6.00 - 7.50	4					*7.33-7.50m bgl: Non-intact recovered as gravel . Gravel is angular to sub-angular fine to medium of mudstone.*
				100 100 100				*7.50-9.00m bgl: Discontinuities are horizontal to sub-horizontal (45°), close to medium spaced, planar, smooth and clean.*
		7.50 - 9.00	5					*9.00-9.17m bgl: Non-intact recovered as gravel. Gravel is angular to sub-angular fine to medium of mudstone.*
				93 67 67				*9.15-9.40m bgl: Non-intact recovered as gravel . Gravel is angular to sub-angular fine to medium of mudstone.*
		9.00 - 10.50	9					*9.40-9.50m bgl: No recovery.*
								9.50-10.5m bgl: Discontinuities are sub-horizontal (45°) and vertical, close to medium spaced, planar, smooth, and clean.
				TCR SCR RQD				

5.0 6.0 7.0 8.0 9.0

Remarks

1. Clearance of services by BSL engineer using CAT & genny, and hand-pit excavated to 1.20m bgl. 2. Dynamic sampled to 5.00m bgl. 3. Coring from 5.00m to 15.00m bgl. 4. Borehole terminated at target depth. 5. Groundwater encountered at 1.20m bgl. 6. No visual or olfactory evidence of contamination noted. Installation to 5.00m bgl: 1.00m plain and 4.00m slotted HDPE 50mm pipe.

ES = Environmental Sample
D = Disturbed Sample
B = Bulk Sample
LB = Large Bulk Sample
U = Undisturbed Sample
UT = Undisturbed Thin Wall Sample
SPT = Standard Penetration Test
PID = Photoionization Detector (ppm)
PPM = Part Per Million
HSV = Hand Shear Vane

BROWNFIELD SOLUTIONS LTD

Borehole Log

Cable Percussion with Rotary Core No.

BH04

Sheet 3 of 4

PROJECT NO:	C6035	**CO-ORDS:**	382650E, 385656N
PROJECT NAME:	MANCHESTER BUSINESS PARK, AVIATOR WAY	**LEVEL:**	70.69m OD
CLIENT:	ASK REAL ESTATE MBP LIMITED	**DATES:**	13/11/2025 - 14/11/2025

Hole Type	Scale	Logged	Checked
CP+RC	1:25	BW	DV

Well	Water Strike	Depth (m)	Type / FI	Coring TCR (%)	Coring SCR (%)	Coring RQD (%)	Depth (m)	Level (m OD)	Legend	Stratum Description
				87	87	87				
		10.50 - 12.00	4							*10.50-11.40m bgl: Discontinuities are horizontal, close to medium spaced, planar, smooth and clean. Bands of quartz at 11.20m bgl.*
			NR							*11.40-11.50m bgl: No recovery.*
			2							*11.50-11.90m bgl: Discontinuities are horizontal, close to medium spaced, planar, smooth and clean.*
			NR							*11.90-12.00m bgl: No recovery.*
		12.00 - 13.50	3	100	100	100				*12.00 - 13.00m bgl: Discontinuities are horizontal, close to medium spaced, planar, smooth and clean.*
		13.50 - 15.00	2	100	100	100				*13.50-15.00m bgl: Discontinuities are horizontal to sub-horizontal (15°), close to medium spaced, planar, rough, and clean.*

10.0
11.0
12.0
13.0
14.0

Remarks

1. Clearance of services by BSL engineer using CAT & genny, and hand-pit excavated to 1.20m bgl. 2. Dynamic sampled to 5.00m bgl. 3. Coring from 5.00m to 15.00m bgl. 4. Borehole terminated at target depth. 5. Groundwater encountered at 1.20m bgl. 6. No visual or olfactory evidence of contamination noted. Installation to 5.00m bgl: 1.00m plain and 4.00m slotted HDPE 50mm pipe.

ES = Environmental Sample
D = Disturbed Sample
B = Bulk Sample
LB = Large Bulk Sample
U = Undisturbed Sample
UT = Undisturbed Thin Wall Sample
SPT = Standard Penetration Test
PID = Photoionization Detector (ppm)
PPM = Part Per Million
HSV = Hand Shear Vane

BROWNFIELD SOLUTIONS LTD

Borehole Log

Cable Percussion with Rotary Core No.

BH04

Sheet 4 of 4

PROJECT NO:	C6035	**CO-ORDS:**	382650E, 385656N
PROJECT NAME:	MANCHESTER BUSINESS PARK, AVIATOR WAY	**LEVEL:**	70.69m OD
CLIENT:	ASK REAL ESTATE MBP LIMITED	**DATES:**	13/11/2025 - 14/11/2025

Hole Type	Scale	Logged	Checked
CP+RC	1:25	BW	DV

Well	Water Strike	Depth (m)	Type / FI	Coring TCR (%)	Coring SCR (%)	Coring RQD (%)	Depth (m)	Level (m OD)	Legend	Stratum Description
							15.00	55.69		End of Borehole at 15.00m

15.0
16.0
17.0
18.0
19.0

Remarks

1. Clearance of services by BSL engineer using CAT & genny, and hand-pit excavated to 1.20m bgl. 2. Dynamic sampled to 5.00m bgl. 3. Coring from 5.00m to 15.00m bgl. 4. Borehole terminated at target depth. 5. Groundwater encountered at 1.20m bgl. 6. No visual or olfactory evidence of contamination noted. Installation to 5.00m bgl: 1.00m plain and 4.00m slotted HDPE 50mm pipe.

ES = Environmental Sample
D = Disturbed Sample
B = Bulk Sample
LB = Large Bulk Sample
U = Undisturbed Sample
UT = Undisturbed Thin Wall Sample
SPT = Standard Penetration Test
PID = Photoionization Detector (ppm)
PPM = Part Per Million
HSV = Hand Shear Vane

BROWNFIELD SOLUTIONS LTD

Borehole Log

Window Sampler No.
BH05
Sheet 1 of 1

PROJECT NO:	C6035	**CO-ORDS:**	382599E, 385658N
PROJECT NAME:	MANCHESTER BUSINESS PARK, AVIATOR WAY	**LEVEL:**	70.66m OD
CLIENT:	ASK REAL ESTATE MBP LIMITED	**DATES:**	17/11/25

Hole Type	Scale	Logged	Checked
WS	1:25	BW	DV

Well	Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m OD)	Legend	Stratum Description
		Depth (m)	Type	Results				
		0.10-0.30	ES					Grass over dark brown gravelly, slightly sandy CLAY with frequent rootlets. Sand is fine to coarse. Gravel is sub-angular to sub-rounded fine to medium of mudstone and quartz (TOPSOIL).
					0.30	70.36		Soft light greyish brown slightly gravelly slightly sandy silty CLAY. Sand ifs fine to coarse. Gravel is sub-angular to sub-rounded fine to coarse of mudstone.
		0.80-0.90	D		0.70	69.96		Soft mottled orangish brown slightly gravelly sandy CLAY. Sand is fine to coarse. Gravel is angular to sub-rounded of mudstone and rare coal.
	▽	1.20-1.50 1.20-1.65 1.20	ES D SPT	N=4 (1,0/1,0,1,2)	1.00	69.66		Soft dark reddish brown slightly gravelly slightly sandy silty CLAY. Sand is fine to coarse. Gravel is sub-angular to sub-rounded fine to medium of mudstone and quartz.
		2.20-2.65 2.20	D SPT	N=8 (1,1/1,2,2,3)	2.00	68.66		Loose dark reddish brown slightly gravelly slightly clayey fine to coarse SAND. Gravel is sub-angular to sub-rounded fine to medium of mudstone and quartz.
					2.65	68.01		End of Borehole at 2.65m

1.0
2.0
3.0
4.0
5.0

Remarks

1. Clearance of services by BSL engineer using CAT & genny, and hand-dug inspection pit excavated to 1.20m bgl. 2. Dynamic sampled to 2.65m bgl. 3. Borehole terminated due to programme constraints. 4. Groundwater encountered at 1.20m bgl. 5. No visual or olfactory evidence of contamination noted. 6. No installation, backfilled with bentonite.

ES = Environmental Sample
D = Disturbed Sample
B = Bulk Sample
LB = Large Bulk Sample
U = Undisturbed Sample
UT = Undisturbed Thin Wall Sample
SPT = Standard Penetration Test
PID = Photoionization Detector (ppm)
PPM = Part Per Million
HSV = Hand Shear Vane

BROWNFIELD SOLUTIONS LTD

Borehole Log

Window Sampler No.
BH07
Sheet 1 of 2

PROJECT NO:	C6035	**CO-ORDS:**	382588E, 385588N
PROJECT NAME:	MANCHESTER BUSINESS PARK, AVIATOR WAY	**LEVEL:**	71.15m OD
CLIENT:	ASK REAL ESTATE MBP LIMITED	**DATES:**	19/11/25 - 20/11/25

Hole Type	Scale	Logged	Checked
WS	1:25	BW	DV

Well	Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m OD)	Legend	Stratum Description
		Depth (m)	Type	Results				
		0.10-0.30	ES					Grass over dark brown slightly gravelly slightly sandy silty CLAY. Sand is fine to coarse. Gravel is sub-angular to sub-rounded fine to coarse of mudstone and rare coal with frequent rootlets. (TOPSOIL)
					0.30	70.85		Soft orange grey slightly gravelly sandy CLAY. Sand is fine to coarse. Gravel is sub-angular to sub-rounded fine to medium of mudstone.
		0.50-0.70	D					
	▽				0.90	70.25		Soft light greyish brown slightly gravelly slightly sandy silty CLAY. Sand is fine to coarse. Gravel is sub-angular to sub-rounded of mudstone sandstone and coal.
		1.20-1.65 1.20	D SPT	N=3 (1,0/1,0,1,1)				
		2.00-2.45 2.00	D SPT	N=16 (3,3/4,4,3,5)	2.00	69.15		Reddish brown slightly gravelly slightly clayey fine to coarse SAND. Gravel is sub-angular to sub-rounded fine to medium of mudstone.
					2.10	69.05		Soft dark reddish brown slightly gravelly slightly sandy silty CLAY. Sand is fine to coarse. Gravel is sub-angular to sub-rounded fine to medium of mudstone and quartz.
					2.30	68.85		Reddish brown slightly gravelly slightly clayey fine to coarse SAND. Gravel is sub-angular to sub-rounded fine to medium of mudstone.
					2.60	68.55		Soft dark reddish brown slightly gravelly slightly sandy silty CLAY. Sand is fine to coarse. Gravel is sub-angular to sub-rounded fine to medium of mudstone and quartz.
		3.00-3.45 3.00	D SPT	N=25 (2,2/4,5,6,10)	3.00	68.15		Medium dense reddish brown slightly gravelly slightly clayey fine to coarse SAND. Gravel is sub-angular to sub-rounded fine to medium of mudstone.
					3.80	67.35		Soft dark reddish brown slightly gravelly slightly sandy silty CLAY. Sand is fine to coarse. Gravel is sub-angular to sub-rounded fine to medium of mudstone and quartz.
		4.00-4.45 4.00	D SPT	N=26 (9,5/5,4,8,9)	4.00	67.15		Grey sub-rounded COBBLES up to 65mm in diameter with some firm CLAY.
					4.20	66.95		Stiff dark reddish brown slightly gravelly slightly sandy silty CLAY. Sand is fine to coarse. Gravel is sub-angular to sub-rounded fine to medium of mudstone and quartz.
					4.80	66.35		Medium dense reddish brown slightly gravelly slightly clayey fine to coarse SAND. Gravel is sub-angular to sub-rounded fine to medium of mudstone and quartz.
		5.00-5.45 5.00	D SPT	N=26 (4,4/5,6,7,8)				

1.0 2.0 3.0 4.0 5.0

Remarks

1. Clearance of services by BSL engineer using CAT & genny, and hand-dug inspection pit excavated to 1.20m bgl. 2. Dynamic sampled to 7.45m bgl. 3. Borehole terminated due to programme constraints. 4. Groundwater encountered at 0.90m bgl. 5. No visual or olfactory evidence of contamination noted. 6. Installation to 5.00m bgl: 1.00m plain, 4.00m slotted 50mm HDPE pipe.

ES = Environmental Sample
D = Disturbed Sample
B = Bulk Sample
LB = Large Bulk Sample
U = Undisturbed Sample
UT = Undisturbed Thin Wall Sample
SPT = Standard Penetration Test
PID = Photoionization Detector (ppm)
PPM = Part Per Million
HSV = Hand Shear Vane

BROWNFIELD SOLUTIONS LTD

Borehole Log

Window Sampler No.
BH07
Sheet 2 of 2

PROJECT NO:	C6035	**CO-ORDS:**	382588E, 385588N
PROJECT NAME:	MANCHESTER BUSINESS PARK, AVIATOR WAY	**LEVEL:**	71.15m OD
CLIENT:	ASK REAL ESTATE MBP LIMITED	**DATES:**	19/11/25 - 20/11/25

Hole Type	Scale	Logged	Checked
WS	1:25	BW	DV

Well	Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m OD)	Legend	Stratum Description
		Depth (m)	Type	Results				
					5.25	65.90		Stiff dark reddish brown slightly gravelly slightly sandy silty CLAY. Sand is fine to coarse. Gravel is sub-angular to sub-rounded fine to medium of mudstone and quartz.
					5.60	65.55		Reddish brown slightly gravelly fine to coarse SAND. Gravel is sub-angular to sub-rounded fine to medium of mudstone and quartz.
					5.70	65.45		Stiff dark reddish brown slightly gravelly slightly sandy silty CLAY. Sand is fine to coarse. Gravel is sub-angular to sub-rounded fine to medium of mudstone and quartz.
		6.00-6.45 6.00	D SPT	N=30 (5,6/6,6,8,10)	6.00	65.15		Medium dense reddish brown slightly gravelly fine to coarse SAND. Gravel is sub-angular to sub-rounded fine to medium of mudstone and quartz.
					6.45	64.70		Very stiff dark reddish brown slightly gravelly slightly sandy silty CLAY. Sand is fine to coarse. Gravel is sub-angular to sub-rounded fine to medium of mudstone and quartz.
		7.00-7.45 7.00	D SPT	N=47 (6,6/10,12,12,13)				
					7.45	63.70		End of Borehole at 7.45m

6.0
7.0
8.0
9.0
10.0

Remarks

1. Clearance of services by BSL engineer using CAT & genny, and hand-dug inspection pit excavated to 1.20m bgl. 2. Dynamic sampled to 7.45m bgl. 3. Borehole terminated due to programme constraints. 4. Groundwater encountered at 0.90m bgl. 5. No visual or olfactory evidence of contamination noted. 6. Installation to 5.00m bgl: 1.00m plain, 4.00m slotted 50mm HDPE pipe.

ES = Environmental Sample
D = Disturbed Sample
B = Bulk Sample
LB = Large Bulk Sample
U = Undisturbed Sample
UT = Undisturbed Thin Wall Sample
SPT = Standard Penetration Test
PID = Photoionization Detector (ppm)
PPM = Part Per Million
HSV = Hand Shear Vane

BROWNFIELD SOLUTIONS LTD

Borehole Log

Rotary Open Hole Borehole No.

BH08

Sheet 1 of 2

PROJECT NO:	C6035	**CO-ORDS:**	382636E, 385576N
PROJECT NAME:	MANCHESTER BUSINESS PARK, AVIATOR WAY	**LEVEL:**	71.40m OD
CLIENT:	ASK REAL ESTATE MBP LIMITED	**DATES:**	21/11/25

Hole Type	Scale	Logged	Checked
RO	1:25	BW	DV

Well	Water Strikes	Sample and In Situ Testing: Depth (m)	Type	Results	Depth (m)	Level (m OD)	Legend	Stratum Description
		0.10-0.30	ES		0.30	71.10		MADE GROUND: Grass over dark brown slightly gravelly slightly sandy CLAY with frequent rootlets. Sand is fine to coarse. Gravel is angular to sub-rounded fine to coarse of mudstone and rare glass (TOPSOIL).
	▽	1.00-1.20	ES					Light grey slightly gravelly slightly clayey fine to coarse SAND. Gravel is sub-angular to sub-rounded fine to medium of mudstone and quartz.
		1.20-1.65 1.20	D SPT	N=2 (1,0/1,0,1,0)	1.20	70.20		Very soft light orangish brown slightly gravelly slightly sandy silty CLAY. Sand is fine to coarse. Gravel is angular to sub-rounded fine to medium of mudstone, quartz and coal.
								0.40m bgl: Orangish brown.
		2.00-2.45 2.00	D SPT	N=6 (1,0/1,1,2,2)				*2.00m bgl: Soft from 2.00m bgl.*
		3.00-3.45 3.00	D SPT	N=17 (1,2/4,4,4,5)	3.00	68.40		Stiff dark reddish brown slightly gravelly slightly sandy silty CLAY. Sand is fine to coarse. Gravel is sub-angular to sub-rounded fine to medium of mudstone and quartz.
		4.00-4.45 4.00	D SPT	N=31 (3,5/7,7,8,9)				*4.00m bgl: Very stiff from 4.00m bgl.*
		5.00-5.45 5.00	D SPT	N=33 (4,6/7,8,8,10)	5.00	66.40		

1.0 2.0 3.0 4.0 5.0

Remarks

1. Clearance of services by BSL engineer using CAT & genny, and hand-dug inspection pit excavated to 1.20m bgl. 2. Rotary open hole methods with SPTs centred at 1.00m intervals adopted. 3. Borehole terminated due to programme constraints. 4. Groundwater encountered at 0.90m bgl. 5. No visual or olfactory evidence of contamination noted. 6. No installation, backfilled with bentonite. 7. Soil descriptions based on SPT and drilling recovery only.

ES = Environmental Sample
D = Disturbed Sample
B = Bulk Sample
LB = Large Bulk Sample
U = Undisturbed Sample
UT = Undisturbed Thin Wall Sample
SPT = Standard Penetration Test
PID = Photoionization Detector (ppm)
PPM = Part Per Million
HSV = Hand Shear Vane

BROWNFIELD SOLUTIONS LTD

Borehole Log

Rotary Open Hole Borehole No.

BH08

Sheet 2 of 2

PROJECT NO:	C6035	**CO-ORDS:**	382636E, 385576N
PROJECT NAME:	MANCHESTER BUSINESS PARK, AVIATOR WAY	**LEVEL:**	71.40m OD
CLIENT:	ASK REAL ESTATE MBP LIMITED	**DATES:**	21/11/25

Hole Type	Scale	Logged	Checked
RO	1:25	BW	DV

Well	Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m OD)	Legend	Stratum Description
		Depth (m)	Type	Results				
		6.00-6.45 6.00	D SPT	N≥50 (6,8/50 for 255mm)	6.45	64.95		Very stiff dark reddish brown slightly gravelly CLAY. Gravel is sub-angular to sub-rounded fine to medium of mudstone.
								End of Borehole at 6.45m

6.0
7.0
8.0
9.0
10.0

Remarks

1. Clearance of services by BSL engineer using CAT & genny, and hand-dug inspection pit excavated to 1.20m bgl. 2. Rotary open hole methods with SPTs centred at 1.00m intervals adopted. 3. Borehole terminated due to programme constraints. 4. Groundwater encountered at 0.90m bgl. 5. No visual or olfactory evidence of contamination noted. 6. No installation, backfilled with bentonite. 7. Soil descriptions based on SPT and drilling recovery only.

ES = Environmental Sample
D = Disturbed Sample
B = Bulk Sample
LB = Large Bulk Sample
U = Undisturbed Sample
UT = Undisturbed Thin Wall Sample
SPT = Standard Penetration Test
PID = Photoionization Detector (ppm)
PPM = Part Per Million
HSV = Hand Shear Vane

BROWNFIELD SOLUTIONS LTD

Trial Pit Log

No.
TP01
Sheet 1 of 1

PROJECT NO:	C6035	**CO-ORDS:**	382546E, 385669N
PROJECT NAME:	MANCHESTER BUSINESS PARK, AVIATOR WAY	**LEVEL:**	70.50m OD
CLIENT:	ASK REAL ESTATE MBP LIMITED	**DATES:**	18/11/25

Hole Type	Scale	Logged	Checked
TP	1:25	BW	DV

Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m OD)	Legend	Stratum Description
	Depth (m)	Type	Results				
	0.00-0.30	ES		0.40	70.10		MADE GROUND: Grass over dark brown slightly gravelly slightly sandy silty CLAY. Sand is fine to coarse. Gravel is sub-angular to sub-rounded fine to medium of quartz and ceramic (TOPSOIL).
	0.60-1.00	ES		1.00	69.50		Light brown slightly gravelly fine to coarse SAND. Gravel is sub-angular to sub-rounded fine to medium of mudstone and quartz.
	2.00-2.40	D		2.40	68.10		Firm reddish brown slightly sandy gravelly CLAY. Sand is fine to coarse. Gravel is sub-angular to sub-rounded fine to coarse of mudstone and quartz.
							End of Trial Pit at 2.40m

1.0
2.0
3.0
4.0
5.0

Remarks 1. Clearance of services by BSL engineer using CAT & Genny. 2. No groundwater encountered. 3. No visual or olfactory evidence of contamination noted. 4. Excavation terminated at target depth. 5. Hole backfilled with arisings upon completion.

ES = Environmental Sample
D = Disturbed Sample
B = Bulk Sample
LB = Large Bulk Sample
U = Undisturbed Sample
UT = Undisturbed Thin Wall Sample
SPT = Standard Penetration Test
PID = Photoionization Detector (ppm)
PPM = Part Per Million
HSV = Hand Shear Vane

BROWNFIELD SOLUTIONS LTD

Trial Pit Log

No.
TP02
Sheet 1 of 1

PROJECT NO:	C6035	**CO-ORDS:**	382636E, 385666N
PROJECT NAME:	MANCHESTER BUSINESS PARK, AVIATOR WAY	**LEVEL:**	70.60m OD
CLIENT:	ASK REAL ESTATE MBP LIMITED	**DATES:**	18/11/25

Hole Type	Scale	Logged	Checked
TP	1:25	BW	DV

Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m OD)	Legend	Stratum Description
	Depth (m)	Type	Results				
	0.00-0.30	ES		0.30	70.31		Grass over dark brown gravelly clayey fine to coarse SAND with frequent roots and rootlets. Gravel is sub-angular to sub-rounded fine to coarse of mudstone (TOPSOIL).
	0.60-0.90	ES		0.55	70.06		Soft light orangish brown slightly gravelly sandy CLAY. Sand is fine to coarse. Gravel is sub-angular to sub-rounded fine to medium of mudstone.
▽				1.20	69.40		Firm brown slightly gravelly slightly sandy silty CLAY. Sand is fine to coarse. Gravel is sub-angular to sub-rounded fine to medium of mudstone.
	1.70-1.80	D					Yellowish brown slightly gravelly slightly clayey fine to coarse SAND. Gravel is sub-angular to sub-rounded fine to medium of mudstone and quartz.
	2.40-2.50	D		2.50	68.10		End of Trial Pit at 2.50m

1.0
2.0
3.0
4.0
5.0

Remarks 1. Clearance of services by BSL engineer using CAT & Genny. 2. Groundwater encountered at 1.00m bgl. 3. No visual or olfactory evidence of contamination noted. 4. Excavation terminated due to sidewall instability. 5. Hole backfilled with arisings upon completion.

ES = Environmental Sample
D = Disturbed Sample
B = Bulk Sample
LB = Large Bulk Sample
U = Undisturbed Sample
UT = Undisturbed Thin Wall Sample
SPT = Standard Penetration Test
PID = Photoionization Detector (ppm)
PPM = Part Per Million
HSV = Hand Shear Vane

BROWNFIELD SOLUTIONS LTD

Trial Pit Log

No.
TP03
Sheet 1 of 1

PROJECT NO:	C6035	**CO-ORDS:**	382567E, 385636N
PROJECT NAME:	MANCHESTER BUSINESS PARK, AVIATOR WAY	**LEVEL:**	70.76m OD
CLIENT:	ASK REAL ESTATE MBP LIMITED	**DATES:**	18/11/25

Hole Type	Scale	Logged	Checked
TP	1:25	BW	DV

Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m OD)	Legend	Stratum Description
	Depth (m)	Type	Results				
	0.00-0.30	ES		0.30	70.46		MADE GROUND: Grass over dark brown and reddish brown mottled slightly sandy gravelly CLAY. Sand is fine to coarse. Gravel is angular to sub-rounded of mudstone, quartz and rare ceramic (TOPSOIL).
				1.00	69.76		Soft light grey slightly gravelly sandy CLAY. Sand is fine to coarse. Gravel is sub-angular to sub-rounded fine to medium of mudstone. *0.60 - 1.00m bgl. - Becomes orange mottled light grey.*
	1.20-1.50	ES		1.30	69.46		Orange slightly gravelly slightly clayey fine to coarse SAND. Gravel is sub-angular to sub-rounded fine to medium of mudstone.
	2.40-2.50	D		2.50	68.26		Firm dark reddish brown slightly gravelly slightly sandy silty CLAY. Sand is fine to coarse. Gravel is sub-angular to sub-rounded fine to medium of mudstone and quartz.
							End of Trial Pit at 2.50m

1.0
2.0
3.0
4.0
5.0

Remarks 1. Clearance of services by BSL engineer using CAT & Genny. 2. No groundwater encountered. 3. No visual or olfactory evidence of contamination noted. 4. Excavation terminated due to sidewall instability. 5. Hole backfilled with arisings upon completion.

ES = Environmental Sample
D = Disturbed Sample
B = Bulk Sample
LB = Large Bulk Sample
U = Undisturbed Sample
UT = Undisturbed Thin Wall Sample
SPT = Standard Penetration Test
PID = Photoionization Detector (ppm)
PPM = Part Per Million
HSV = Hand Shear Vane

BROWNFIELD SOLUTIONS LTD

Trial Pit Log

No.
TP04
Sheet 1 of 1

PROJECT NO:	C6035	**CO-ORDS:**	382564E, 385600N
PROJECT NAME:	MANCHESTER BUSINESS PARK, AVIATOR WAY	**LEVEL:**	71.02m OD
CLIENT:	ASK REAL ESTATE MBP LIMITED	**DATES:**	18/11/25

Hole Type	Scale	Logged	Checked
TP	1:25	BW	DV

Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m OD)	Legend	Stratum Description
	Depth (m)	Type	Results				
	0.00-0.30	ES		0.30	70.72		MADE GROUND: Grass over dark brown slightly gravelly slightly sandy silty CLAY. Sand is fine to coarse. Gravel is sub-angular to sub-rounded fine to medium of mudstone and quartz (TOPSOIL).
	0.60-0.70	ES		0.75	70.27		MADE GROUND: Orangish brown slightly gravelly slightly clayey fine to coarse SAND. Gravel is sub-angular to sub-rounded fine to medium of mudstone and quartz. *Burried wheel trim.* *Redundant concrete pipe.*
							End of Trial Pit at 0.75m

1.0
2.0
3.0
4.0
5.0

Remarks 1. Clearance of services by BSL engineer using CAT & Genny. 2. No groundwater encountered. 3. No visual or olfactory evidence of contamination noted. 4. Hole terminated on redundant concrete pipe at 0.75m bgl. 5. Hole backfilled with arisings upon completion.

ES = Environmental Sample
D = Disturbed Sample
B = Bulk Sample
LB = Large Bulk Sample
U = Undisturbed Sample
UT = Undisturbed Thin Wall Sample
SPT = Standard Penetration Test
PID = Photoionization Detector (ppm)
PPM = Part Per Million
HSV = Hand Shear Vane

BROWNFIELD SOLUTIONS LTD

Trial Pit Log

No.
TP05
Sheet 1 of 1

PROJECT NO:	C6035	**CO-ORDS:**	382624E, 385618N
PROJECT NAME:	MANCHESTER BUSINESS PARK, AVIATOR WAY	**LEVEL:**	70.95m OD
CLIENT:	ASK REAL ESTATE MBP LIMITED	**DATES:**	19/11/25

Hole Type	Scale	Logged	Checked
TP	1:25	BW	DV

Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m OD)	Legend	Stratum Description
	Depth (m)	Type	Results				
	0.00-0.30	ES		0.30	70.65		Grass over dark brown slightly sandy slightly gravelly silty CLAY with frequent rootlets. Sand is fine to coarse. Gravel is sub-angular to sub-rounded fine to medium of mudstone (TOPSOIL).
▽				0.50	70.45		Soft light orangish brown slightly gravelly sandy CLAY. Sand is fine to coarse. Gravel is sub-angular to sub-rounded fine to medium of mudstone.
	1.00-1.20	ES		1.20	69.75		Firm brown slightly gravelly slightly sandy silty CLAY. Sand is fine to coarse. Gravel is sub-angular to sub-rounded fine to medium of mudstone and quartz.
	1.50-1.60	D					Yellowish brown slightly gravelly slightly clayey fine to coarse SAND. Gravel is sub-angular to sub-rounded fine to medium of mudstone and quartz.
	2.00-2.20	D		2.20	68.75		End of Trial Pit at 2.20m

1.0
2.0
3.0
4.0
5.0

Remarks 1. Clearance of services by BSL engineer using CAT & Genny. 2. Groundwater encountered at 0.60m bgl. 3. No visual or olfactory evidence of contamination noted. 4. Excavation terminated due to sidewall instability. 5. Hole backfilled with arisings upon completion.

ES = Environmental Sample
D = Disturbed Sample
B = Bulk Sample
LB = Large Bulk Sample
U = Undisturbed Sample
UT = Undisturbed Thin Wall Sample
SPT = Standard Penetration Test
PID = Photoionization Detector (ppm)
PPM = Part Per Million
HSV = Hand Shear Vane

BROWNFIELD SOLUTIONS LTD

Trial Pit Log

No.
TP06
Sheet 1 of 1

PROJECT NO:	C6035	**CO-ORDS:**	382624E, 385618N
PROJECT NAME:	MANCHESTER BUSINESS PARK, AVIATOR WAY	**LEVEL:**	70.81m OD
CLIENT:	ASK REAL ESTATE MBP LIMITED	**DATES:**	19/11/25

Hole Type	Scale	Logged	Checked
TP	1:25	BW	DV

Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m OD)	Legend	Stratum Description
	Depth (m)	Type	Results				
	0.10-0.30	ES					Grass over dark brown slightly gravelly slightly sandy silty CLAY with frequent rootlets. Sand is fine to coarse. Gravel is sub-angular to sub-rounded fine to medium of mudstone and quartz (TOPSOIL).
▽				0.35	70.46		Soft reddish brown slightly sandy slightly gravelly silty CLAY. Sand is fine to coarse. Gravel is sub-angular to sub-rounded fine to medium of mudstone and quartz.
	0.60-1.00	ES					*0.60 - 0.80m bgl. Clay pipe present.*
							Firm from 1.90m bgl.
	2.20	D		2.20	68.61		End of Trial Pit at 2.20m

1.0
2.0
3.0
4.0
5.0

Remarks 1. Clearance of services by BSL engineer using CAT & Genny. 2. Groundwater encountered at 0.40m bgl. 3. Possible clay pipe observed at 0.60-0.80m bgl. 4. No visual or olfactory evidence of contamination noted. 5. Excavation terminated due to sidewall instability. 6. Hole backfilled with arisings upon completion.

ES = Environmental Sample
D = Disturbed Sample
B = Bulk Sample
LB = Large Bulk Sample
U = Undisturbed Sample
UT = Undisturbed Thin Wall Sample
SPT = Standard Penetration Test
PID = Photoionization Detector (ppm)
PPM = Part Per Million
HSV = Hand Shear Vane

BROWNFIELD SOLUTIONS LTD

Trial Pit Log

No.
TP07
Sheet 1 of 1

PROJECT NO:	C6035	**CO-ORDS:**	382720E, 385603N
PROJECT NAME:	MANCHESTER BUSINESS PARK, AVIATOR WAY	**LEVEL:**	71.31m OD
CLIENT:	ASK REAL ESTATE MBP LIMITED	**DATES:**	19/11/25

Hole Type	Scale	Logged	Checked
TP	1:25	BW	DV

Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m OD)	Legend	Stratum Description
	Depth (m)	Type	Results				
	0.00-0.30	ES					MADE GROUND: Grass over dark brown slightly gravelly slightly sandy silty CLAY with rootlets. Sand is fine to coarse. Gravel is angular to sub-rounded fine to coarse of brick, concrete, plastic, glass and mudstone (TOPSOIL).
				0.50	70.81		Soft reddish brown slightly gravelly slightly sandy silty CLAY. Sand is fine to coarse. Gravel is sub-angular to sub-rounded fine to medium of quartz and mudstone.
	1.10-1.40	ES		1.10	70.21		Greyish yellow slightly gravelly fine to coarse SAND. Gravel is sub-angular to sub-rounded fine to medium of mudstone and quartz.
				2.00	69.31		Firm greyish reddish brown slightly gravelly slightly sandy silty CLAY. Sand is fine to coarse. Gravel is sub-angular to sub-rounded fine to medium of mudstone and quartz.
	2.80	D		2.80	68.51		End of Trial Pit at 2.80m

1.0
2.0
3.0
4.0
5.0

Remarks 1. Clearance of services by BSL engineer using CAT & Genny. 2. No groundwater encountered. 3. No visual or olfactory evidence of contamination noted. 4. Excavation terminated at target depth. 5. Hole backfilled with arisings upon completion.

ES = Environmental Sample
D = Disturbed Sample
B = Bulk Sample
LB = Large Bulk Sample
U = Undisturbed Sample
UT = Undisturbed Thin Wall Sample
SPT = Standard Penetration Test
PID = Photoionization Detector (ppm)
PPM = Part Per Million
HSV = Hand Shear Vane

BROWNFIELD SOLUTIONS LTD

Trial Pit Log

No.
TP08
Sheet 1 of 1

PROJECT NO:	C6035	**CO-ORDS:**	382696E, 385555N
PROJECT NAME:	MANCHESTER BUSINESS PARK, AVIATOR WAY	**LEVEL:**	71.90m OD
CLIENT:	ASK REAL ESTATE MBP LIMITED	**DATES:**	21/11/25

Hole Type	
TP	
Scale	
1:25	
Logged	**Checked**
BW	DV

Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m OD)	Legend	Stratum Description
	Depth (m)	Type	Results				
	0.10-0.30	ES		0.30	71.60		MADE GROUND: Grass over dark brown to black slightly gravelly slightly sandy silty CLAY. Sand is fine to coarse. Gravel is angular to sub-rounded fine to coarse of brick, glass, and mudstone (TOPSOIL).
	0.40-0.80	ES					MADE GROUND: Soft yellowish slightly gravelly sandy CLAY. Sand is fine to coarse. Gravel is angular to sub-rounded fine to coarse of brick, mudstone and quartz.
				1.20	70.70		Soft dark reddish brown slightly gravelly sandy CLAY. Sand is fine to coarse. Gravel is sub-angular to sub-rounded fine to medium of mudstone and quartz.
							Firm from 1.90m bgl.
	2.30	D		2.30	69.60		End of Trial Pit at 2.30m

1.0
2.0
3.0
4.0
5.0

Remarks 1. Clearance of services by BSL engineer using CAT & Genny. 2. No groundwater encountered 3. No visual or olfactory evidence of contamination noted. 4. Excavation terminated due to sidewall instability. 5. Hole backfilled with arisings upon completion.

ES = Environmental Sample
D = Disturbed Sample
B = Bulk Sample
LB = Large Bulk Sample
U = Undisturbed Sample
UT = Undisturbed Thin Wall Sample
SPT = Standard Penetration Test
PID = Photoionization Detector (ppm)
PPM = Part Per Million
HSV = Hand Shear Vane

BROWNFIELD SOLUTIONS LTD

Trial Pit Log

No.
TP09
Sheet 1 of 1

PROJECT NO:	C6035	**CO-ORDS:**	382675E, 385600N
PROJECT NAME:	MANCHESTER BUSINESS PARK, AVIATOR WAY	**LEVEL:**	71.30m OD
CLIENT:	ASK REAL ESTATE MBP LIMITED	**DATES:**	21/11/25

Hole Type	Scale	Logged	Checked
TP	1:25	BW	DV

Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m OD)	Legend	Stratum Description
	Depth (m)	Type	Results				
	0.35-0.60	ES		0.35	70.95		MADE GROUND: Grass over dark brown gravelly slightly clayey fine to coarse SAND. Gravel is angular to sub-rounded fine to coarse of brick, mudstone and quartz (TOPSOIL).
				1.40	69.90		MADE GROUND: Soft orange brown slightly gravelly silty CLAY. Sand is fine to coarse. Gravel is sub-angular to sub-rounded fine to coarse of brick and mudstone.
				2.00	69.30		Grey slightly gravelly slightly clayey fine to coarse SAND. Gravel is sub-angular to sub-rounded fine to medium of quartz and mudstone.
	2.40	D		2.50	68.80		Firm dark brown slightly sandy silty CLAY. Sand is fine to coarse. Gravel is sub-angular to sub-rounded fine to medium of quartz and mudstone.
							End of Trial Pit at 2.50m

1.0
2.0
3.0
4.0
5.0

Remarks 1. Clearance of services by BSL engineer using CAT & Genny. 2. No groundwater encountered 3. Brick was observed up to 1.40m bgl. 4. Excavation terminated at 2.50m bgl. due to reaching target depth. 5. Hole backfilled with arisings upon completion.

ES = Environmental Sample
D = Disturbed Sample
B = Bulk Sample
LB = Large Bulk Sample
U = Undisturbed Sample
UT = Undisturbed Thin Wall Sample
SPT = Standard Penetration Test
PID = Photoionization Detector (ppm)
PPM = Part Per Million
HSV = Hand Shear Vane

BROWNFIELD SOLUTIONS LTD

Trial Pit Log

No.
TP10
Sheet 1 of 1

PROJECT NO:	C6035	**CO-ORDS:**	382702E, 385633N
PROJECT NAME:	MANCHESTER BUSINESS PARK, AVIATOR WAY	**LEVEL:**	70.96m OD
CLIENT:	ASK REAL ESTATE MBP LIMITED	**DATES:**	21/11/25

Hole Type	Scale	Logged	Checked
TP	1:25	BW	DV

Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m OD)	Legend	Stratum Description
	Depth (m)	Type	Results				
	0.10-0.30	ES					MADE GROUND: Grass over dark brown slightly gravelly slightly sandy silty CLAY. Sand is fine to coarse. Gravel is sub-angular to sub-rounded fine to coarse of mudstone, quartz and rare brick (TOPSOIL).
				0.40	70.56		Soft light grey sandy silty CLAY. Sand is fine to coarse. Gravel is sub-angular to sub-rounded fine to medium of mudstone and quartz.
				0.65	70.31		Light brown slightly gravelly slightly clayey fine to coarse SAND. Gravel is sub-angular to sub-rounded fine to medium of mudstone and quartz.
				1.65	69.31		Soft light brown slightly gravelly sandy silty CLAY. Sand is fine to coarse. Gravel is sub-angular to sub-rounded fine to medium of quartz and mudstone.
				2.00	68.96		Firm dark reddish brown slightly gravelly slightly sandy silty CLAY. Sand is fine to coarse. Gravel is sub-angular to sub-rounded fine to medium of quartz and mudstone.
				2.20	68.76		End of Trial Pit at 2.20m

1.0
2.0
3.0
4.0
5.0

Remarks 1. Clearance of services by BSL engineer using CAT & Genny. 2. No groundwater encountered 3. No visual or olfactory evidence of contamination noted. 4. Excavation terminated at target depth. 5. Hole backfilled with arisings upon completion.

ES = Environmental Sample
D = Disturbed Sample
B = Bulk Sample
LB = Large Bulk Sample
U = Undisturbed Sample
UT = Undisturbed Thin Wall Sample
SPT = Standard Penetration Test
PID = Photoionization Detector (ppm)
PPM = Part Per Million
HSV = Hand Shear Vane

BROWNFIELD SOLUTIONS LTD

Trial Pit Log

No.
TP11
Sheet 1 of 1

PROJECT NO:	C6035	**CO-ORDS:**	382600E, 385639N
PROJECT NAME:	MANCHESTER BUSINESS PARK, AVIATOR WAY	**LEVEL:**	70.77m OD
CLIENT:	ASK REAL ESTATE MBP LIMITED	**DATES:**	21/11/25

Hole Type	Scale	Logged	Checked
TP	1:25	BW	DV

Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m OD)	Legend	Stratum Description
	Depth (m)	Type	Results				
	0.10-0.25	D		0.25	70.52		MADE GROUND: Grass over dark brown to black slightly gravelly slightly sandy silty CLAY with frequent rootlets. Sand is fine to coarse. Gravel is angular to sub-rounded of mudstone, ceramics and rare brick (TOPSOIL).
				0.50	70.27		MADE GROUND: Soft light grey slightly gravelly sandy CLAY with low cobble content. Sand is fine to coarse. Gravel is sub-angular to sub-rounded of mudstone and rare brick. Cobbles are sub-angular to sub-rounded up to 80mm in diameter of mudstone.
▽	0.80	D					
				1.00	69.77		MADE GROUND: Soft orange brown slightly gravelly sandy silty CLAY. Sand is fine to coarse. Gravel is angular to sub-rounded fine to coarse of brick and mudstone.
							Soft reddish greyish brown slightly gravelly slightly sandy silty CLAY. Sand is fine to coarse. Gravel is sub-angular to sub-rounded fine to medium of mudstone.
	2.00	D		2.00	68.77		End of Trial Pit at 2.00m

1.0
2.0
3.0
4.0
5.0

Remarks 1. Clearance of services by BSL engineer using CAT & Genny. 2. Groundwater encountered at 0.70m bgl. 3. No visual or olfactory evidence of contamination noted. 4. Excavation terminated due to sidewall instability. 5. Hole backfilled with arisings upon completion.

ES = Environmental Sample
D = Disturbed Sample
B = Bulk Sample
LB = Large Bulk Sample
U = Undisturbed Sample
UT = Undisturbed Thin Wall Sample
SPT = Standard Penetration Test
PID = Photoionization Detector (ppm)
PPM = Part Per Million
HSV = Hand Shear Vane

BROWNFIELD SOLUTIONS LTD

Trial Pit Log

No.
TP12
Sheet 1 of 1

PROJECT NO:	C6035	**CO-ORDS:**	382609E, 385585N
PROJECT NAME:	MANCHESTER BUSINESS PARK, AVIATOR WAY	**LEVEL:**	71.29m OD
CLIENT:	ASK REAL ESTATE MBP LIMITED	**DATES:**	20/11/25

Hole Type	Scale	Logged	Checked
TP	1:25	BW	DV

Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m OD)	Legend	Stratum Description
	Depth (m)	Type	Results				
				0.30	70.99		MADE GROUND: Grass over dark brown to black slightly sandy gravelly CLAY with frequent rootlets. Sand is fine to coarse. Gravel is angular to sub-rounded fine to coarse of brick, concrete, ceramic and mudstone (TOPSOIL).
	0.65-1.10	D		0.65	70.64		Light brown slightly gravelly clayey fine to coarse SAND. Gravel is sub-angular to sub-rounded fine to coarse of mudstone, sandstone and quartz.
				1.10	70.19		Yellowish grey slightly gravelly clayey fine to coarse SAND. Gravel is sub-angular to sub-rounded fine to medium of mudstone, sandstone and quartz.
				1.80	69.49		Reddish brown slightly gravelly clayey fine to coarse SAND. Gravel is sub-angular to sub-rounded fine to medium of mudstone and quartz.
	2.20	D		2.20	69.09		Firm reddish brown slightly gravelly slightly sandy silty CLAY. Sand is fine to coarse. Gravel is sub-angular to sub-rounded fine to medium of mudstone and quartz.
							End of Trial Pit at 2.20m

1.0
2.0
3.0
4.0
5.0

Remarks 1. Clearance of services by BSL engineer using CAT & Genny. 2. No groundwater encountered. 3. Excavation terminated due to sidewall instability. 4. No visual or olfactory evidence of contamination noted. 5. Hole backfilled with arisings upon completion.

ES = Environmental Sample
D = Disturbed Sample
B = Bulk Sample
LB = Large Bulk Sample
U = Undisturbed Sample
UT = Undisturbed Thin Wall Sample
SPT = Standard Penetration Test
PID = Photoionization Detector (ppm)
PPM = Part Per Million
HSV = Hand Shear Vane

BROWNFIELD SOLUTIONS LTD

Trial Pit Log

No.
SA01
Sheet 1 of 1

PROJECT NO:	C6035	**CO-ORDS:**	382664E, 385592N
PROJECT NAME:	MANCHESTER BUSINESS PARK, AVIATOR WAY	**LEVEL:**	70.85m OD
CLIENT:	ASK REAL ESTATE MBP LIMITED	**DATES:**	30/12/99 - 14/11/25

Hole Type	Scale	Logged	Checked
TP	1:25	MB	DV

Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m OD)	Legend	Stratum Description
	Depth (m)	Type	Results				
				0.20	70.65		Brown slightly sandy CLAY. Sand is fine to coarse (TOPSOIL).
				0.50	70.35		Soft brown slightly gravelly slightly sandy CLAY. Sand is fine to coarse. Gravel is sub-angular to sub-rounded fine to medium of sandstone.
							End of Trial Pit at 0.50m

1.0
2.0
3.0
4.0
5.0

Remarks 1. Clearance of services by BSL engineer using CAT & Genny. 2. No groundwater encountered. 3. Soakaway test undertaken in pit at 0.50m bgl. 4. Excavation terminated at target depth. 5. No visual or olfactory evidence of contamination noted. 6. Hole backfilled with arisings upon completion.

ES = Environmental Sample
D = Disturbed Sample
B = Bulk Sample
LB = Large Bulk Sample
U = Undisturbed Sample
UT = Undisturbed Thin Wall Sample
SPT = Standard Penetration Test
PID = Photoionization Detector (ppm)
PPM = Part Per Million
HSV = Hand Shear Vane

BROWNFIELD SOLUTIONS LTD

Trial Pit Log

No.
SA02
Sheet 1 of 1

PROJECT NO:	C6035	**CO-ORDS:**	382618E, 385637N
PROJECT NAME:	MANCHESTER BUSINESS PARK, AVIATOR WAY	**LEVEL:**	70.79m OD
CLIENT:	ASK REAL ESTATE MBP LIMITED	**DATES:**	30/12/99 - 12/11/25

Hole Type	Scale	Logged	Checked
TP	1:25	BW	DV

Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m OD)	Legend	Stratum Description
	Depth (m)	Type	Results				
				0.30	70.49		Grass over dark brown slightly gravelly slightly sandy silty CLAY with frequent rootlets (TOPSOIL). Sand is fine to coarse. Gravel is sub-angular to sub-rounded fine to coarse of coal, limestone and mudstone.
				0.55	70.24		Soft light orangish grey sandy gravelly CLAY. Sand is fine to coarse. Gravel is sub-angular to sub-rounded fine to coarse of coal, limestone and mudstone.
							End of Trial Pit at 0.50m

1.0
2.0
3.0
4.0
5.0

Remarks 1. Clearance of services by BSL engineer using CAT & Genny. 2. No groundwater encountered. 3. Soakaway test undertaken in pit at 0.50m bgl. 4. Excavation terminated at target depth. 5. No visual or olfactory evidence of contamination noted. 6. Hole backfilled with arisings upon completion.

ES = Environmental Sample
D = Disturbed Sample
B = Bulk Sample
LB = Large Bulk Sample
U = Undisturbed Sample
UT = Undisturbed Thin Wall Sample
SPT = Standard Penetration Test
PID = Photoionization Detector (ppm)
PPM = Part Per Million
HSV = Hand Shear Vane

BROWNFIELD SOLUTIONS LTD

Trial Pit Log

No.
SA03
Sheet 1 of 1

PROJECT NO:	C6035	**CO-ORDS:**	382558E, 385616N
PROJECT NAME:	MANCHESTER BUSINESS PARK, AVIATOR WAY	**LEVEL:**	71.25m OD
CLIENT:	ASK REAL ESTATE MBP LIMITED	**DATES:**	30/12/99 - 12/11/25

Hole Type	Scale	Logged	Checked
TP	1:25	BW	DV

Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m OD)	Legend	Stratum Description
	Depth (m)	Type	Results				
	0.10-0.30	ES					MADE GROUND: Grass over dark brown to black slightly gravelly slightly sandy silty CLAY. Sand is fine to coarse. Gravel is angular to sub-rounded fine to coarse of mudstone, brick, and sandstone (TOPSOIL).
	0.30-0.50	ES		0.30	70.95		MADE GROUND: Brown slightly gravelly slightly sandy silty CLAY with occasional rootlets and low cobble content. Sand is fine to coarse. Gravel is sub-angular to sub-rounded fine to coarse of mudstone, brick, and limestone. Cobbles are angular to sub-angular up to 202mm in diameter of brick.
				0.50	70.75		End of Trial Pit at 0.50m

1.0
2.0
3.0
4.0
5.0

Remarks 1. Clearance of services by BSL engineer using CAT & Genny. 2. No groundwater encountered. 3. Soakaway test undertaken in pit at 0.50m bgl. 4. Excavation terminated at target depth. 5. No visual or olfactory evidence of contamination noted. 6. Hole backfilled with arisings upon completion.

ES = Environmental Sample
D = Disturbed Sample
B = Bulk Sample
LB = Large Bulk Sample
U = Undisturbed Sample
UT = Undisturbed Thin Wall Sample
SPT = Standard Penetration Test
PID = Photoionization Detector (ppm)
PPM = Part Per Million
HSV = Hand Shear Vane

APPENDIX C

Geotechnical Testing Results

MURRAY RIX
CONSULTANCY, SITE INVESTIGATION
CONSTRUCTION MATERIALS TESTING

TEST REPORT

Client Brownfield Solutions Ltd

Address William Smith House
173-183 Witton Street
Northwich
Cheshire
CW9 5LP

Contract C6035 -
Manchester Business Park

Job Number MRN 25017/34
Date of Issue 18 December 2025

Approved Signatories

S J Hutchings, O P Davies

Notes

1 All remaining samples and remnants from this contract will be disposed 28 days from the date of this report unless you notify us to the contrary.

2 Result certificates, in this report, not bearing a UKAS mark, are not included in our UKAS accreditation schedule.

3 Opinions and interpretations expressed herein are outside the scope of our UKAS accreditation.

4 Certified that the samples have been examined and tested in accordance with the terms of the contract/order and unless otherwise stated conform to the standards/specifications quoted.

5 The results included within the report are representative of the samples submitted for analysis.

6 This certificate should not be reproduced, except in full, without the express permission of the laboratory.

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M U R R A Y R I X

ANDREW HOUSE, HADFIELD STREET,
DUKINFIELD, CHESHIRE SK16 4QX
TEL 0161 475 0870

TEST CERTIFICATE

DETERMINATION OF POINT LOAD STRENGTH INDEX OF ROCK
METHOD IN ACCORDANCE WITH ASTM STANDARD D 5731

CLIENT	Brownfield Solutions Ltd
SITE	C6035 - Manchester Business Park
JOB NUMBER	MRN 25017/34

DATE RECEIVED	04-Dec-25	DATE SAMPLED	Not advised
DATE TESTED	09-Dec-25	SAMPLED BY	Client

MATERIAL	Rock Core
ADVISED SOURCE	Site Investigation Sample

Sample Number	B/H No.	Depth (m)	Test Type*	D (mm)	W** (mm)	Load (P) (kN)	D_e^2 (mm^2)	D_e (mm)	Is (MPa)	F	$I_{s(50)}$ (MPa)
5237901	BH01	5.9-6.0	A	76.0	86.0	0.2	8321.89	91.22	0.02	1.31	0.03
5237903	BH01	8.4-8.5	A	81.0	86.5	0.1	8920.95	94.45	0.01	1.33	0.01
5237905	BH01	10.8-10.9	D	87.0		0.3	7569.00	87.00	0.04	1.28	0.05
5237907	BH01	13.5-13.6	A	83.2	85.1	0.1	9014.94	94.95	0.01	1.33	0.01
5237908	BH02	4.55-4.65	A	77.0	87.0	0.1	8529.43	92.35	0.01	1.32	0.02
5237910	BH02	11.0-11.2	D	87.0		0.1	7569.00	87.00	0.01	1.28	0.02
5237912	BH02	8.0-8.1	A	83.5	86.1	0.1	9153.76	95.68	0.01	1.34	0.01
5237914	BH02	11.5-11.6	A	84.0	87.0	0.2	9304.83	96.46	0.02	1.34	0.03
5237916	BH03	3.9-4.0	A	81.0	87.0	0.1	8972.52	94.72	0.01	1.33	0.01
5237917	BH03	4.5-4.6	A	78.0	85.1	0.1	8451.51	91.93	0.01	1.32	0.02
5237919	BH03	6.95-7.05	D	85.0		0.3	7225.00	85.00	0.04	1.27	0.05
5237921	BH03	9.8-9.9	A	74.0	86.4	0.3	8140.58	90.23	0.04	1.30	0.05
5237922	BH04	6.95-7.05	A	79.0	85.5	0.2	8600.10	92.74	0.02	1.32	0.03
5237924	BH04	6.5-6.6	D	85.0		0.3	7225.00	85.00	0.04	1.27	0.05
5237926	BH04	8.4-8.5	A	76.0	87.0	0.4	8418.66	91.75	0.05	1.31	0.06
5237928	BH04	10.5-10.6	A	80.0	85.5	0.5	8708.96	93.32	0.06	1.32	0.08

Test Type *				**W	Entry required if test type is not Diametral
A	Axial Test	D	Diametral Test		
B	Block Test	I	Irregular Lump Test		

REMARKS

SIGNED

NAME O.P. Davies BA (Hons) DATE 18-Dec-25
(Director / Head of Laboratory)

M U R R A Y R I X

ANDREW HOUSE, HADFIELD STREET,
DUKINFIELD, CHESHIRE SK16 4QX
TEL 0161 475 0870

TEST CERTIFICATE

DETERMINATION OF THE COMPRESSIVE STRENGTH OF INTACT ROCK CORE SPECIMENS

ASTM D7012 - 14 Method C

CLIENT	Brownfield Solutions Ltd
SITE	C6035 - Manchester Business Park
JOB NUMBER	MRN 25017/34

DATE RECEIVED	04-Dec-25	DATE SAMPLED	Not advised
DATE TESTED	09-Dec-25	SAMPLED BY	Client
MATERIAL TESTED	Rock Core		

Sample Number	B/H No.	Sample Depth	Tested By	Diameter (mm)	Length* (mm)	L/D Ratio	Method of Preparation	Load at Failure (kN)	Compressive Strength (N/mm^2)	Description after Test
5237902	BH01	6.1-6.3	M.R.	86	171	1.99	Saw / Grinding	5.8	**1.0**	Split vertically top to bottom with no visible end defects
5237904	BH01	10.3-10.5	M.R.	86	172	2.00	Saw / Grinding	5.6	**1.0**	Split vertically top to bottom with no visible end defects
5237906	BH01	11.5-11.7	M.R.	85	169	1.99	Saw / Grinding	5.4	**1.0**	Split vertically top to bottom with no visible end defects
5237909	BH02	5.9-6.1	M.R.	86	170	1.98	Saw / Grinding	5.8	**1.0**	Split vertically top to bottom with no visible end defects
5237911	BH02	7.0-7.3	M.R.	84	169	2.01	Saw / Grinding	5.6	**1.0**	Split vertically top to bottom with no visible end defects
5237913	BH02	9.0-9.2	M.R.	87	171	1.97	Saw / Grinding	6	**1.0**	Split vertically top to bottom with no visible end defects
5237915	BH03	3.1-3.3	M.R.	84	170	2.02	Saw / Grinding	5.9	**1.1**	Split vertically top to bottom with no visible end defects
5237918	BH03	6.0-6.2	M.R.	87	174	2.00	Saw / Grinding	6.1	**1.0**	Split vertically top to bottom with no visible end defects
5237920	BH03	8.2-8.4	M.R.	85	168	1.98	Saw / Grinding	5.5	**1.0**	Split vertically top to bottom with no visible end defects
5237923	BH04	5.35-5.55	M.R.	86	173	2.01	Saw / Grinding	5.2	**0.9**	Split vertically top to bottom with no visible end defects

Comments / Deviation from standard method / Abnormalities noted during visual inspection.
*Length after sample preparation

NAME O.P. Davies BA (Hons)
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DATE 18-Dec-25

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ASTM D7012 - 14 Method C

CLIENT	Brownfield Solutions Ltd
SITE	C6035 - Manchester Business Park
JOB NUMBER	MRN 25017/34

DATE RECEIVED	04-Dec-25	DATE SAMPLED	Not advised
DATE TESTED	09-Dec-25	SAMPLED BY	Client
MATERIAL TESTED	Rock Core		

Sample Number	B/H No.	Sample Depth	Tested By	Diameter (mm)	Length* (mm)	L/D Ratio	Method of Preparation	Load at Failure (kN)	Compressive Strength (N/mm^2)	Description after Test
5237925	BH04	7.15-7.35	M.R.	86	169	1.97	Saw / Grinding	5.9	**1.0**	Split vertically top to bottom with no visible end defects
5237927	BH04	9.8-10.0	M.R.	84	169	2.01	Saw / Grinding	5.4	**1.0**	Split vertically top to bottom with no visible end defects

Comments / Deviation from standard method / Abnormalities noted during visual inspection.
*Length after sample preparation

NAME O.P. Davies BA (Hons) (Director / Head of Laboratory) SIGNED DATE 18-Dec-25

M U R R A Y R I X

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UKAS TESTING 1580

TEST CERTIFICATE

PARTICLE SIZE DISTRIBUTION

BS EN ISO 17892-4:2016

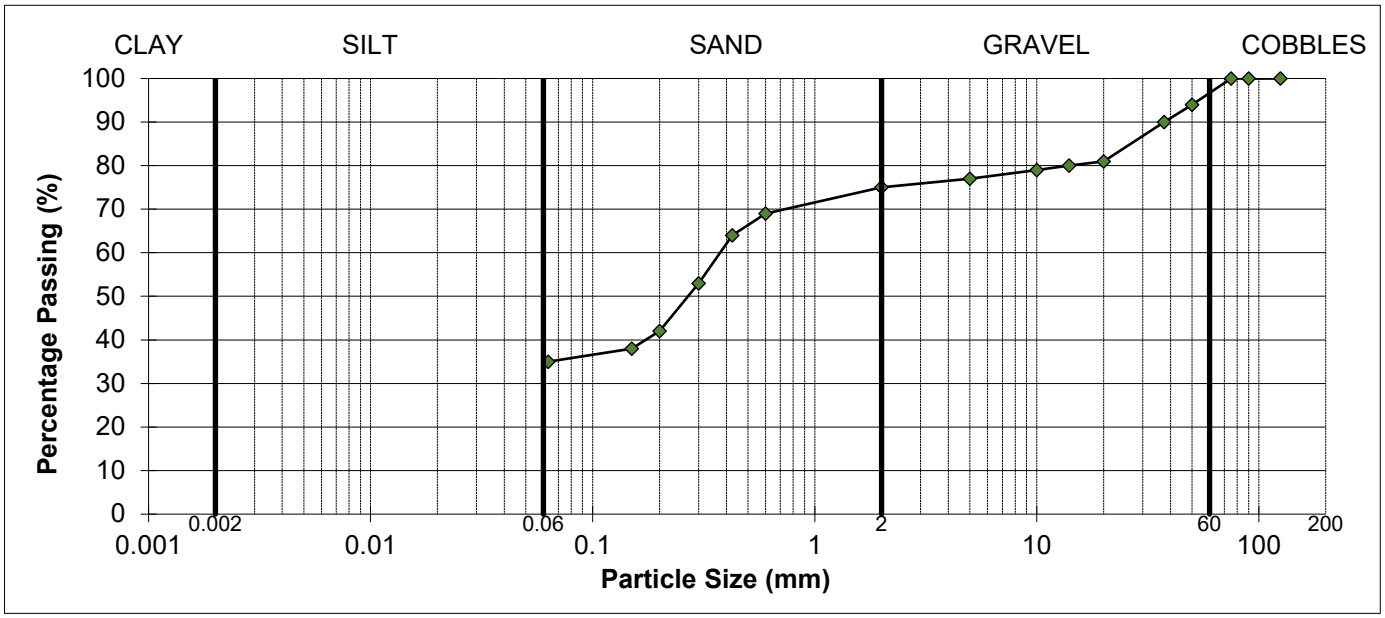
Determination of Water Content in accordance with BS EN ISO 17892-1:2014+A1:2022 (Oven Dry)

CLIENT	Brownfield Solutions Ltd
SITE	C6035 - Manchester Business Park
JOB NUMBER	MRN 25017/34

SAMPLE LABEL	BH02 0.3-0.5	DATE SAMPLED	Not advised
LAB SAMPLE No	5237939	DATE RECEIVED	04-Dec-25
DATE TESTED	08-Dec-25	SAMPLED BY	Client

MATERIAL	Brown clayey very gravelly SAND
ADVISED SOURCE	Site Investigation Sample

Sieve Size (mm)	% Passing (%)	Specification (%)	Sieve Size (mm)	% Passing (%)	Specification (%)
125	100		5	77	
90	100		2	75	
75	100		0.6	69	
50	94		0.425	64	
37.5	90		0.3	53	
20	81		0.2	42	
14	80		0.15	38	
10	79		0.063	35	



SOIL FRACTIONS			
COBBLES	3%	SAND	40%
GRAVEL	22%	SILT / CLAY	35%

As received water content	17.1%

REMARKS

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NAME O.P. Davies BA (Hons) (Director / Head of Laboratory) DATE 18-Dec-25

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TEST CERTIFICATE

PARTICLE SIZE DISTRIBUTION

BS EN ISO 17892-4:2016

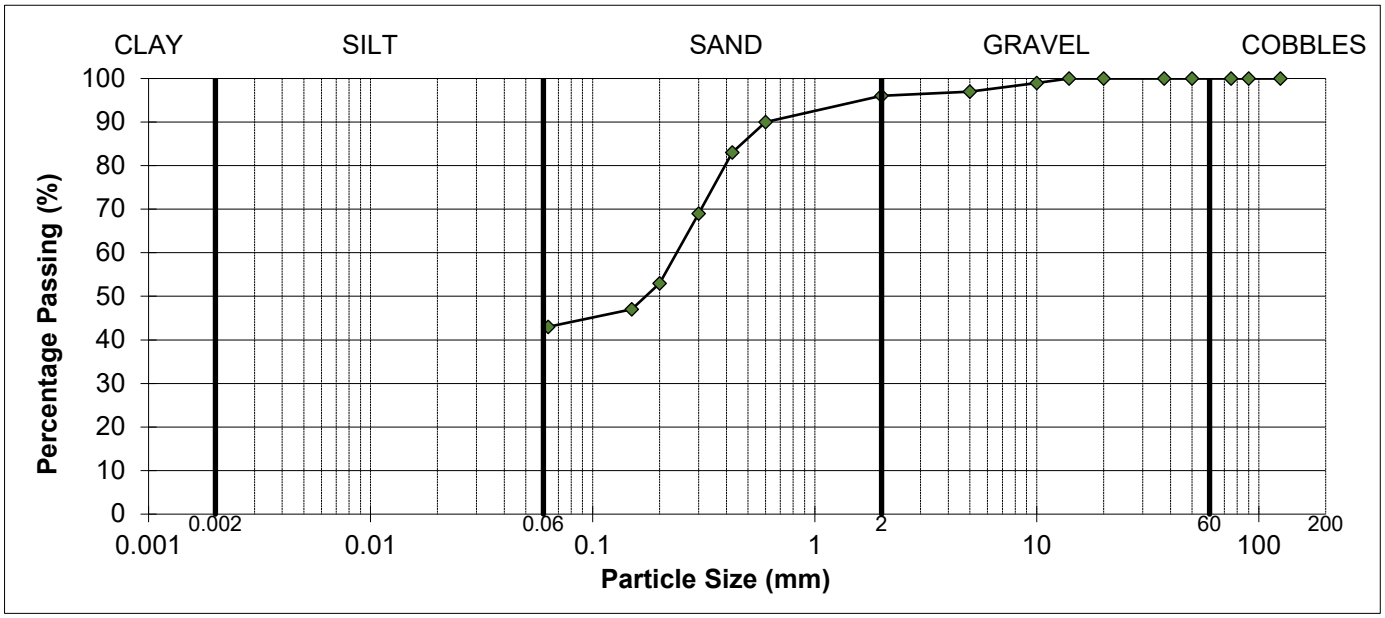
Determination of Water Content in accordance with BS EN ISO 17892-1:2014+A1:2022 (Oven Dry)

CLIENT	Brownfield Solutions Ltd
SITE	C6035 - Manchester Business Park
JOB NUMBER	MRN 25017/34

SAMPLE LABEL	BH04 0.3-0.5	DATE SAMPLED	Not advised
LAB SAMPLE No	5237940	DATE RECEIVED	04-Dec-25
DATE TESTED	08-Dec-25	SAMPLED BY	Client

MATERIAL	Brown clayey slightly gravelly SAND
ADVISED SOURCE	Site Investigation Sample

Sieve Size (mm)	% Passing (%)	Specification (%)	Sieve Size (mm)	% Passing (%)	Specification (%)
125	100		5	97	
90	100		2	96	
75	100		0.6	90	
50	100		0.425	83	
37.5	100		0.3	69	
20	100		0.2	53	
14	100		0.15	47	
10	99		0.063	43	



SOIL FRACTIONS			
COBBLES	0%	SAND	53%
GRAVEL	4%	SILT / CLAY	43%

As received water content	16.7%

REMARKS

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PARTICLE SIZE DISTRIBUTION

BS EN ISO 17892-4:2016

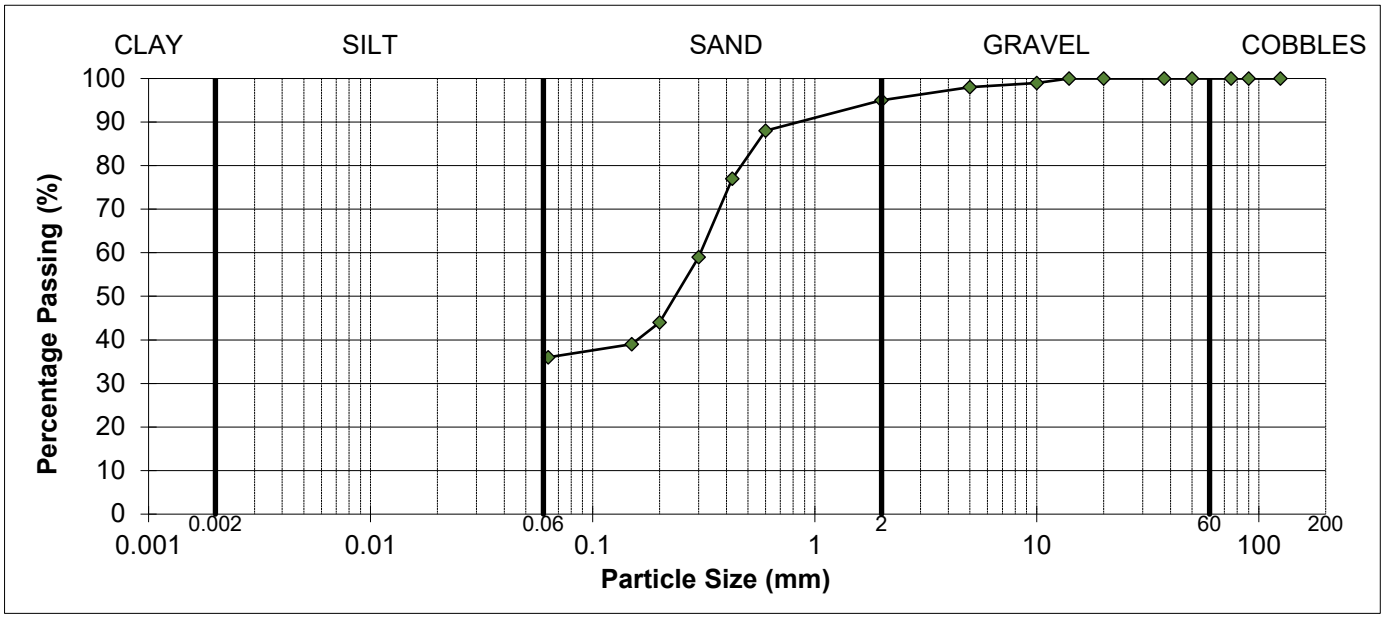
Determination of Water Content in accordance with BS EN ISO 17892-1:2014+A1:2022 (Oven Dry)

CLIENT	Brownfield Solutions Ltd
SITE	C6035 - Manchester Business Park
JOB NUMBER	MRN 25017/34

SAMPLE LABEL	BH07 0.3-0.5	DATE SAMPLED	Not advised
LAB SAMPLE No	5237941	DATE RECEIVED	04-Dec-25
DATE TESTED	08-Dec-25	SAMPLED BY	Client

MATERIAL	Brown clayey slightly gravelly SAND
ADVISED SOURCE	Site Investigation Sample

Sieve Size (mm)	% Passing (%)	Specification (%)	Sieve Size (mm)	% Passing (%)	Specification (%)
125	100		5	98	
90	100		2	95	
75	100		0.6	88	
50	100		0.425	77	
37.5	100		0.3	59	
20	100		0.2	44	
14	100		0.15	39	
10	99		0.063	36	



SOIL FRACTIONS			
COBBLES	0%	SAND	59%
GRAVEL	5%	SILT / CLAY	36%

As received water content	16.0%

REMARKS

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NAME O.P. Davies BA (Hons) (Director / Head of Laboratory) DATE 18-Dec-25

MURRAY RIX

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UKAS TESTING 1580

TEST CERTIFICATE

LIQUID LIMIT BS EN ISO 17892-12:2018+A2:2022 Clause 5.3 (30° FALL CONE) 1 POINT METHOD
PLASTIC LIMIT BS EN ISO 17892-12:2018+A2:2022 Clause 5.5
WATER CONTENT METHOD BS EN ISO 17892-1:2014+A1:2022

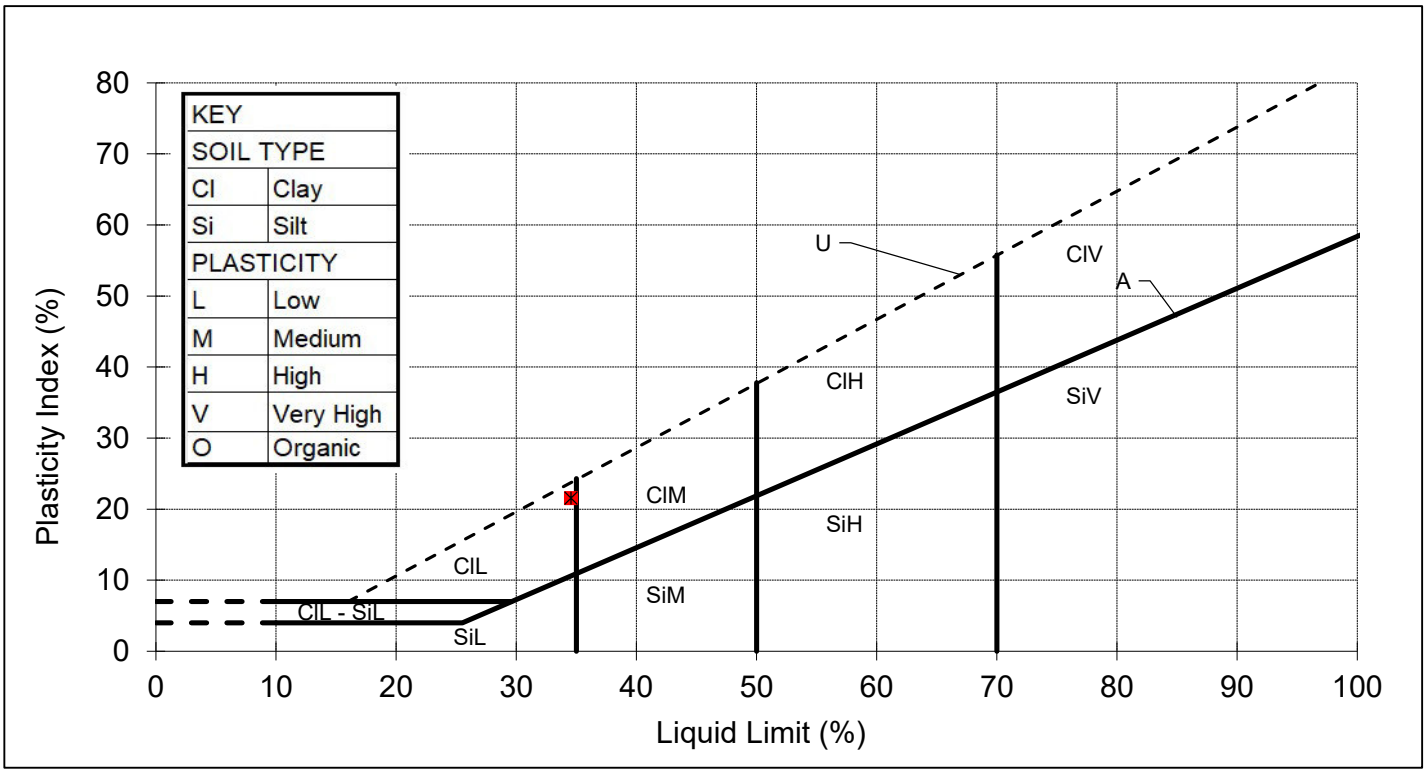
CLIENT	Brownfield Solutions Ltd
SITE	C6035 - Manchester Business Park
JOB NUMBER	MRN 25017/34

SAMPLE LABEL	BH02 1.5-1.6	DATE SAMPLED	Not advised
SAMPLE No.	5237929	DATE RECEIVED	04-Dec-25
DATE TESTED	09-Dec-25	SAMPLED BY	Client

MATERIAL	Orange grey brown silty slightly sandy slightly gravelly CLAY		
ADVISED SOURCE	Site Investigation Sample	WATER CONTENT	Increasing
SAMPLE HISTORY	Natural State	% RET. 425um BY	Wet Sieved

Test Readings mm (average)		Water Content %	Correction Factor	Correction factor from Clayton and Jukes 1978
Determination 1 (avg)	18.5	33.8	1.021	
Determination 2 (avg)	18.7	33.9		

Natural Water Content (%)	Liquid Limit (%)	Plastic Limit (%)	Plasticity Index (%)	Passing 425 micron (%)
17.1	35	13	22	92



REMARKS

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TEST CERTIFICATE

LIQUID LIMIT BS EN ISO 17892-12:2018+A2:2022 Clause 5.3 (30° FALL CONE) 1 POINT METHOD
PLASTIC LIMIT BS EN ISO 17892-12:2018+A2:2022 Clause 5.5
WATER CONTENT METHOD BS EN ISO 17892-1:2014+A1:2022

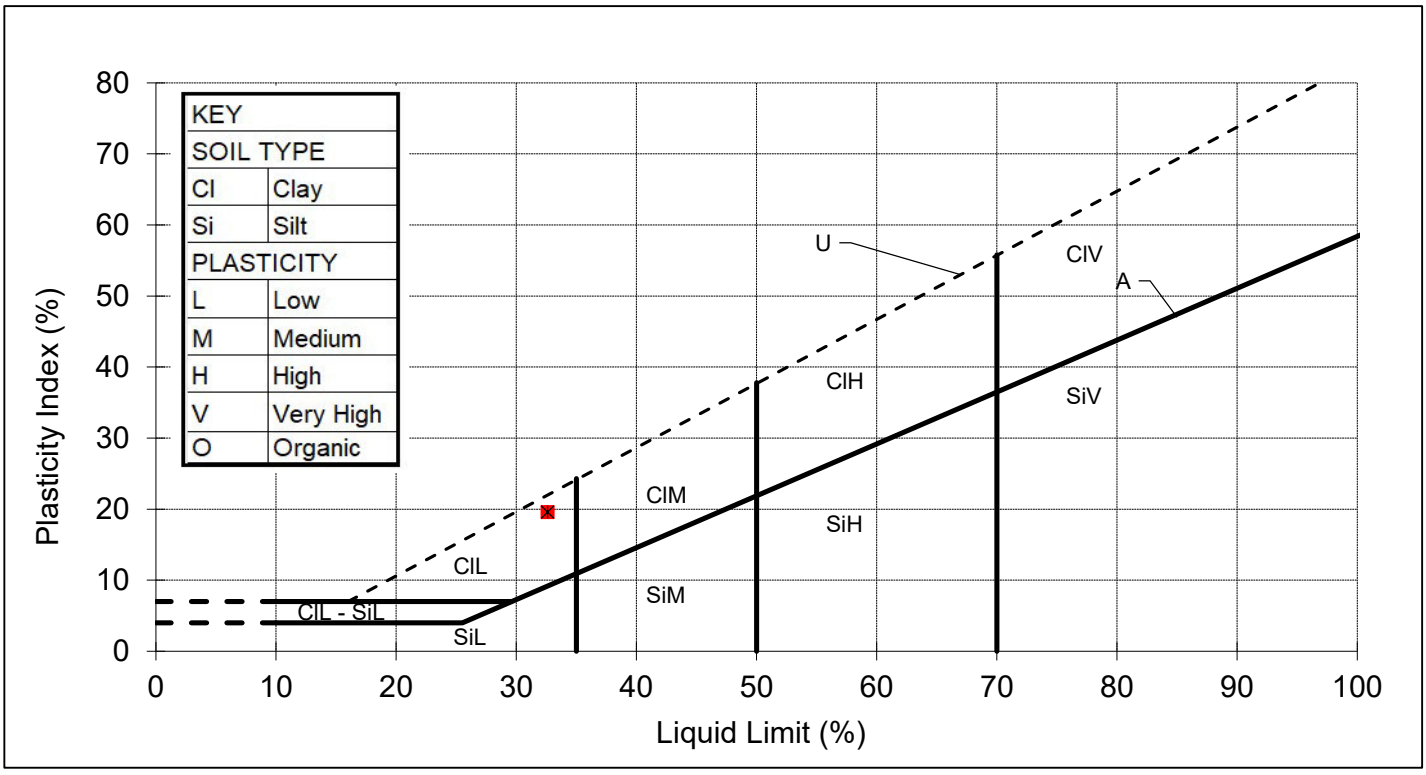
CLIENT	Brownfield Solutions Ltd
SITE	C6035 - Manchester Business Park
JOB NUMBER	MRN 25017/34

SAMPLE LABEL	BH03 0.8	DATE SAMPLED	Not advised
SAMPLE No.	5237930	DATE RECEIVED	04-Dec-25
DATE TESTED	09-Dec-25	SAMPLED BY	Client

MATERIAL	Brown silty slightly sandy slightly gravelly CLAY		
ADVISED SOURCE	Site Investigation Sample	WATER CONTENT	Increasing
SAMPLE HISTORY	Natural State	% RET. 425um BY	Wet Sieved

Test Readings mm (average)		Water Content %	Correction Factor	Correction factor from Clayton and Jukes 1978
Determination 1 (avg)	19.9	32.6	1.002	
Determination 2 (avg)	19.9	32.5		

Natural Water Content (%)	Liquid Limit (%)	Plastic Limit (%)	Plasticity Index (%)	Passing 425 micron (%)
17.7	33	13	20	81



REMARKS

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NAME O.P. Davies BA (Hons) (Director / Head of Laboratory) DATE 18-Dec-25

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UKAS TESTING 1580

TEST CERTIFICATE

LIQUID LIMIT BS EN ISO 17892-12:2018+A2:2022 Clause 5.3 (30° FALL CONE) 1 POINT METHOD
PLASTIC LIMIT BS EN ISO 17892-12:2018+A2:2022 Clause 5.5
WATER CONTENT METHOD BS EN ISO 17892-1:2014+A1:2022

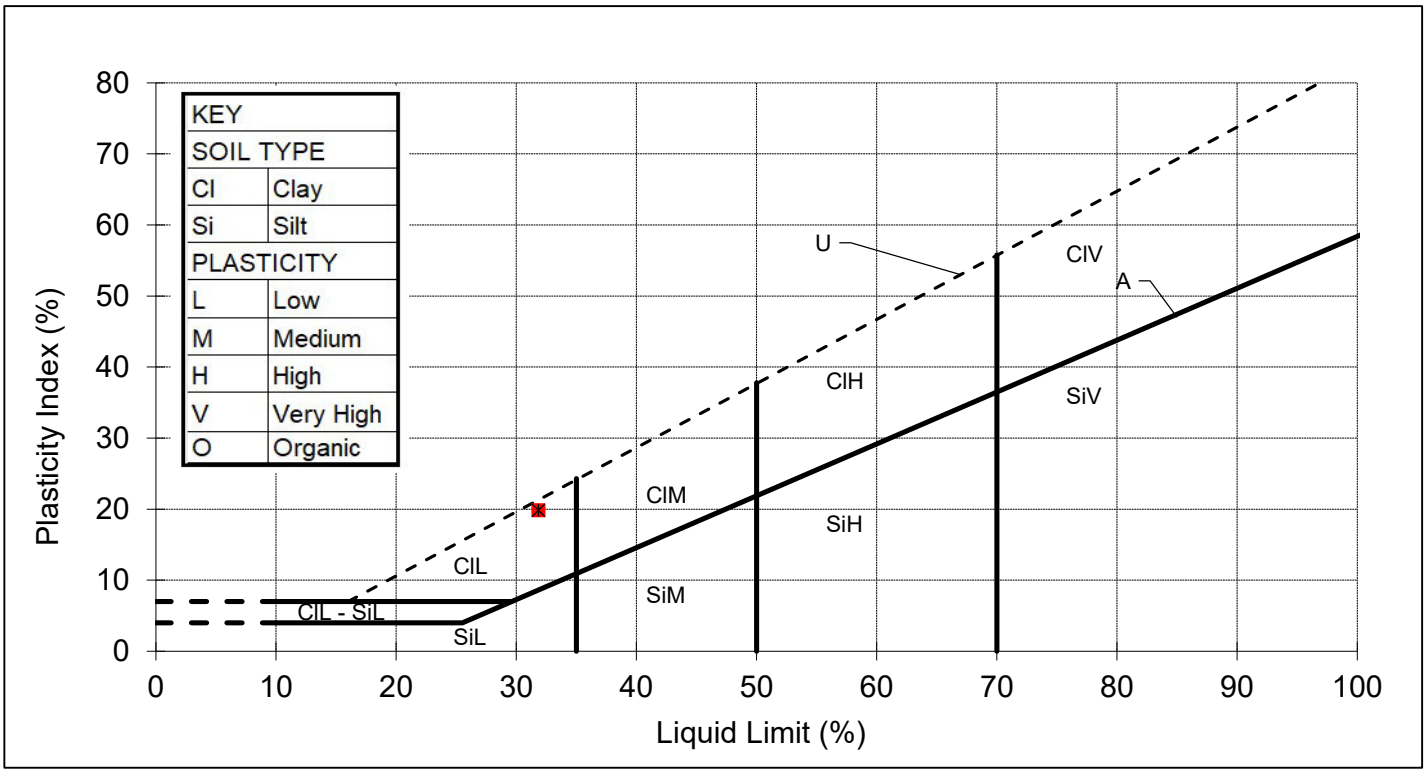
CLIENT	Brownfield Solutions Ltd
SITE	C6035 - Manchester Business Park
JOB NUMBER	MRN 25017/34

SAMPLE LABEL	BH05 1.2-1.5	DATE SAMPLED	Not advised
SAMPLE No.	5237931	DATE RECEIVED	04-Dec-25
DATE TESTED	09-Dec-25	SAMPLED BY	Client

MATERIAL	Orange brown silty slightly sandy slightly gravelly CLAY		
ADVISED SOURCE	Site Investigation Sample	WATER CONTENT	Increasing
SAMPLE HISTORY	Natural State	% RET. 425um BY	Wet Sieved

Test Readings mm (average)		Water Content %	Correction Factor	Correction factor from Clayton and Jukes 1978
Determination 1 (avg)	20.0	31.8	1.002	
Determination 2 (avg)	19.8	31.8		

Natural Water Content (%)	Liquid Limit (%)	Plastic Limit (%)	Plasticity Index (%)	Passing 425 micron (%)
16.3	32	12	20	86



REMARKS

SIGNED

NAME O.P. Davies BA (Hons) (Director / Head of Laboratory) DATE 18-Dec-25

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TEST CERTIFICATE

LIQUID LIMIT BS EN ISO 17892-12:2018+A2:2022 Clause 5.3 (30° FALL CONE) 1 POINT METHOD
PLASTIC LIMIT BS EN ISO 17892-12:2018+A2:2022 Clause 5.5
WATER CONTENT METHOD BS EN ISO 17892-1:2014+A1:2022

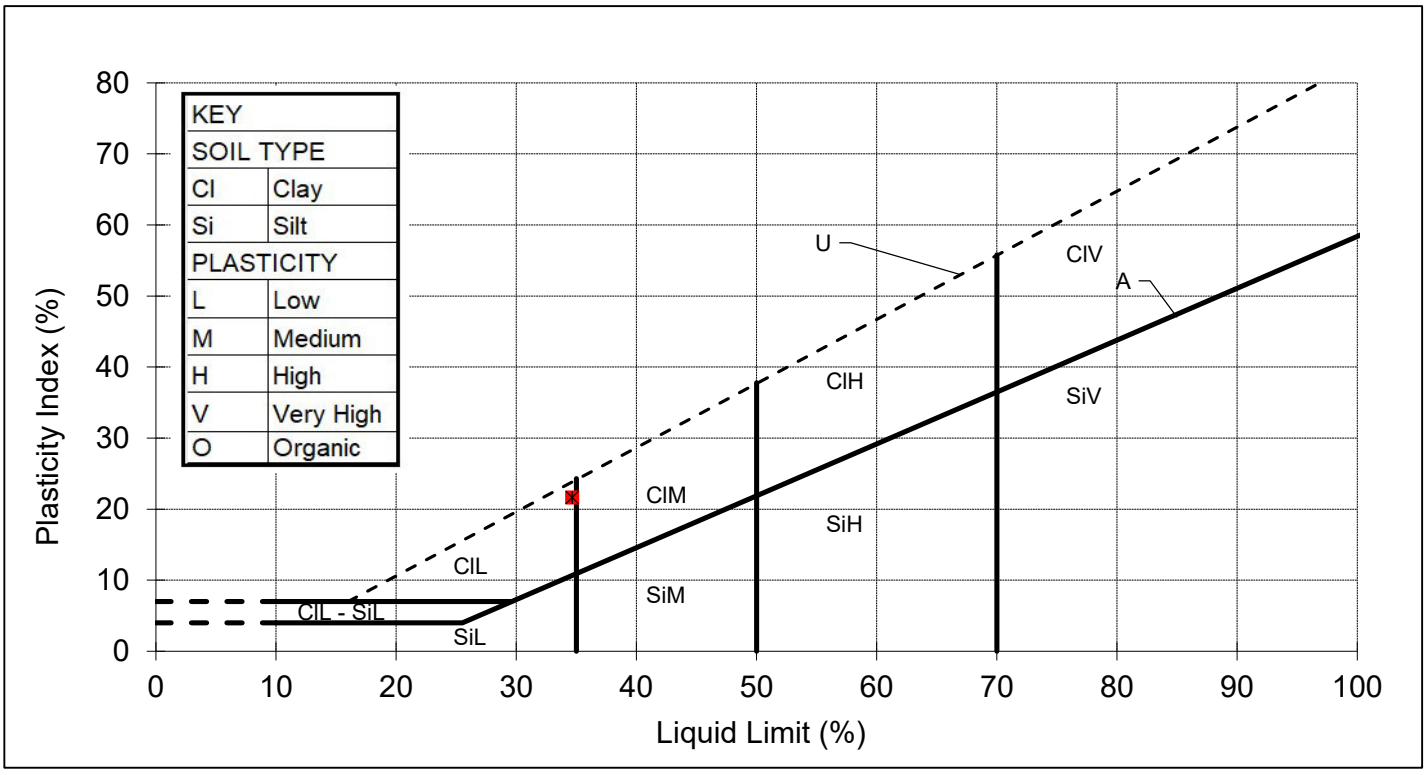
CLIENT	Brownfield Solutions Ltd
SITE	C6035 - Manchester Business Park
JOB NUMBER	MRN 25017/34

SAMPLE LABEL	BH07 0.5-0.7	DATE SAMPLED	Not advised
SAMPLE No.	5237932	DATE RECEIVED	04-Dec-25
DATE TESTED	09-Dec-25	SAMPLED BY	Client

MATERIAL	Orange brown silty slightly sandy slightly gravelly CLAY		
ADVISED SOURCE	Site Investigation Sample	WATER CONTENT	Increasing
SAMPLE HISTORY	Natural State	% RET. 425um BY	Wet Sieved

Test Readings mm (average)		Water Content %	Correction Factor	Correction factor from Clayton and Jukes 1978
Determination 1 (avg)	16.7	33.2	1.046	
Determination 2 (avg)	16.6	33.1		

Natural Water Content (%)	Liquid Limit (%)	Plastic Limit (%)	Plasticity Index (%)	Passing 425 micron (%)
17.3	35	13	22	83



REMARKS

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NAME O.P. Davies BA (Hons) (Director / Head of Laboratory) DATE 18-Dec-25

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TEST CERTIFICATE

LIQUID LIMIT BS EN ISO 17892-12:2018+A2:2022 Clause 5.3 (30° FALL CONE) 1 POINT METHOD
PLASTIC LIMIT BS EN ISO 17892-12:2018+A2:2022 Clause 5.5
WATER CONTENT METHOD BS EN ISO 17892-1:2014+A1:2022

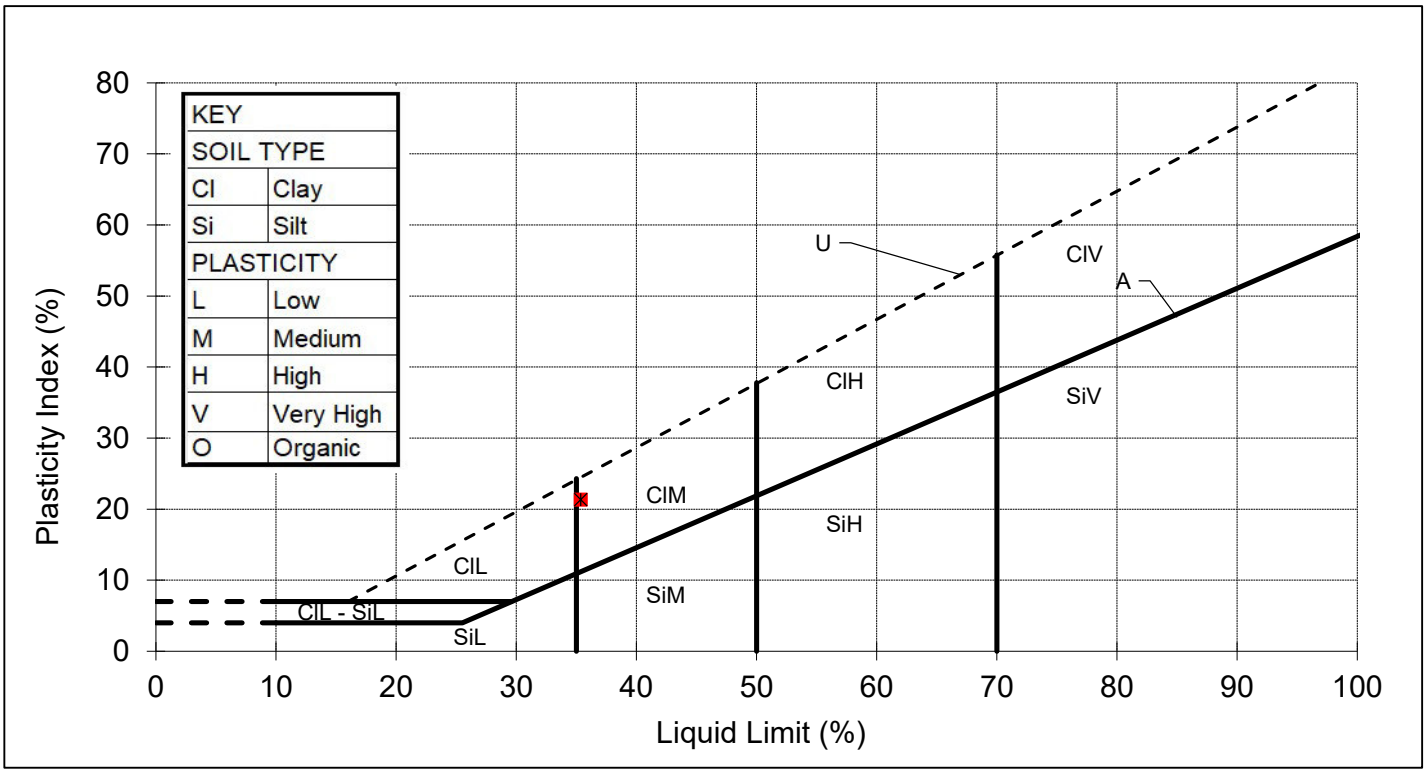
CLIENT	Brownfield Solutions Ltd
SITE	C6035 - Manchester Business Park
JOB NUMBER	MRN 25017/34

SAMPLE LABEL	BH08 1.2	DATE SAMPLED	Not advised
SAMPLE No.	5237933	DATE RECEIVED	04-Dec-25
DATE TESTED	09-Dec-25	SAMPLED BY	Client

MATERIAL	Orange brown silty slightly sandy slightly gravelly CLAY		
ADVISED SOURCE	Site Investigation Sample	WATER CONTENT	Increasing
SAMPLE HISTORY	Natural State	% RET. 425um BY	Wet Sieved

Test Readings mm (average)		Water Content %	Correction Factor	Correction factor from Clayton and Jukes 1978
Determination 1 (avg)	20.0	35.3	1.003	
Determination 2 (avg)	19.7	35.2		

Natural Water Content (%)	Liquid Limit (%)	Plastic Limit (%)	Plasticity Index (%)	Passing 425 micron (%)
24.2	35	14	21	82



REMARKS

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TEST CERTIFICATE

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PLASTIC LIMIT BS EN ISO 17892-12:2018+A2:2022 Clause 5.5
WATER CONTENT METHOD BS EN ISO 17892-1:2014+A1:2022

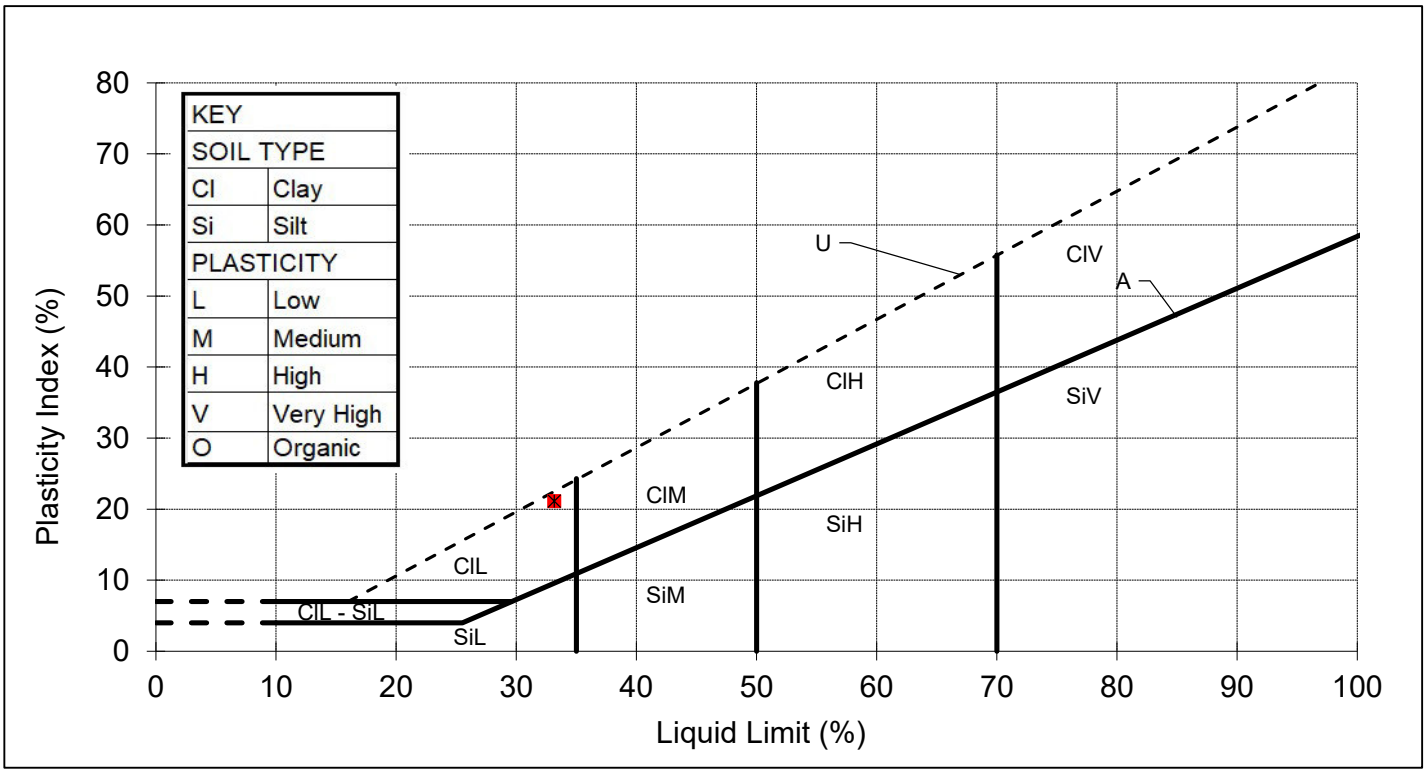
CLIENT	Brownfield Solutions Ltd
SITE	C6035 - Manchester Business Park
JOB NUMBER	MRN 25017/34

SAMPLE LABEL	TP02 0.6-0.9	DATE SAMPLED	Not advised
SAMPLE No.	5237934	DATE RECEIVED	04-Dec-25
DATE TESTED	09-Dec-25	SAMPLED BY	Client

MATERIAL	Orange brown silty slightly sandy slightly gravelly CLAY		
ADVISED SOURCE	Site Investigation Sample	WATER CONTENT	Increasing
SAMPLE HISTORY	Natural State	% RET. 425um BY	Wet Sieved

Test Readings mm (average)		Water Content %	Correction Factor	Correction factor from Clayton and Jukes 1978
Determination 1 (avg)	19.5	32.9	1.009	
Determination 2 (avg)	19.3	32.8		

Natural Water Content (%)	Liquid Limit (%)	Plastic Limit (%)	Plasticity Index (%)	Passing 425 micron (%)
20.2	33	12	21	90



REMARKS

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PLASTIC LIMIT BS EN ISO 17892-12:2018+A2:2022 Clause 5.5
WATER CONTENT METHOD BS EN ISO 17892-1:2014+A1:2022

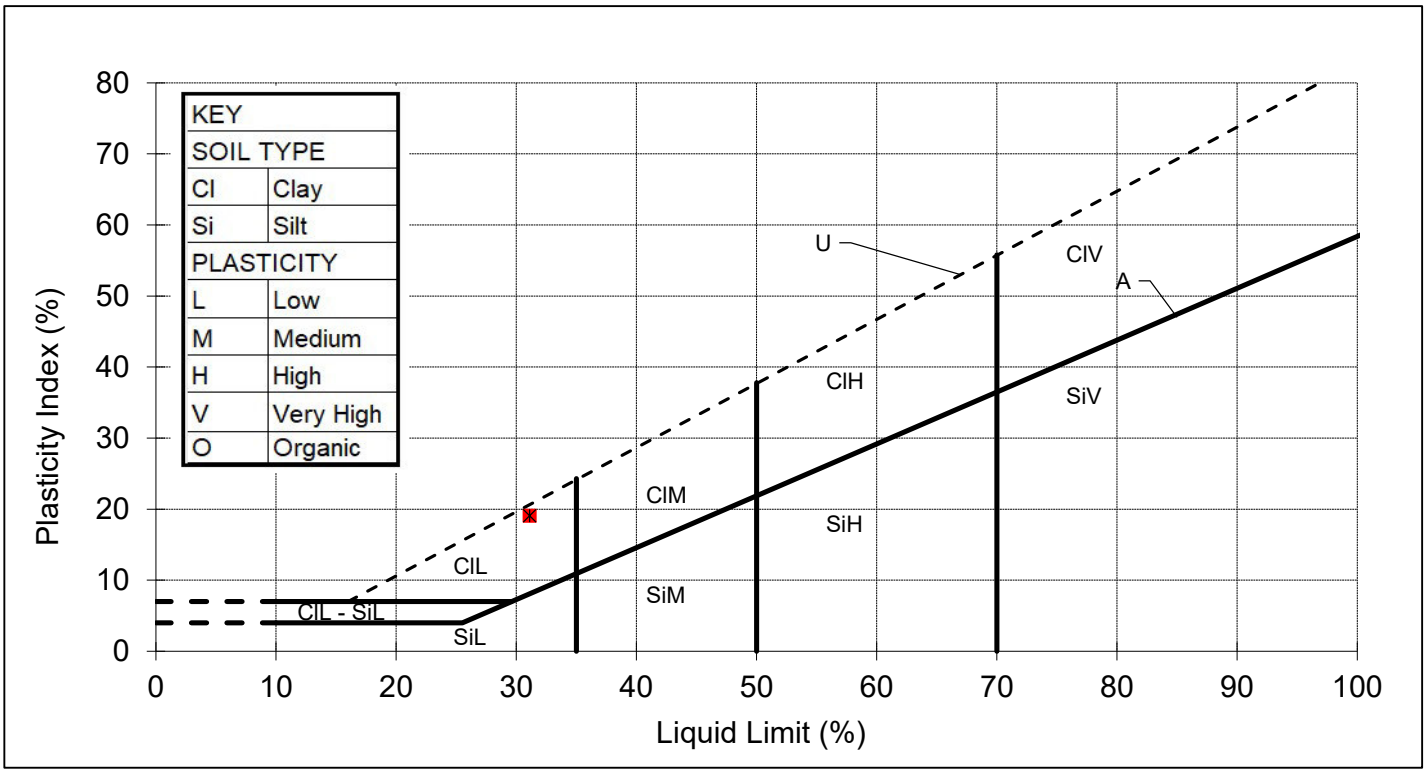
CLIENT	Brownfield Solutions Ltd
SITE	C6035 - Manchester Business Park
JOB NUMBER	MRN 25017/34

SAMPLE LABEL	TP03 2.4-2.5	DATE SAMPLED	Not advised
SAMPLE No.	5237935	DATE RECEIVED	04-Dec-25
DATE TESTED	09-Dec-25	SAMPLED BY	Client

MATERIAL	Brown silty slightly sandy slightly gravelly CLAY		
ADVISED SOURCE	Site Investigation Sample	WATER CONTENT	Increasing
SAMPLE HISTORY	Natural State	% RET. 425um BY	Wet Sieved

Test Readings mm (average)		Water Content %	Correction Factor	Correction factor from Clayton and Jukes 1978
Determination 1 (avg)	18.6	30.3	1.020	
Determination 2 (avg)	18.8	30.7		

Natural Water Content (%)	Liquid Limit (%)	Plastic Limit (%)	Plasticity Index (%)	Passing 425 micron (%)
12.6	31	12	19	80



REMARKS

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PLASTIC LIMIT BS EN ISO 17892-12:2018+A2:2022 Clause 5.5
WATER CONTENT METHOD BS EN ISO 17892-1:2014+A1:2022

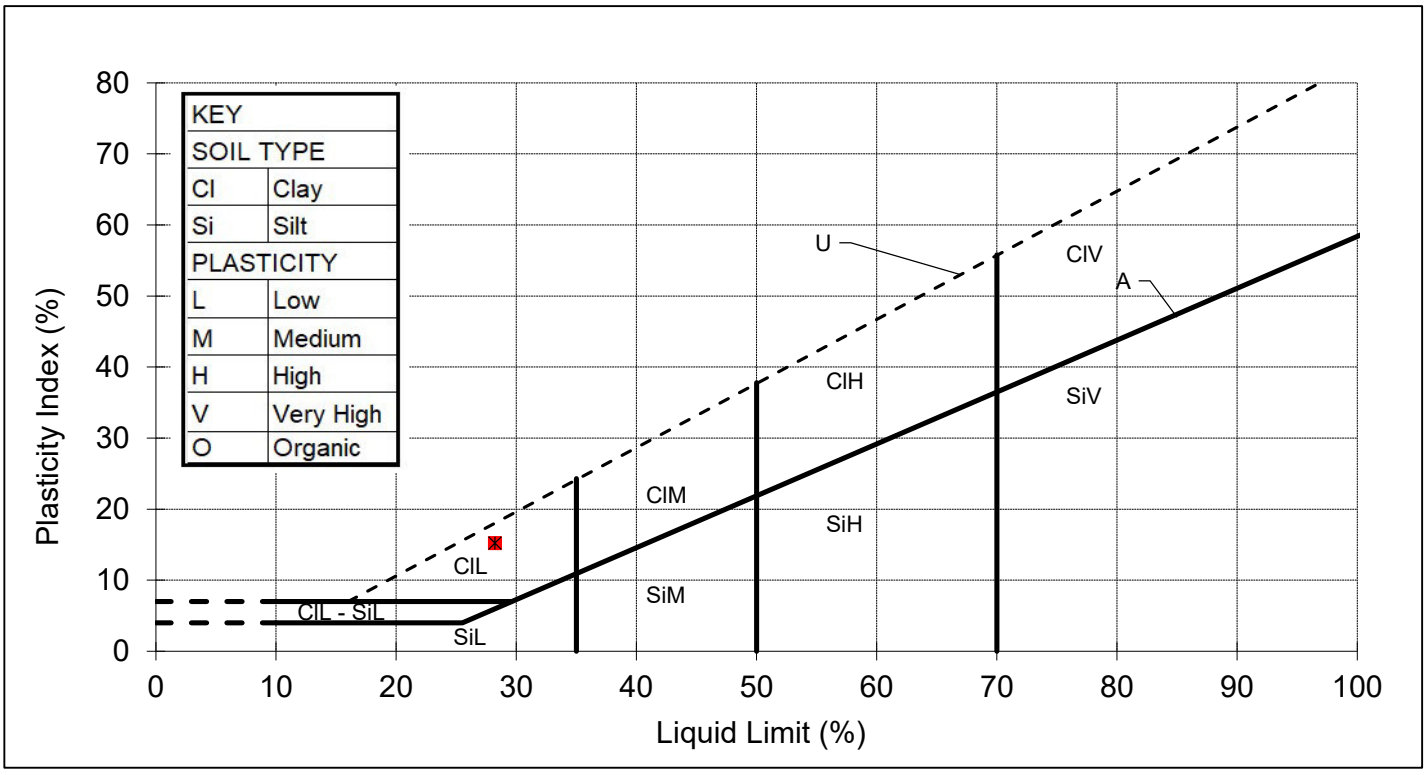
CLIENT	Brownfield Solutions Ltd
SITE	C6035 - Manchester Business Park
JOB NUMBER	MRN 25017/34

SAMPLE LABEL	TP06 2.2	DATE SAMPLED	Not advised
SAMPLE No.	5237936	DATE RECEIVED	04-Dec-25
DATE TESTED	09-Dec-25	SAMPLED BY	Client

MATERIAL	Brown silty slightly sandy slightly gravelly CLAY		
ADVISED SOURCE	Site Investigation Sample	WATER CONTENT	Increasing
SAMPLE HISTORY	Natural State	% RET. 425um BY	Wet Sieved

Test Readings mm (average)		Water Content %	Correction Factor	Correction factor from Clayton and Jukes 1978
Determination 1 (avg)	21.2	28.8	0.983	
Determination 2 (avg)	20.9	28.6		

Natural Water Content (%)	Liquid Limit (%)	Plastic Limit (%)	Plasticity Index (%)	Passing 425 micron (%)
15.9	28	13	15	73



REMARKS

SIGNED

NAME O.P. Davies BA (Hons) (Director / Head of Laboratory) DATE 18-Dec-25

MURRAY RIX

ANDREW HOUSE, HADFIELD STREET,
DUKINFIELD, CHESHIRE SK16 4QX
TEL 0161 475 0870

UKAS TESTING 1580

TEST CERTIFICATE

LIQUID LIMIT BS EN ISO 17892-12:2018+A2:2022 Clause 5.3 (30° FALL CONE) 1 POINT METHOD
PLASTIC LIMIT BS EN ISO 17892-12:2018+A2:2022 Clause 5.5
WATER CONTENT METHOD BS EN ISO 17892-1:2014+A1:2022

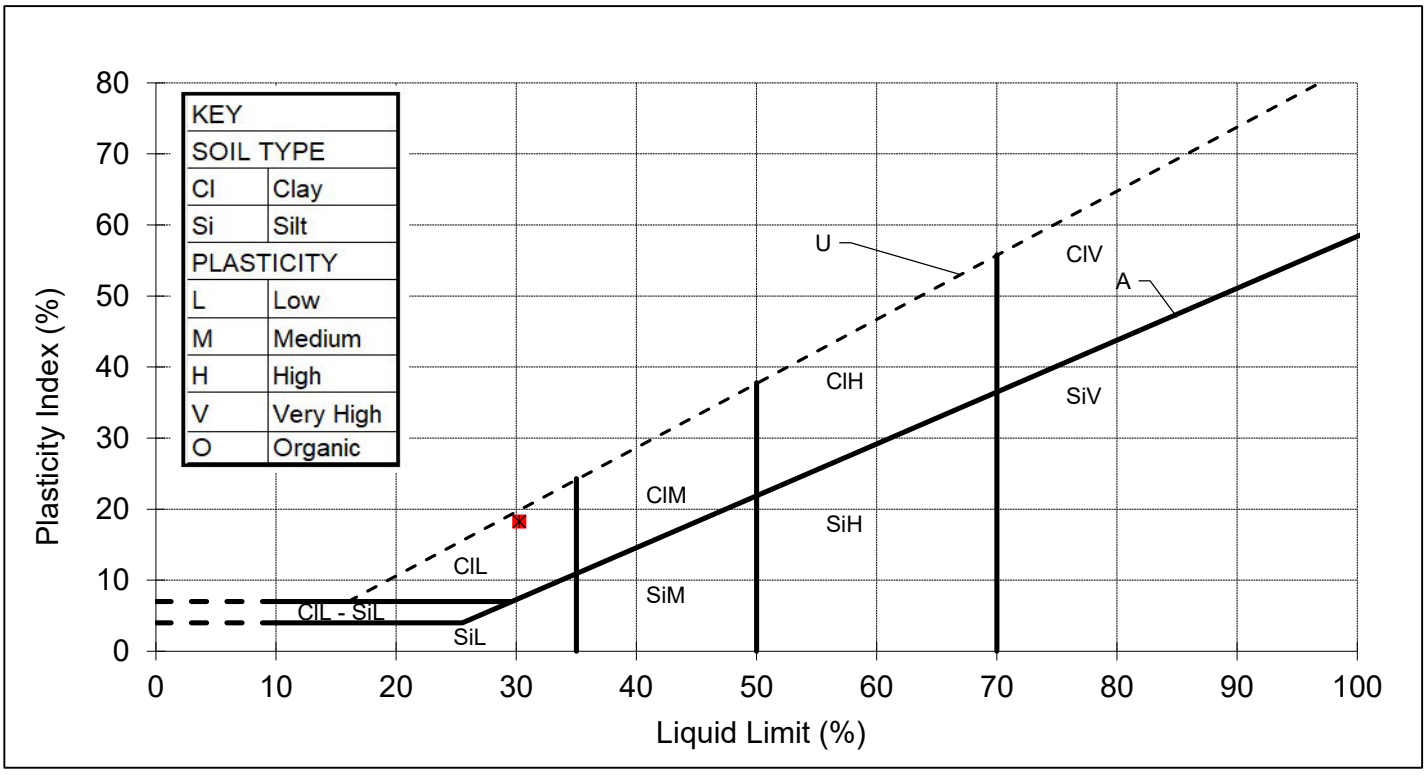
CLIENT	Brownfield Solutions Ltd
SITE	C6035 - Manchester Business Park
JOB NUMBER	MRN 25017/34

SAMPLE LABEL	TP08 2.2	DATE SAMPLED	Not advised
SAMPLE No.	5237937	DATE RECEIVED	04-Dec-25
DATE TESTED	09-Dec-25	SAMPLED BY	Client

MATERIAL	Brown silty slightly sandy slightly gravelly CLAY		
ADVISED SOURCE	Site Investigation Sample	WATER CONTENT	Increasing
SAMPLE HISTORY	Natural State	% RET. 425um BY	Wet Sieved

Test Readings mm (average)		Water Content %	Correction Factor	Correction factor from Clayton and Jukes 1978
Determination 1 (avg)	19.6	30.0	1.005	
Determination 2 (avg)	19.7	30.2		

Natural Water Content (%)	Liquid Limit (%)	Plastic Limit (%)	Plasticity Index (%)	Passing 425 micron (%)
15.0	30	12	18	78



REMARKS

SIGNED

NAME O.P. Davies BA (Hons) (Director / Head of Laboratory) DATE 18-Dec-25

MURRAY RIX

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DUKINFIELD, CHESHIRE SK16 4QX
TEL 0161 475 0870

UKAS TESTING 1580

TEST CERTIFICATE

LIQUID LIMIT BS EN ISO 17892-12:2018+A2:2022 Clause 5.3 (30° FALL CONE) 1 POINT METHOD
PLASTIC LIMIT BS EN ISO 17892-12:2018+A2:2022 Clause 5.5
WATER CONTENT METHOD BS EN ISO 17892-1:2014+A1:2022

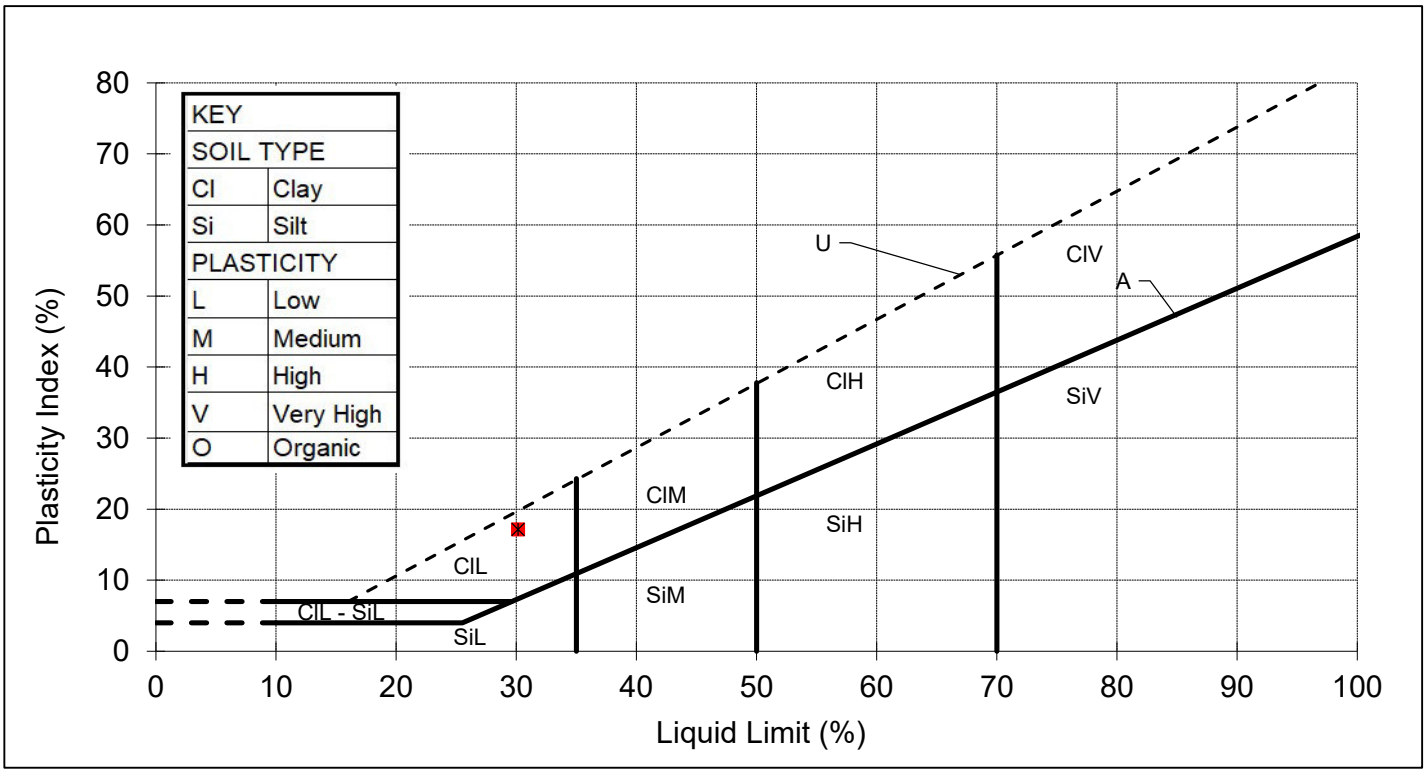
CLIENT	Brownfield Solutions Ltd
SITE	C6035 - Manchester Business Park
JOB NUMBER	MRN 25017/34

SAMPLE LABEL	TP12 2.1	DATE SAMPLED	Not advised
SAMPLE No.	5237938	DATE RECEIVED	04-Dec-25
DATE TESTED	09-Dec-25	SAMPLED BY	Client

MATERIAL	Brown silty slightly sandy slightly gravelly CLAY		
ADVISED SOURCE	Site Investigation Sample	WATER CONTENT	Increasing
SAMPLE HISTORY	Natural State	% RET. 425um BY	Wet Sieved

Test Readings mm (average)		Water Content %	Correction Factor	Correction factor from Clayton and Jukes 1978
Determination 1 (avg)	18.4	29.5	1.024	
Determination 2 (avg)	18.4	29.4		

Natural Water Content (%)	Liquid Limit (%)	Plastic Limit (%)	Plasticity Index (%)	Passing 425 micron (%)
12.0	30	13	17	81



REMARKS

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NAME O.P. Davies BA (Hons) (Director / Head of Laboratory) DATE 18-Dec-25

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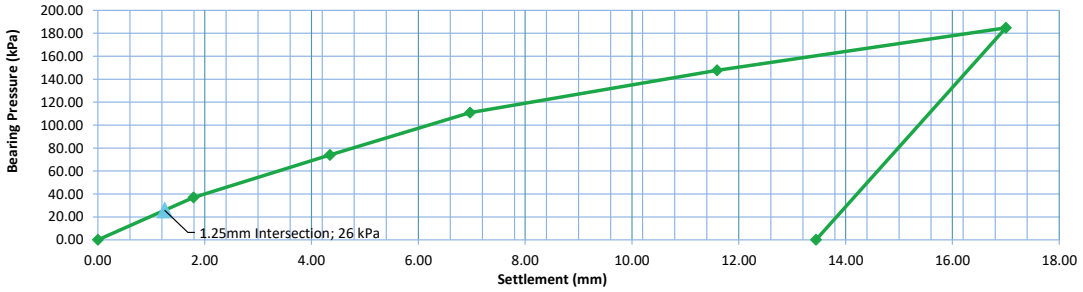
Determination of Equivalent CBR Value by Plate Load Test

BS1377: Part 9 and IAN 73/06

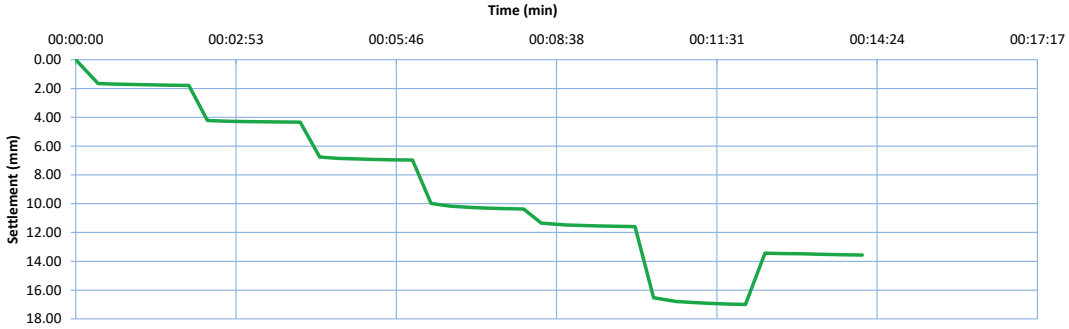
Client	ASK REAL ESTATE PROPERTY LTD		**Test Position**	**PL01**	
Site Name	MANCHESTER BUSINESS PARK				
Job Number	C6035		**OS Co-ordinates**	382545.7991	385653.3653
Date Tested	12/11/2025		**Level (mAOD)**	N/A	
Depth (mm)	500.00		**Formation Description:**	NATURAL STRATA (COHESIVE)	

			Bearing Pressure (kPa)	Average Plate Settlement (mm)
Plate Ø (mm)	450			
Plate Area (m^2)	0.159	**Load Phase**	0.00	0.00
Max Applied Force (kPa)	184.8	**1**	36.95	1.79
Kentledge	Tracked	**2**	73.90	4.34
Moisture Content (%)		**3**	110.85	6.97
Max Settlement (mm)	17.000	**4**	147.81	11.59
		5	184.76	17.00
		Unload	0.00	13.44

Load vs Settlement Data



Time vs Settlement Data



Settlement required for CBR Value 1.25mm

Load at 1.25mm settlement (kPa)	26
k (Modulus of subgrade reaction $KN/m^2/mm$)	20.6
k_{762} (Modulus of subgrade reaction $KN/m^2/mm$)	12.8

Equivalent CBR Value (%) **0.8**

Tester: GK **Checked By:** LC

Date Checked: 18/11/2025 **Signature:**

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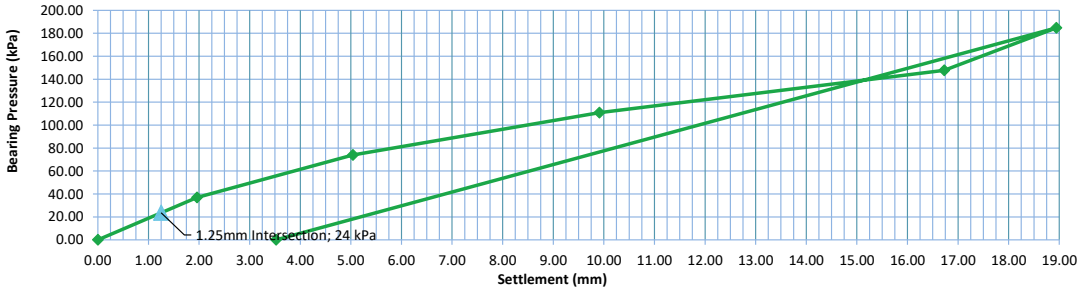
Determination of Equivalent CBR Value by Plate Load Test

BS1377: Part 9 and IAN 73/06

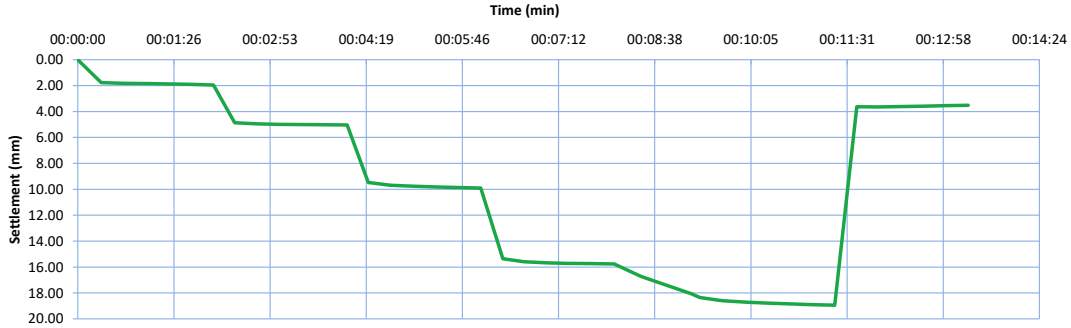
Client	ASK REAL ESTATE PROPERTY LTD		**Test Position**	**PL02**	
Site Name	MANCHESTER BUSINESS PARK				
Job Number	C6035		**OS Co-ordinates**	382554.4263	385600.0206
Date Tested	12/11/2025		**Level (mAOD)**	N/A	
Depth (mm)	500		**Formation Description:**	NATURAL STRATA (COHESIVE)	

			Bearing Pressure (kPa)	Average Plate Settlement (mm)
Plate Ø (mm)	450			
Plate Area (m^2)	0.159	**Load Phase**	0.00	0.00
Max Applied Force (kPa)	184.8	**1**	36.95	1.96
Kentledge	Tracked	**2**	73.90	5.04
Moisture Content (%)		**3**	110.85	9.91
Max Settlement (mm)	18.943	**4**	147.81	16.73
		5	184.76	18.94
		Unload	0.00	3.52

Load vs Settlement Data



Time vs Settlement Data



Settlement required for CBR Value 1.25mm

Load at 1.25mm settlement (kPa)	24
k (Modulus of subgrade reaction $KN/m^2/mm$)	18.9
k_{762} (Modulus of subgrade reaction $KN/m^2/mm$)	11.7
Equivalent CBR Value (%)	**0.7**

Tester: GK **Checked By:** LC

Date Checked: 18/11/2025 **Signature:**

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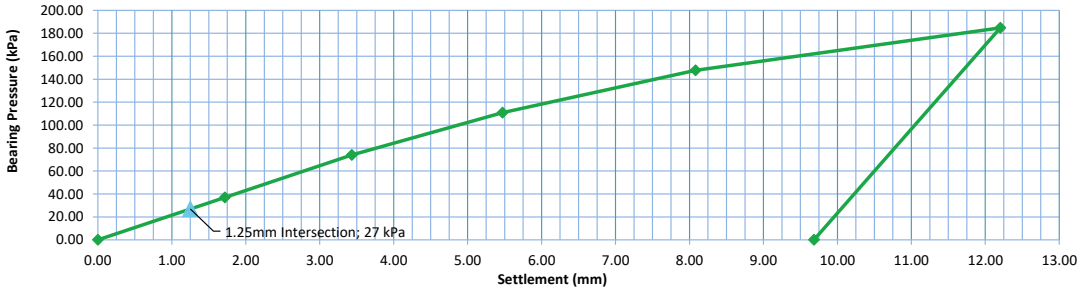
Determination of Equivalent CBR Value by Plate Load Test

BS1377: Part 9 and IAN 73/06

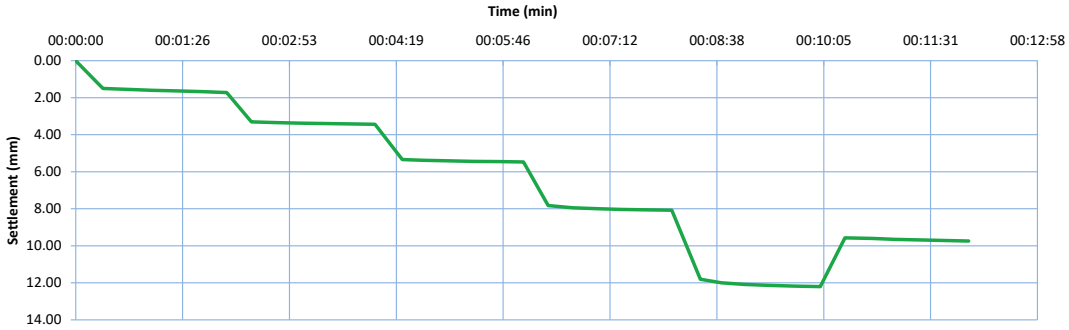
Client	ASK REAL ESTATE PROPERTY LTD		**Test Position**	**PL03**	
Site Name	MANCHESTER BUSINESS PARK				
Job Number	C6035		**OS Co-ordinates**	382601.9931	385629.4967
Date Tested	11/11/2025		**Level (mAOD)**	N/A	
Depth (mm)	500		**Formation Description:**	NATURAL STRATA (COHESIVE)	

			Bearing Pressure (kPa)	Average Plate Settlement (mm)
Plate Ø (mm)	450			
Plate Area (m^2)	0.159	**Load Phase**	0.00	0.00
Max Applied Force (kPa)	184.8	**1**	36.95	1.72
Kentledge	Tracked	**2**	73.90	3.43
Moisture Content (%)		**3**	110.85	5.47
Max Settlement (mm)	12.203	**4**	147.81	8.08
		5	184.76	12.20
		Unload	0.00	9.68

Load vs Settlement Data



Time vs Settlement Data



Settlement required for CBR Value 1.25mm

Load at 1.25mm settlement (kPa)	27
k (Modulus of subgrade reaction $KN/m^2/mm$)	21.5
k_{762} (Modulus of subgrade reaction $KN/m^2/mm$)	13.4
Equivalent CBR Value (%)	**0.9**

Tester: GK **Checked By:** LC

Date Checked: 18/11/2025 **Signature:**

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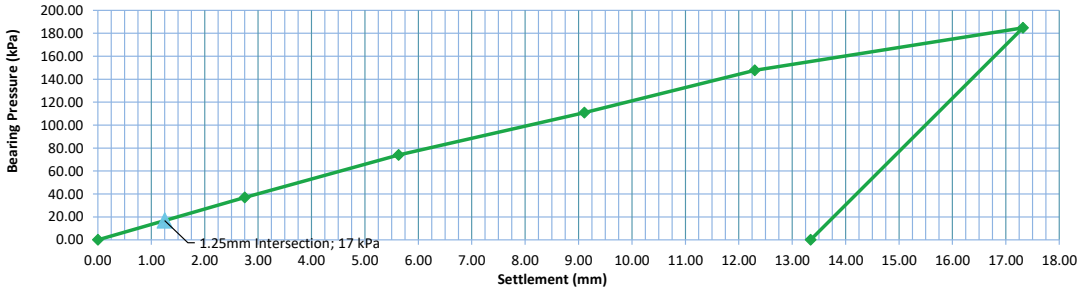
Determination of Equivalent CBR Value by Plate Load Test

BS1377: Part 9 and IAN 73/06

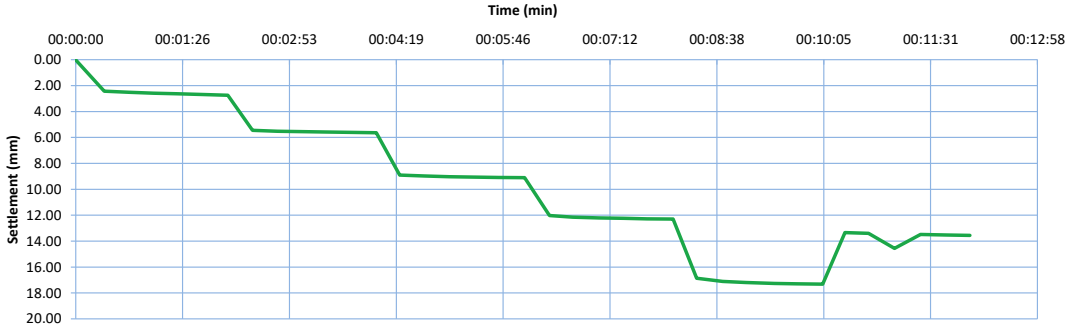
Client	ASK REAL ESTATE PROPERTY LTD		**Test Position**	**PL04**	
Site Name	MANCHESTER BUSINESS PARK				
Job Number	C6035		**OS Co-ordinates**	382620.1881	385597.1466
Date Tested	12/11/2025		**Level (mAOD)**	N/A	
Depth (mm)	500		**Formation Description:**	NATURAL STRATA (COHESIVE)	

			Bearing Pressure (kPa)	Average Plate Settlement (mm)
Plate Ø (mm)	450			
Plate Area (m^2)	0.159	**Load Phase**	0.00	0.00
Max Applied Force (kPa)	184.8	**1**	36.95	2.75
Kentledge	Tracked	**2**	73.90	5.63
Moisture Content (%)		**3**	110.85	9.11
Max Settlement (mm)	17.320	**4**	147.81	12.30
		5	184.76	17.32
		Unload	0.00	13.34

Load vs Settlement Data



Time vs Settlement Data



Settlement required for CBR Value 1.25mm

Load at 1.25mm settlement (kPa)	17
k (Modulus of subgrade reaction $KN/m^2/mm$)	13.5
k_{762} (Modulus of subgrade reaction $KN/m^2/mm$)	8.4
Equivalent CBR Value (%)	**0.4**

Tester: GK **Checked By:** LC

Date Checked: 18/11/2025 **Signature:**

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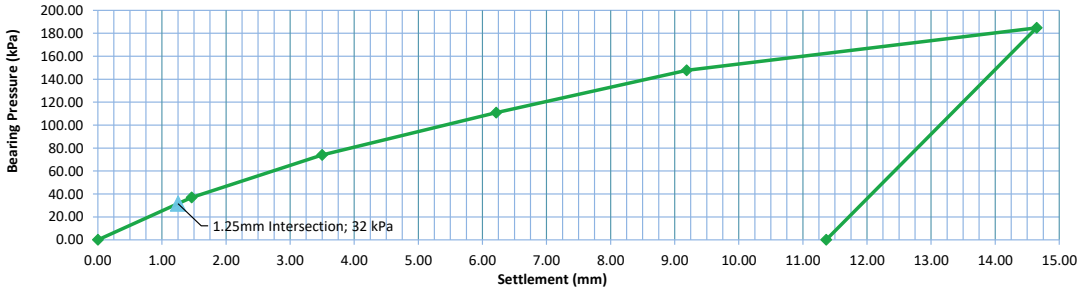
Determination of Equivalent CBR Value by Plate Load Test

BS1377: Part 9 and IAN 73/06

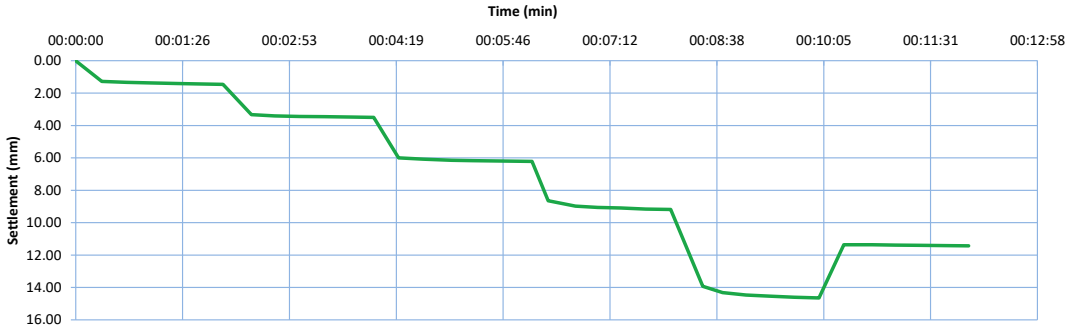
Client	ASK REAL ESTATE PROPERTY LTD		**Test Position**	**PL05**	
Site Name	MANCHESTER BUSINESS PARK				
Job Number	C6035		**OS Co-ordinates**	382646.8192	385637.6385
Date Tested	11/11/2025		**Level (mAOD)**	N/A	
Depth (mm)	500		**Formation Description:**	NATURAL STRATA (COHESIVE)	

			Bearing Pressure (kPa)	Average Plate Settlement (mm)
Plate Ø (mm)	450			
Plate Area (m^2)	0.159	**Load Phase**	0.00	0.00
Max Applied Force (kPa)	184.8	**1**	36.95	1.46
Kentledge	Tracked	**2**	73.90	3.50
Moisture Content (%)		**3**	110.85	6.21
Max Settlement (mm)	14.647	**4**	147.81	9.19
		5	184.76	14.65
		Unload	0.00	11.36

Load vs Settlement Data



Time vs Settlement Data



Settlement required for CBR Value 1.25mm

Load at 1.25mm settlement (kPa)	32
k (Modulus of subgrade reaction KN/m^2/mm)	25.3
k_{762} (Modulus of subgrade reaction KN/m^2/mm)	15.7
Equivalent CBR Value (%)	**1.1**

Tester: GK **Checked By:** LC

Date Checked: 18/11/2025 **Signature:**

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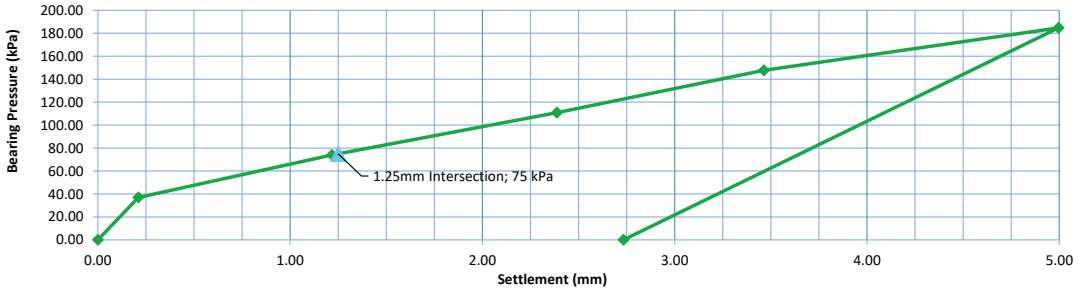
Determination of Equivalent CBR Value by Plate Load Test

BS1377: Part 9 and IAN 73/06

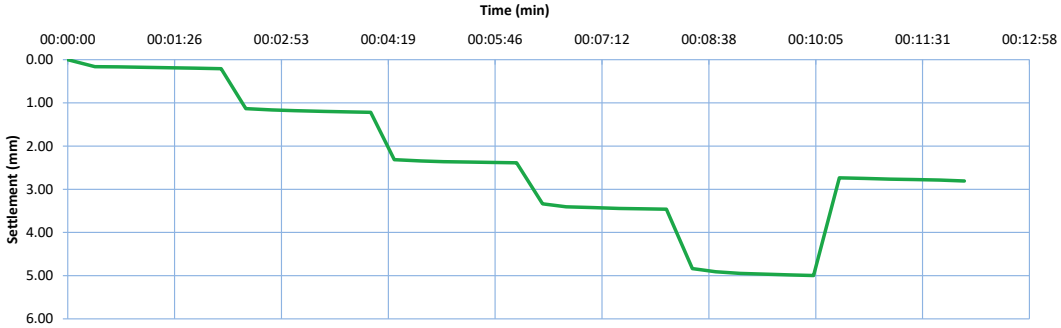
Client	ASK REAL ESTATE PROPERTY LTD	**Test Position**	**PL06**
Site Name	MANCHESTER BUSINESS PARK		
Job Number	C6035	**OS Co-ordinates**	382668.9446 385609.7914
Date Tested	10/11/2025	**Level (mAOD)**	N/A
Depth (mm)	500	**Formation Description:**	NATURAL STRATA (COHESIVE)

			Bearing Pressure (kPa)	Average Plate Settlement (mm)
Plate Ø (mm)	450			
Plate Area (m^2)	0.159	**Load Phase**	0.00	0.00
Max Applied Force (kPa)	184.8	**1**	36.95	0.21
Kentledge	Tracked	**2**	73.90	1.22
Moisture Content (%)		**3**	110.85	2.39
Max Settlement (mm)	4.997	**4**	147.81	3.46
		5	184.76	5.00
		Unload	0.00	2.73

Load vs Settlement Data



Time vs Settlement Data



Settlement required for CBR Value 1.25mm

Load at 1.25mm settlement (kPa)	75
k (Modulus of subgrade reaction KN/m^2/mm)	60.0
k_{762} (Modulus of subgrade reaction KN/m^2/mm)	37.3
Equivalent CBR Value (%)	**5.1**

Tester: GK **Checked By:** LC

Date Checked: 18/11/2025 **Signature:**

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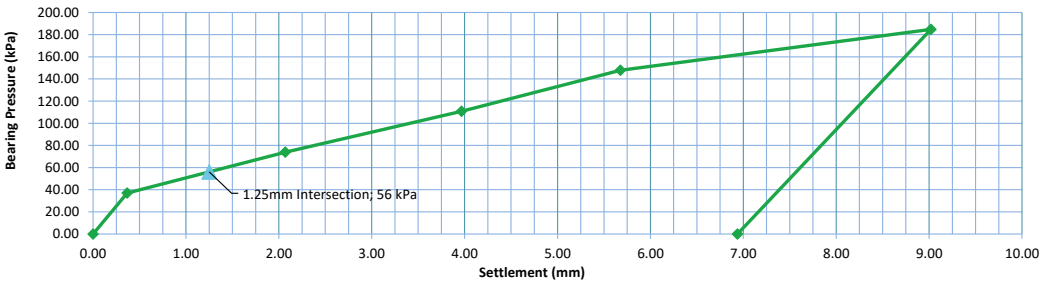
Determination of Equivalent CBR Value by Plate Load Test

BS1377: Part 9 and IAN 73/06

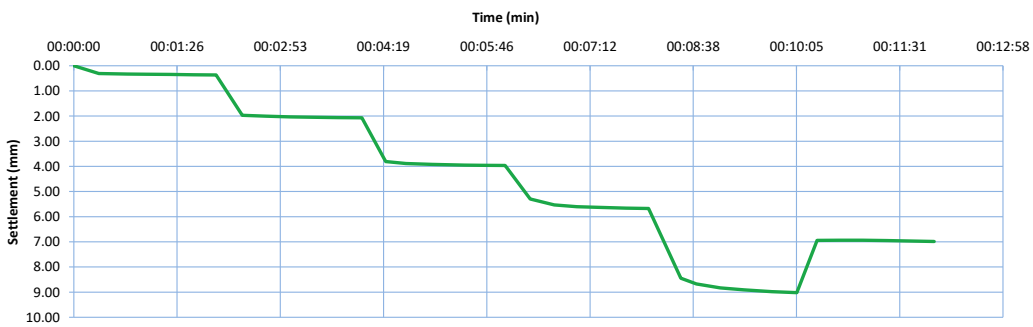
Client	ASK REAL ESTATE PROPERTY LTD	**Test Position**	**PL07**
Site Name	MANCHESTER BUSINESS PARK		
Job Number	C6035	**OS Co-ordinates**	382708.5945 385606.4273
Date Tested	10/11/2025	**Level (mAOD)**	N/A
Depth (mm)	500	**Formation Description:**	NATURAL STRATA (COHESIVE)

			Bearing Pressure (kPa)	Average Plate Settlement (mm)
Plate Ø (mm)	450			
Plate Area (m^2)	0.159	**Load Phase**	0.00	0.00
Max Applied Force (kPa)	184.8	**1**	36.95	0.37
Kentledge	Tracked	**2**	73.90	2.07
Moisture Content (%)		**3**	110.85	3.97
Max Settlement (mm)	9.020	**4**	147.81	5.68
		5	184.76	9.02
		Unload	0.00	6.94

Load vs Settlement Data



Time vs Settlement Data



Settlement required for CBR Value 1.25mm

Load at 1.25mm settlement (kPa)	56
k (Modulus of subgrade reaction KN/m^2/mm)	44.9
k_{762} (Modulus of subgrade reaction KN/m^2/mm)	27.9
Equivalent CBR Value (%)	**3.1**

Tester: GK **Checked By:** LC

Date Checked: 18/11/2025 **Signature:**

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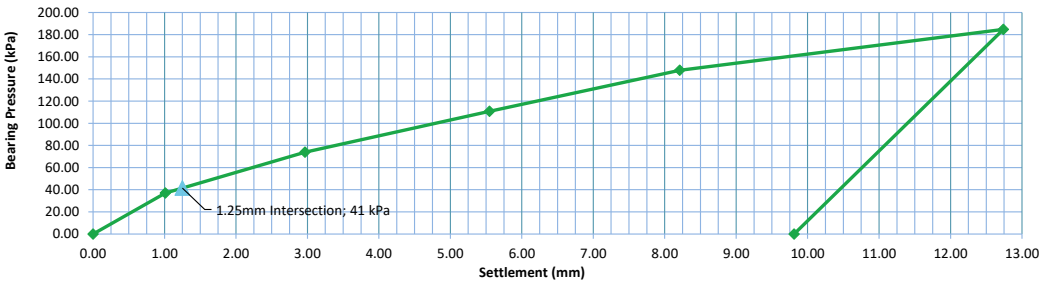
Determination of Equivalent CBR Value by Plate Load Test

BS1377: Part 9 and IAN 73/06

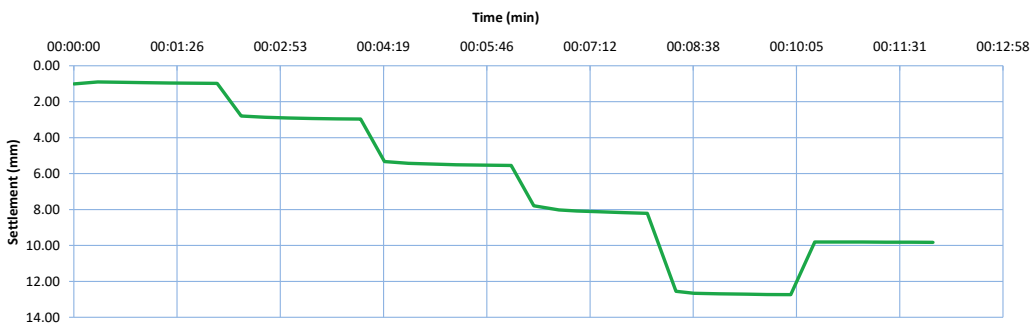
Client	ASK REAL ESTATE PROPERTY LTD	**Test Position**	**PL08**
Site Name	MANCHESTER BUSINESS PARK		
Job Number	C6035	**OS Co-ordinates**	382677.2916 385566.9091
Date Tested	10/11/2025	**Level (mAOD)**	N/A
Depth (mm)	500	**Formation Description:**	NATURAL STRATA (COHESIVE)

Plate Ø (mm)	450		**Bearing Pressure (kPa)**	**Average Plate Settlement (mm)**
Plate Area (m^2)	0.159	**Load Phase**	0.00	0.00
Max Applied Force (kPa)	184.8	**1**	36.95	1.01
Kentledge	Tracked	**2**	73.90	2.97
Moisture Content (%)		**3**	110.85	5.55
Max Settlement (mm)	12.740	**4**	147.81	8.21
		5	184.76	12.74
		Unload	0.00	9.81

Load vs Settlement Data



Time vs Settlement Data



Settlement required for CBR Value 1.25mm

Load at 1.25mm settlement (kPa)	41
k (Modulus of subgrade reaction KN/m^2/mm)	33.2
k_{762} (Modulus of subgrade reaction KN/m^2/mm)	20.6
Equivalent CBR Value (%)	**1.8**

Tester: GK **Checked By:** LC

Date Checked: 18/11/2025 **Signature:** E Brooks

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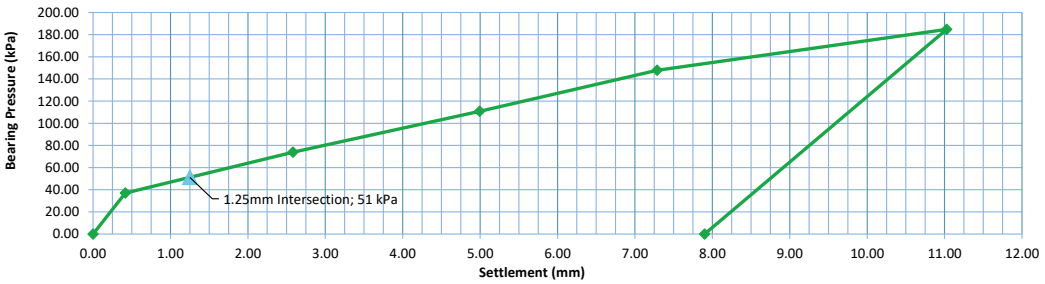
Determination of Equivalent CBR Value by Plate Load Test

BS1377: Part 9 and IAN 73/06

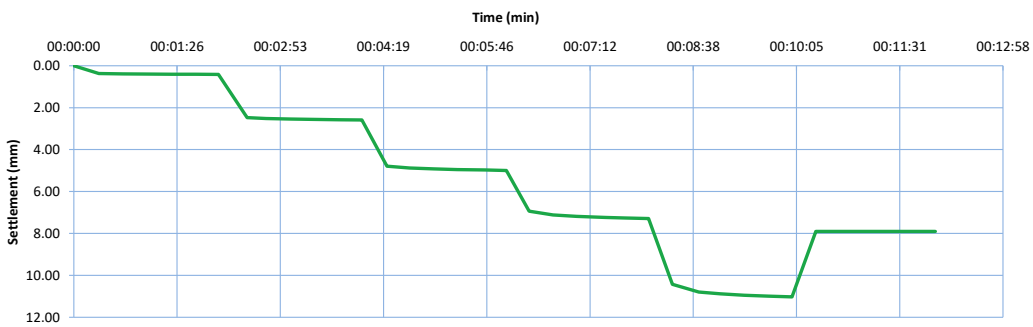
Client	ASK REAL ESTATE PROPERTY LTD	**Test Position**	**PL09**
Site Name	MANCHESTER BUSINESS PARK		
Job Number	C6035	**OS Co-ordinates**	382728.9457 385581.2944
Date Tested	10/11/2025	**Level (mAOD)**	N/A
Depth (mm)	500	**Formation Description:**	NATURAL STRATA (GRANULAR)

			Bearing Pressure (kPa)	Average Plate Settlement (mm)
Plate Ø (mm)	450			
Plate Area (m^2)	0.159	**Load Phase**	0.00	0.00
Max Applied Force (kPa)	184.8	**1**	36.95	0.42
Kentledge	Tracked	**2**	73.90	2.58
Moisture Content (%)		**3**	110.85	4.99
Max Settlement (mm)	11.027	**4**	147.81	7.29
		5	184.76	11.03
		Unload	0.00	7.90

Load vs Settlement Data



Time vs Settlement Data



Settlement required for CBR Value 1.25mm

Load at 1.25mm settlement (kPa)	51
k (Modulus of subgrade reaction KN/m^2/mm)	40.9
k_{762} (Modulus of subgrade reaction KN/m^2/mm)	25.4
Equivalent CBR Value (%)	**2.6**

Tester: GK **Checked By:** LC

Date Checked: 18/11/2025 **Signature:**

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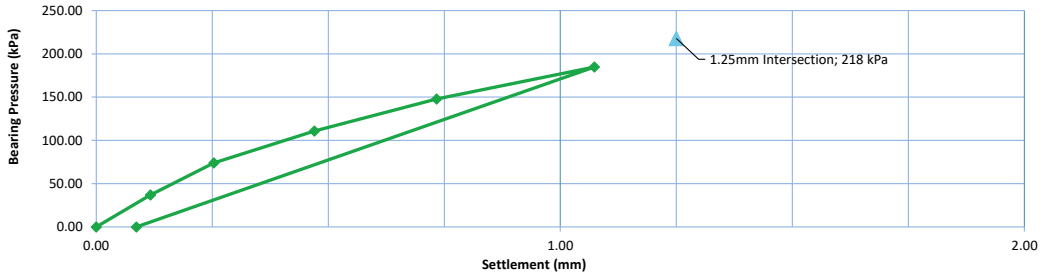
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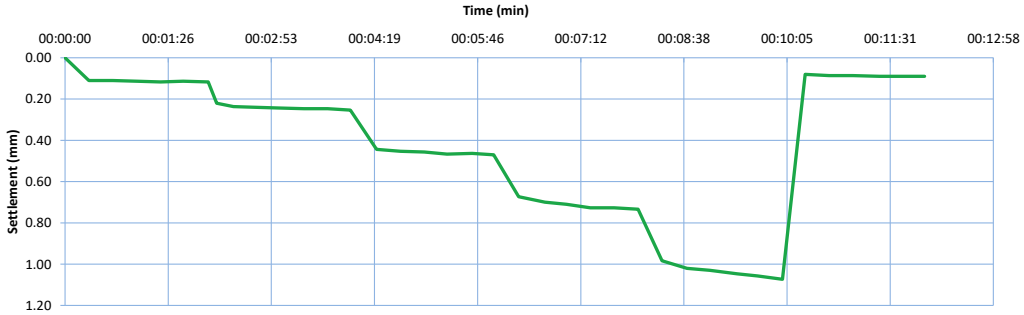
Client	ASK REAL ESTATE PROPERTY LTD		**Test Position**	**PL10**	
Site Name	MANCHESTER BUSINESS PARK				
Job Number	C6035		**OS Co-ordinates**	382716.2102	385558.2033
Date Tested	10/11/2025		**Level (mAOD)**	N/A	
Depth (mm)	500		**Formation Description:**	MADE GROUND (COHESIVE)	

			Bearing Pressure (kPa)	Average Plate Settlement (mm)
Plate Ø (mm)	600			
Plate Area (m^2)	0.283	**Load Phase**	0.00	0.00
Max Applied Force (kPa)	184.8	**1**	36.95	0.12
Kentledge	Tracked	**2**	73.90	0.25
Moisture Content (%)		**3**	110.85	0.47
Max Settlement (mm)	1.073	**4**	147.81	0.73
		5	184.76	1.07
		Unload	0.00	0.09

Load vs Settlement Data



Time vs Settlement Data



Settlement required for CBR Value 1.25mm

Load at 1.25mm settlement (kPa)	218
k (Modulus of subgrade reaction KN/m^2/mm)	174.3
k_{762} (Modulus of subgrade reaction KN/m^2/mm)	139.9
Equivalent CBR Value (%)	**50.5**

Tester: GK **Checked By:** LC

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Where 1.25mm of penetration is not reached then k is calculated as below:

k = Load/penetration (k is in kN/m^2/mm)

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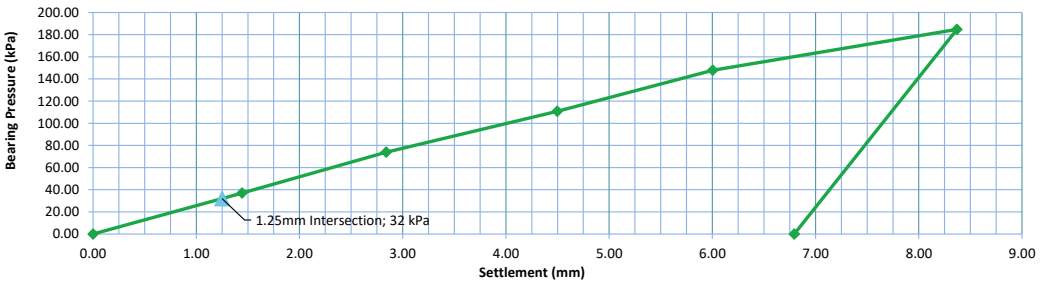
Determination of Equivalent CBR Value by Plate Load Test

BS1377: Part 9 and IAN 73/06

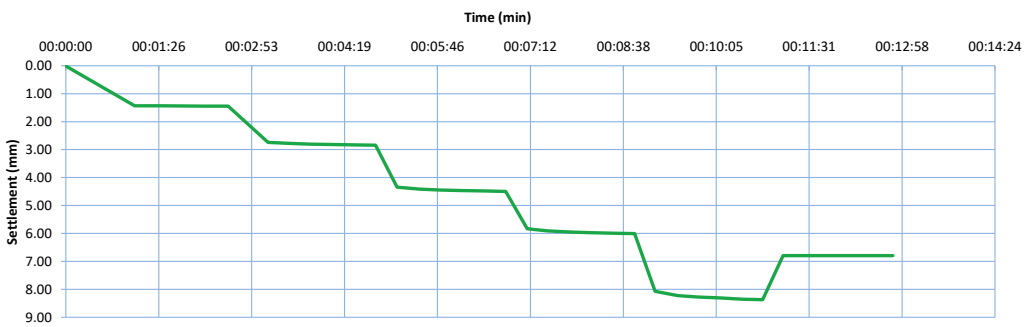
Client	ASK REAL ESTATE PROPERTY LTD	**Test Position**	**PL11**
Site Name	MANCHESTER BUSINESS PARK		
Job Number	C6035	**OS Co-ordinates**	382648.1909 385559.2116
Date Tested	11/11/2025	**Level (mAOD)**	N/A
Depth (mm)	500.00	**Formation Description:**	NATURAL STRATA (COHESIVE)

Plate Ø (mm)	450		**Bearing Pressure (kPa)**	**Average Plate Settlement (mm)**
Plate Area (m^2)	0.159	**Load Phase**	0.00	0.00
Max Applied Force (kPa)	184.8	**1**	36.95	1.44
Kentledge	Tracked	**2**	73.90	2.84
Moisture Content (%)		**3**	110.85	4.50
Max Settlement (mm)	8.370	**4**	147.81	6.00
		5	184.76	8.37
		Unload	0.00	6.79

Load vs Settlement Data



Time vs Settlement Data



Settlement required for CBR Value 1.25mm

Load at 1.25mm settlement (kPa)	32
k (Modulus of subgrade reaction KN/m^2/mm)	25.6
k_{762} (Modulus of subgrade reaction KN/m^2/mm)	15.9
Equivalent CBR Value (%)	**1.2**

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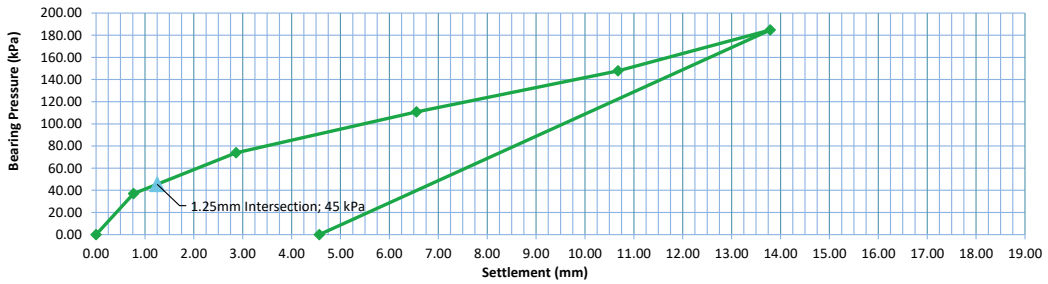
Determination of Equivalent CBR Value by Plate Load Test

BS1377: Part 9 and IAN 73/06

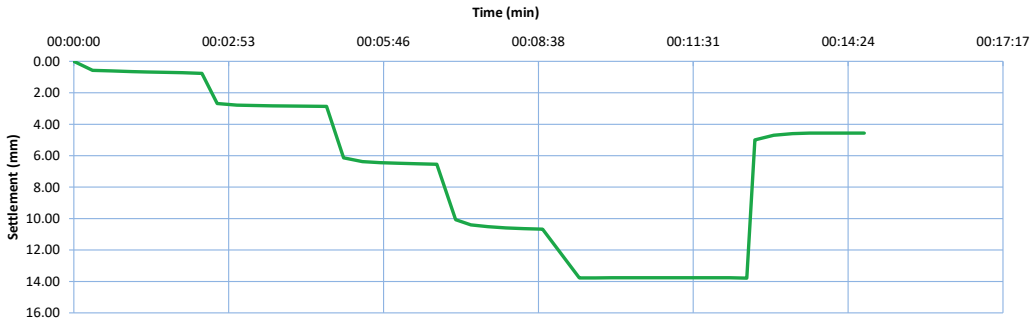
Client	ASK REAL ESTATE PROPERTY LTD		**Test Position**	**PL12**	
Site Name	MANCHESTER BUSINESS PARK				
Job Number	C6035		**OS Co-ordinates**	382611.9971	385569.4602
Date Tested	10/11/2025		**Level (mAOD)**	N/A	
Depth (mm)	500.00		**Formation Description:**	NATURAL STRATA (COHESIVE)	

			Bearing Pressure (kPa)	Average Plate Settlement (mm)
Plate Ø (mm)	450			
Plate Area (m^2)	0.159	**Load Phase**	0.00	0.00
Max Applied Force (kPa)	184.8	**1**	36.95	0.77
Kentledge	Tracked	**2**	73.90	2.86
Moisture Content (%)		**3**	110.85	6.55
Max Settlement (mm)	13.790	**4**	147.81	10.68
		5	184.76	13.79
		Unload	0.00	4.57

Load vs Settlement Data



Time vs Settlement Data



Settlement required for CBR Value 1.25mm

Load at 1.25mm settlement (kPa)	45
k (Modulus of subgrade reaction KN/m^2/mm)	36.4
k_{762} (Modulus of subgrade reaction KN/m^2/mm)	22.6
Equivalent CBR Value (%)	**2.1**

Tester: GK **Checked By:** LC

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Where 1.25mm of penetration is not reached then k is calculated as below:

k = Load/penetration (k is in kN/m^2/mm)

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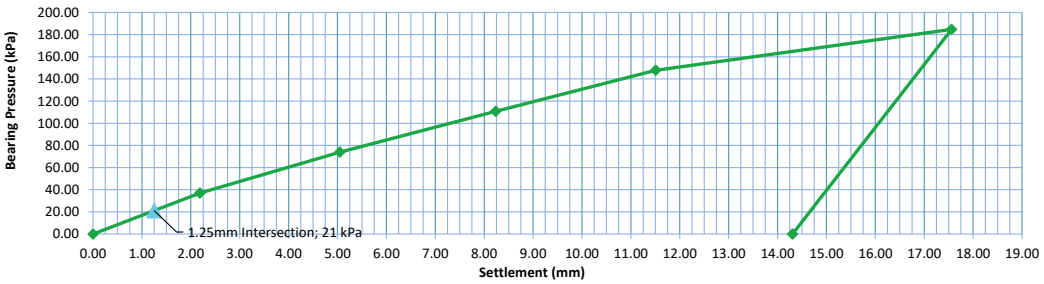
Determination of Equivalent CBR Value by Plate Load Test

BS1377: Part 9 and IAN 73/06

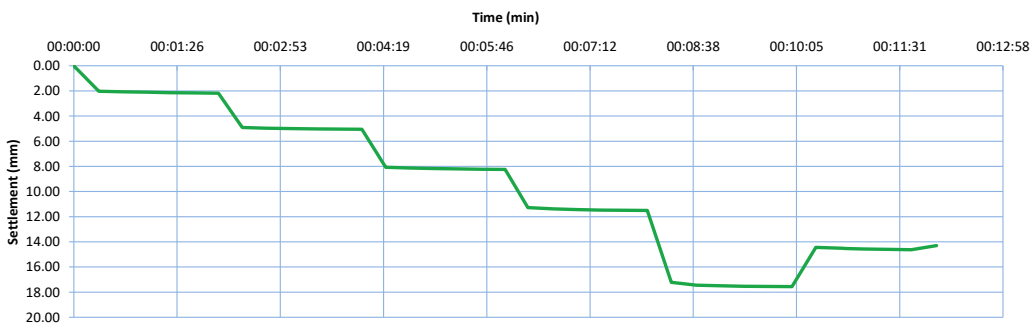
Client	ASK REAL ESTATE PROPERTY LTD	**Test Position**	**PL13**
Site Name	MANCHESTER BUSINESS PARK		
Job Number	C6035	**OS Co-ordinates**	382573.8188 385580.1799
Date Tested	12/11/2025	**Level (mAOD)**	N/A
Depth (mm)	500.00	**Formation Description:**	NATURAL STRATA (COHESIVE)

Plate Ø (mm)	450		**Bearing Pressure (kPa)**	**Average Plate Settlement (mm)**
Plate Area (m^2)	0.159	**Load Phase**	0.00	0.00
Max Applied Force (kPa)	184.8	**1**	36.95	2.19
Kentledge	Tracked	**2**	73.90	5.05
Moisture Content (%)		**3**	110.85	8.24
Max Settlement (mm)	17.560	**4**	147.81	11.51
		5	184.76	17.56
		Unload	0.00	14.31

Load vs Settlement Data



Time vs Settlement Data



Settlement required for CBR Value 1.25mm

Load at 1.25mm settlement (kPa)	21
k (Modulus of subgrade reaction KN/m^2/mm)	16.9
k_{762} (Modulus of subgrade reaction KN/m^2/mm)	10.5
Equivalent CBR Value (%)	**0.6**

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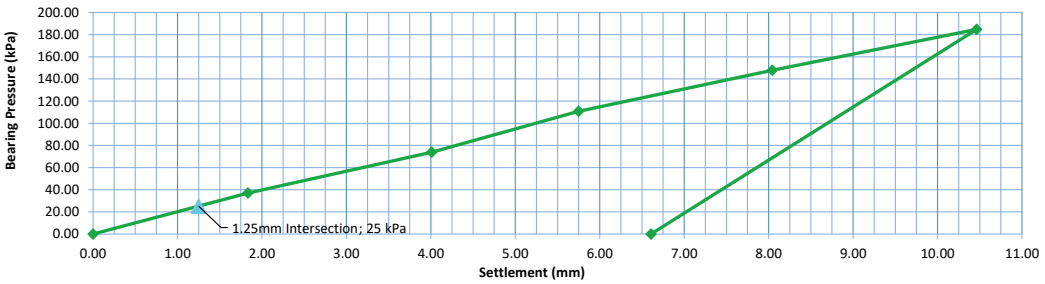
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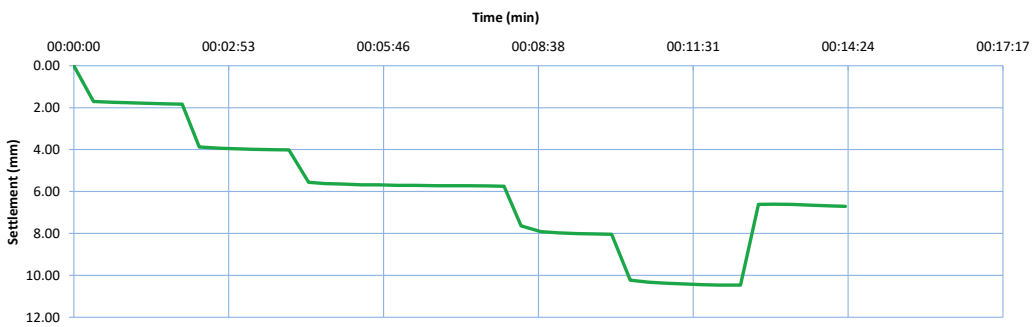
Client	ASK REAL ESTATE PROPERTY LTD	**Test Position**	**PL14**
Site Name	MANCHESTER BUSINESS PARK		
Job Number	C6035	**OS Co-ordinates**	382545.958 385679.8695
Date Tested	12/11/2025	**Level (mAOD)**	N/A
Depth (mm)	500.00	**Formation Description:**	MADE GROUND (COHESIVE)

			Bearing Pressure (kPa)	Average Plate Settlement (mm)
Plate Ø (mm)	450			
Plate Area (m^2)	0.159	**Load Phase**	0.00	0.00
Max Applied Force (kPa)	184.8	**1**	36.95	1.83
Kentledge	Tracked	**2**	73.90	4.01
Moisture Content (%)		**3**	110.85	5.75
Max Settlement (mm)	10.463	**4**	147.81	8.04
		5	184.76	10.46
		Unload	0.00	6.61

Load vs Settlement Data



Time vs Settlement Data



Settlement required for CBR Value 1.25mm

Load at 1.25mm settlement (kPa)	25
k (Modulus of subgrade reaction KN/m^2/mm)	20.2
k_{762} (Modulus of subgrade reaction KN/m^2/mm)	12.5
Equivalent CBR Value (%)	**0.8**

Tester: GK **Checked By:** LC

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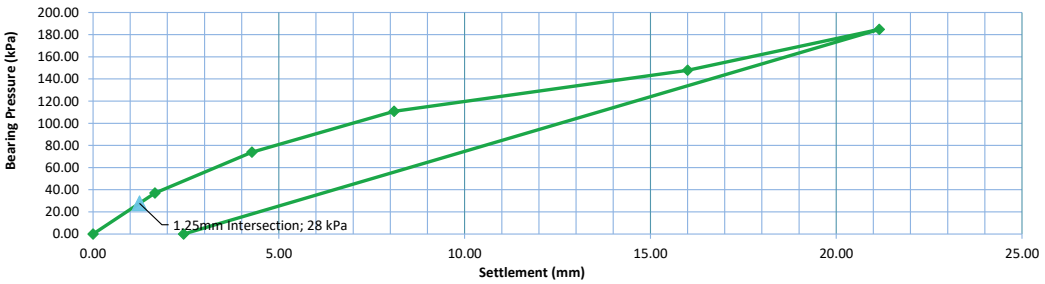
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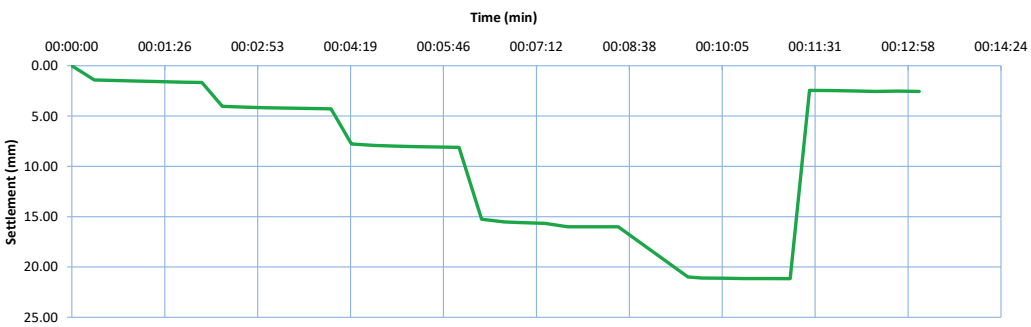
Client	ASK REAL ESTATE PROPERTY LTD	**Test Position**	**PL15**
Site Name	MANCHESTER BUSINESS PARK		
Job Number	C6035	**OS Co-ordinates**	382579.5687 385670.4724
Date Tested	12/11/2025	**Level (mAOD)**	N/A
Depth (mm)	500.00	**Formation Description:**	MADE GROUND (COHESIVE)

			Bearing Pressure (kPa)	Average Plate Settlement (mm)
Plate Ø (mm)	450			
Plate Area (m^2)	0.159	**Load Phase**	0.00	0.00
Max Applied Force (kPa)	184.8	**1**	36.95	1.67
Kentledge	Tracked	**2**	73.90	4.28
Moisture Content (%)		**3**	110.85	8.10
Max Settlement (mm)	16.000	**4**	147.81	16.00
		5	184.76	21.16
		Unload	0.00	2.44

Load vs Settlement Data



Time vs Settlement Data



Settlement required for CBR Value 1.25mm

Load at 1.25mm settlement (kPa)	28
k (Modulus of subgrade reaction KN/m^2/mm)	22.2
k_{762} (Modulus of subgrade reaction KN/m^2/mm)	13.8
Equivalent CBR Value (%)	**0.9**

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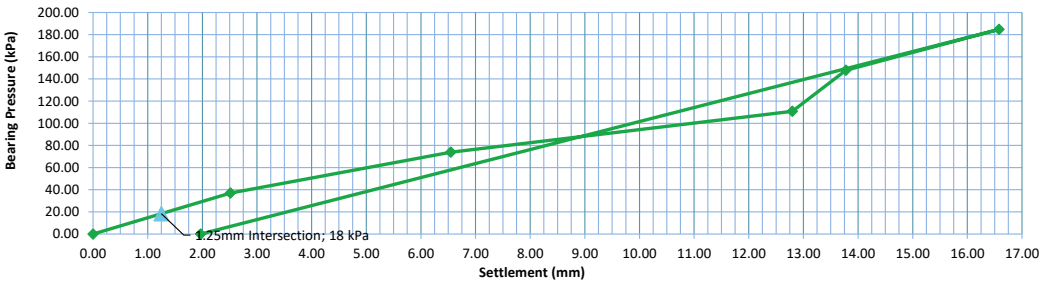
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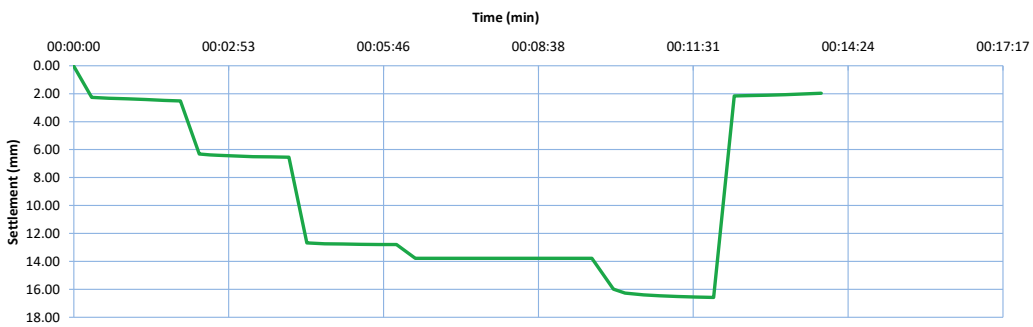
Client	ASK REAL ESTATE PROPERTY LTD	**Test Position**	**PL16**
Site Name	MANCHESTER BUSINESS PARK		
Job Number	C6035	**OS Co-ordinates**	382617.3332 385659.7487
Date Tested	11/11/2025	**Level (mAOD)**	N/A
Depth (mm)	500.00	**Formation Description:**	NATURAL STRATA (COHESIVE)

Plate Ø (mm)	450		**Bearing Pressure (kPa)**	**Average Plate Settlement (mm)**
Plate Area (m^2)	0.159	**Load Phase**	0.00	0.00
Max Applied Force (kPa)	184.8	**1**	36.95	2.51
Kentledge	Tracked	**2**	73.90	6.55
Moisture Content (%)		**3**	110.85	12.80
Max Settlement (mm)	16.580	**4**	147.81	13.78
		5	184.76	16.58
		Unload	0.00	1.97

Load vs Settlement Data



Time vs Settlement Data



Settlement required for CBR Value 1.25mm

Load at 1.25mm settlement (kPa)	18
k (Modulus of subgrade reaction KN/m^2/mm)	14.7
k_{762} (Modulus of subgrade reaction KN/m^2/mm)	9.1
Equivalent CBR Value (%)	**0.4**

Tester: GK **Checked By:** LC

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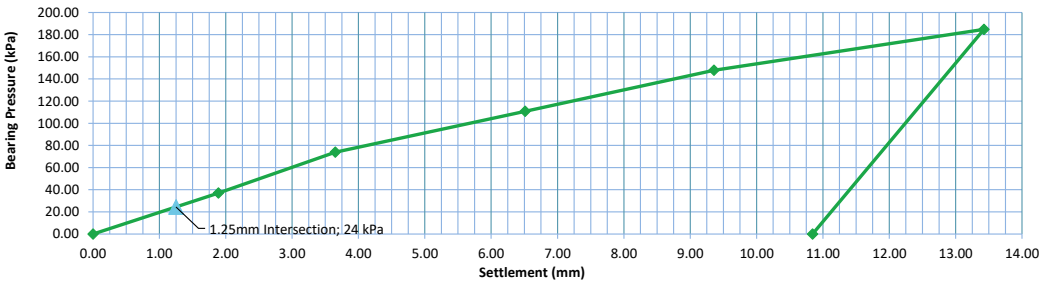
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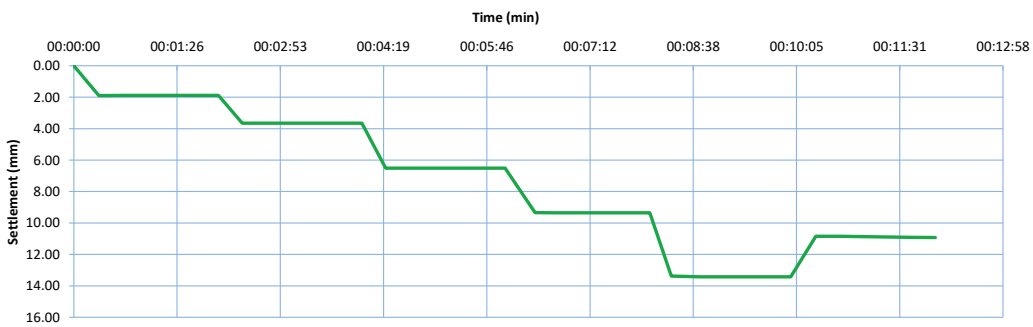
Client	ASK REAL ESTATE PROPERTY LTD	**Test Position**	**PL17**
Site Name	MANCHESTER BUSINESS PARK		
Job Number	C6035	**OS Co-ordinates**	382646.6577 385668.8382
Date Tested	11/11/2025	**Level (mAOD)**	N/A
Depth (mm)	500.00	**Formation Description:**	NATURAL STRATA (COHESIVE)

Plate Ø (mm)	450		**Bearing Pressure (kPa)**	**Average Plate Settlement (mm)**
Plate Area (m^2)	0.159	**Load Phase**	0.00	0.00
Max Applied Force (kPa)	184.8	**1**	36.95	1.89
Kentledge	Tracked	**2**	73.90	3.65
Moisture Content (%)		**3**	110.85	6.51
Max Settlement (mm)	13.427	**4**	147.81	9.36
		5	184.76	13.43
		Unload	0.00	10.84

Load vs Settlement Data



Time vs Settlement Data



Settlement required for CBR Value 1.25mm

Load at 1.25mm settlement (kPa)	24
k (Modulus of subgrade reaction KN/m^2/mm)	19.6
k_{762} (Modulus of subgrade reaction KN/m^2/mm)	12.2
Equivalent CBR Value (%)	**0.7**

Tester: GK **Checked By:** LC

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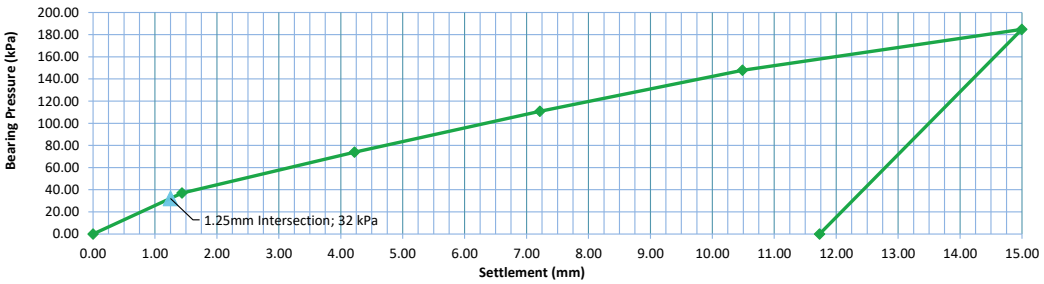
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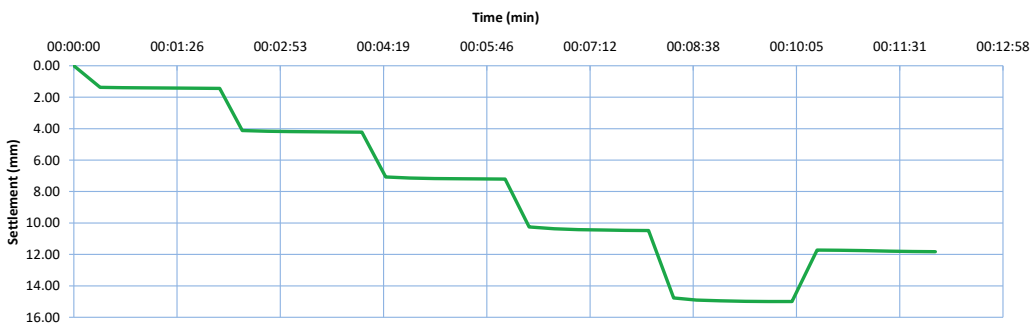
Client	ASK REAL ESTATE PROPERTY LTD	**Test Position**	**PL18**
Site Name	MANCHESTER BUSINESS PARK		
Job Number	C6035	**OS Co-ordinates**	382675.0749 385653.0122
Date Tested	11/11/2025	**Level (mAOD)**	N/A
Depth (mm)	500.00	**Formation Description:**	NATURAL STRATA (COHESIVE)

Plate Ø (mm)	450		**Bearing Pressure (kPa)**	**Average Plate Settlement (mm)**
Plate Area (m^2)	0.159	**Load Phase**	0.00	0.00
Max Applied Force (kPa)	184.8	**1**	36.95	1.44
Kentledge	Tracked	**2**	73.90	4.22
Moisture Content (%)		**3**	110.85	7.21
Max Settlement (mm)	14.997	**4**	147.81	10.49
		5	184.76	15.00
		Unload	0.00	11.73

Load vs Settlement Data



Time vs Settlement Data



Settlement required for CBR Value 1.25mm

Load at 1.25mm settlement (kPa)	32
k (Modulus of subgrade reaction KN/m^2/mm)	25.7
k_{762} (Modulus of subgrade reaction KN/m^2/mm)	16.0
Equivalent CBR Value (%)	**1.2**

Tester: GK **Checked By:** LC

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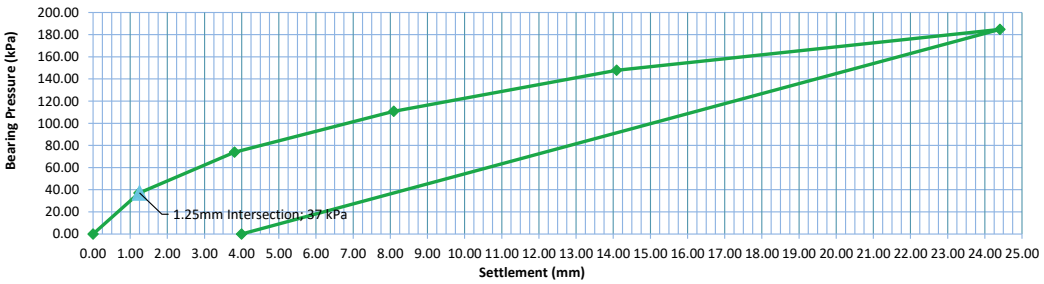
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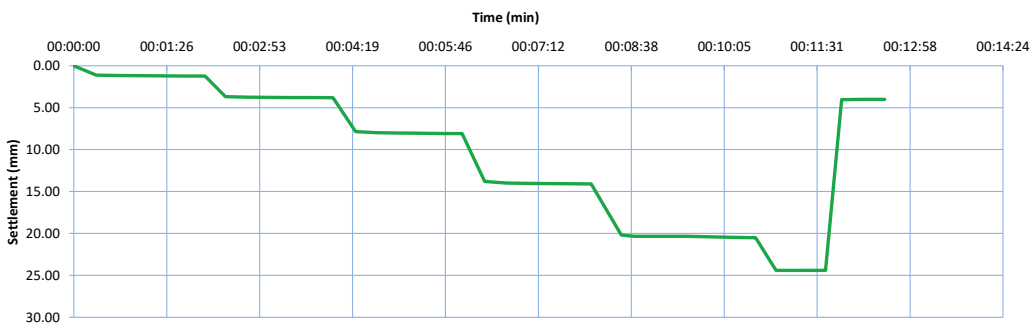
Client	ASK REAL ESTATE PROPERTY LTD	**Test Position**	**PL19**
Site Name	MANCHESTER BUSINESS PARK		
Job Number	C6035	**OS Co-ordinates**	382710.9187 385636.6699
Date Tested	11/11/2025	**Level (mAOD)**	N/A
Depth (mm)	500.00	**Formation Description:**	NATURAL STRATA (COHESIVE)

			Bearing Pressure (kPa)	Average Plate Settlement (mm)
Plate Ø (mm)	450			
Plate Area (m^2)	0.159	**Load Phase**	0.00	0.00
Max Applied Force (kPa)	184.8	**1**	36.95	1.23
Kentledge	Tracked	**2**	73.90	3.81
Moisture Content (%)		**3**	110.85	8.09
Max Settlement (mm)	24.407	**4**	147.81	14.09
		5	184.76	24.41
		Unload	0.00	3.99

Load vs Settlement Data



Time vs Settlement Data



Settlement required for CBR Value 1.25mm

Load at 1.25mm settlement (kPa)	37
k (Modulus of subgrade reaction KN/m^2/mm)	29.8
k_{762} (Modulus of subgrade reaction KN/m^2/mm)	18.5
Equivalent CBR Value (%)	**1.5**

Tester: GK **Checked By:** LC

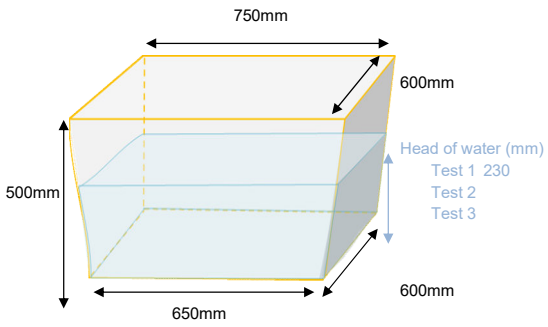
Date Checked: 18/11/2025 **Signature:**

Percolation Test	ASK REAL ESTATE MBP LTD	Date of Test: 14/11/2025
	Manchester Business Park, Aviator Way	Logged By: GK
SA01	C6035	Checked By: DV

BROWNFIELD SOLUTIONS LTD

Dimensions (mm)	TEST 1	TEST 2	TEST 3
Length at Top	750		
Length at Bottom	650		
Width at Top	600		
Width at Bottom	600		
Depth Tested (Head of Water)	230		
Depth of Excavation	500		
Volume of Water (m3)	0.10		
Void Ratio	1		
Factored Volume of Water (m3)	0.10		
Strata Description	0-250mm TOPSOIL 250- 500mm CLAY		
Pit Details			

Test Pit Construction



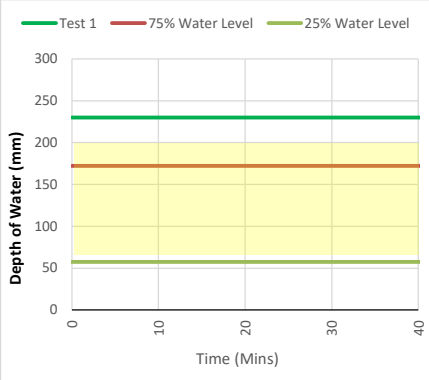
Site Recorded Data

Test 1			Test 2			Test 3		
Time (mins)	Depth to water (mm)	Head of water (mm)	Time (mins)	Depth to water (mm)	Head of water (mm)	Time (mins)	Depth to water (mm)	Head of water (mm)
0.00	270	230						
0.16	270	230						
0.81	270	230						
1.18	270	230						
2.42	270	230						
4.97	270	230						
12.64	270	230						
15.23	270	230						
20.47	270	230						
25.19	270	230						
29.35	270	230						
41.50	270	230						
68.35	260	240						
97.93	260	240						
129.95	260	240						
1234.91	240	260						

Percolation Test	ASK REAL ESTATE MBP LTD	Date of Test: 14/11/2025
	Manchester Business Park, Aviator Way	Logged By: GK
SA01	C6035	Checked By: DV

BROWNFIELD SOLUTIONS LTD

Data Analysis



Soil Infiltration Rate Calculation

	Test 1	Test 2	Test 3
Water Level 1	230		
Water Level 2	260		
Time to drain from Water Level 1 to Level 2 (m	1234.91		
Volume of Water Discharged m3)	-0.01		
Discharge Area (m2)	1.027		
Soil Infiltration Rate (m/min)	-0.00001		
Soil Infiltration Rate (m/sec)	-1.66E-07		

Compliancy Check

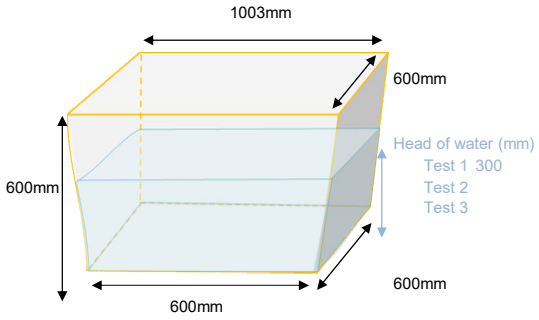
	Test 1	Test 2	Test 3
Water Level at 75% effective depth (mm)	172.5		
Water Level at 25% effective depth (mm)	57.5		
	Not Compliant with BRE 365 - Insufficient time to drain past 25% effective depth		

Percolation Test	ASK REAL ESTATE MBP LTD	Date of Test: 14/11/2025
	Manchester Business Park, Aviator Way	Logged By: GK
SA02	C6035	Checked By: DV

BROWNFIELD SOLUTIONS LTD

Dimensions (mm)	TEST 1	TEST 2	TEST 3
Length at Top	1003		
Length at Bottom	600		
Width at Top	600		
Width at Bottom	600		
Depth Tested (Head of Water)	300		
Depth of Excavation	600		
Volume of Water (m3)	0.14		
Void Ratio	1		
Factored Volume of Water (m3)	0.14		
Strata Description	0-300mm TOPSOIL 300-600mm CLAY		
Pit Details	N/A		

Test Pit Construction

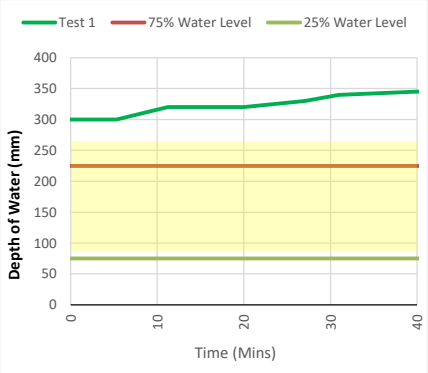


Site Recorded Data

Test 1			Test 2			Test 3		
Time (mins)	Depth to water (mm)	Head of water (mm)	Time (mins)	Depth to water (mm)	Head of water (mm)	Time (mins)	Depth to water (mm)	Head of water (mm)
0.00	300	300						
0.16	300	300						
0.44	300	300						
0.70	300	300						
1.05	300	300						
1.79	300	300						
2.72	300	300						
3.48	300	300						
5.26	300	300						
11.23	280	320						
15.82	280	320						
20.04	280	320						
27.05	270	330						
30.98	260	340						
39.81	255	345						
49.28	255	345						
60.19	255	345						
91.98	220	380						
112.42	220	380						
172.51	260	340						
203.11	260	340						
228.94	255	345						

Percolation Test	**ASK REAL ESTATE MBP LTD**	Date of Test: 14/11/2025	BROWNFIELD SOLUTIONS LTD
	Manchester Business Park, Aviator Way	Logged By: GK	
SA02	C6035	Checked By: DV	

Data Analysis



Soil Infiltration Rate Calculation

	Test 1	Test 2	Test 3
Water Level 1	300		
Water Level 2	345		
Time to drain from Water Level 1 to Level 2 (n	228.94		
Volume of Water Discharged m3)	0.00		
Discharge Area (m2)	1.26		
Soil Infiltration Rate (m/min)	0.00000		
Soil Infiltration Rate (m/sec)	N/A		

Compliancy Check

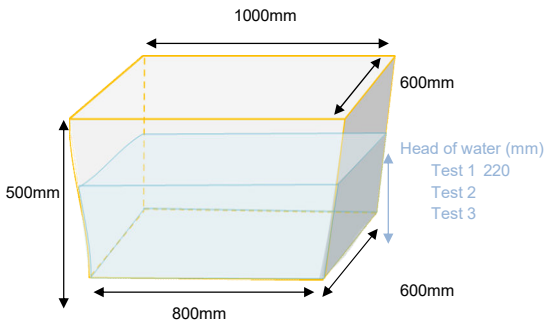
	Test 1	Test 2	Test 3
Water Level at 75% effective depth (mm)	225.0		
Water Level at 25% effective depth (mm)	75.0		
	Not Compliant with BRE 365 - Insufficient time to drain past 25% effective depth		

Percolation Test	ASK REAL ESTATE MBP LTD	Date of Test: 14/11/2025
	Manchester Business Park, Aviator Way	Logged By: GK
SA03	C6035	Checked By: DV

BROWNFIELD SOLUTIONS LTD

Dimensions (mm)	TEST 1	TEST 2	TEST 3
Length at Top	1000		
Length at Bottom	800		
Width at Top	600		
Width at Bottom	600		
Depth Tested (Head of Water)	220		
Depth of Excavation	500		
Volume of Water (m3)	0.12		
Void Ratio	1		
Factored Volume of Water (m3)	0.12		
Strata Description	0-280mm MADE GROUND 280-500mm CLAY		
Pit Details			

Test Pit Construction



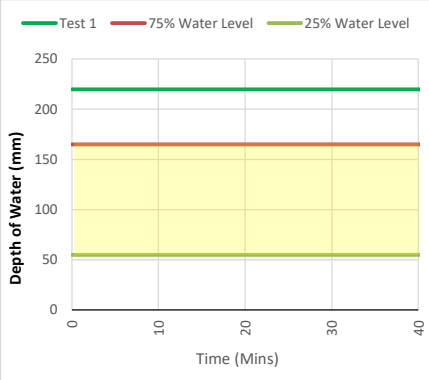
Site Recorded Data

Test 1			Test 2			Test 3		
Time (mins)	Depth to water (mm)	Head of water (mm)	Time (mins)	Depth to water (mm)	Head of water (mm)	Time (mins)	Depth to water (mm)	Head of water (mm)
0.00	280	220						
0.12	280	220						
0.21	280	220						
0.28	280	220						
0.36	280	220						
0.44	280	220						
0.55	280	220						
0.70	280	220						
1.01	280	220						
1.51	280	220						
2.04	280	220						
2.58	280	220						
3.02	280	220						
4.16	280	220						
5.04	280	220						
10.32	280	220						
15.01	280	220						
20.48	280	220						
25.43	280	220						
30.43	280	220						
41.45	280	220						
50.60	275	225						
60.09	275	225						
90.63	275	225						
121.51	270	230						
149.19	270	230						
186.76	270	230						
226.36	270	230						
249.07	270	230						

Percolation Test	ASK REAL ESTATE MBP LTD	Date of Test: 14/11/2025
	Manchester Business Park, Aviator Way	Logged By: GK
SA03	C6035	Checked By: DV

BROWNFIELD SOLUTIONS LTD

Data Analysis



Soil Infiltration Rate Calculation

	Test 1	Test 2	Test 3
Water Level 1	220		
Water Level 2	230		
Time to drain from Water Level 1 to Level 2 (m	249.07		
Volume of Water Discharged m3)	-0.01		
Discharge Area (m2)	1.16		
Soil Infiltration Rate (m/min)	-0.00002		
Soil Infiltration Rate (m/sec)	-3.13E-07		

Compliancy Check

	Test 1	Test 2	Test 3
Water Level at 75% effective depth (mm)	165.0		
Water Level at 25% effective depth (mm)	55.0		
	Not Compliant with BRE 365 - Insufficient time to drain past 25% effective depth		

APPENDIX D

Chemical Testing Results

ANALYTICAL TEST REPORT

Report Number	25-11610, issue number 3
Contract name:	C6035 Manchester Business Park
Client reference:	C6035
Clients name:	Brownfield Solutions Ltd
Clients address:	Brownfield Solutions Ltd 173-183 Witton Street Northwich Cheshire CW9 5LP
Samples received:	26/11/2025
Analysis started:	26/11/2025
Analysis completed:	15/01/2026
Report issued:	15/01/2026

3. Replaces Analytical Report number 25-11610; issue no.2

Key

U UKAS accredited test
M MCERTS & UKAS accredited test
(B) Analysis performed at Southampton Site
I/S Insufficient sample to carry out test
U/S Sample not suitable for testing
NAD No Asbestos Detected
Full key available on Information page

Approved by:

Georgia Hunter
Senior Reporting Administrator

Re-Issue Summary

Client: Brownfield Solutions Ltd
Address: 173-183 Witton Street, Northwich, Cheshire, CW9 5LP

Date: **15-Jan-26**

Report No.: **25-11610**

Issue: **3**

This report replaces 25-11610, issue: 2, issued: 03 December 2025

Reason for Change
Change of units

Key
A - Additional Work added
D - Work Deleted
E - Result Edited*
R - Work Repeated*

*If a result changed, please refer to the previous report for the old result. The new result will be shown in this report.

Re-issued by: Georgia Hunter
Senior Reporting Administrator



Approved by: Abbie Neasham-Bourn
Senior Reporting Administrator



SAMPLE INFORMATION

MCERTS (Soils):

Soil descriptions are only intended to provide a log of sample matrices with respect to MCERTS validation. They are not intended as full geological descriptions. MCERTS accreditation applies for sand, clay and loam/topsoil, or combinations of these whether these are derived from naturally occurring soils or from made ground, as long as these materials constitute the major part of the sample. Other materials such as concrete, gravel and brick are not accredited if they comprise the major part of the sample.
% Moisture reported as MCERTS drying at 30°C

Lab ref	Sample ID	Depth (m)	Sample description	Material removed	% Removed	% Moisture
78054	SA03	0.30 - 0.50	Brown Clayey Sand with Gravel and Vegetation.	-	-	16.1
78055	TP08	0.10 - 0.30	Brown Loamy Clay with Gravel and Vegetation.	-	-	17.0
78056	TP07	0.10 - 0.30	Brown Loamy Clay with Gravel and Vegetation.	-	-	27.7
78057	TP02	0.10 - 0.30	Brown Loamy Clay with Gravel and Vegetation.	-	-	21.3
78058	TP01	0.60 - 1.00	Brown Sandy Clay with Gravel and Vegetation.	-	-	13.8
78059	TP12	0.10 - 0.30	Brown Loamy Clay with Gravel and Vegetation.	-	-	19.4
78060	TP03	0.10 - 0.30	Brown Loamy Clay with Gravel and Vegetation.	-	-	17.8
78061	TP05	1.00 - 1.20	Brown Sandy Clay with Gravel.	-	-	11.4
78062	TP06	0.60 - 1.00	Brown Clay with Gravel and Vegetation.	-	-	21.9
78063	TP04	0.60 - 0.70	Brown Sandy Clay with Gravel and Vegetation.	-	-	12.8
78064	TP09	0.35 - 0.60	Brown Loamy Clay with Gravel and Vegetation.	-	-	19.5
78065	BH05	0.10 - 0.30	Brown Loamy Clay with Gravel and Vegetation.	-	-	33.8
78066	BH02	4.00	Brown Sandy Clay with Gravel.	-	-	9.1
78067	BH02	1.20	Brown Sandy Clay with Gravel.	-	-	15.4
78068	BH04	3.00	Brown Sand with Gravel.	-	-	15.2
78069	BH03	5.20 - 5.30	Brown Sandy Clay with Gravel.	-	-	14.0
78070	BH07	7.00	Brown Sandy Clay with Gravel.	-	-	16.9
78071	TP01	2.00 - 2.40	Brown Clay with Gravel.	-	-	11.7
78072	BH08	6.00	Brown Sandy Clay with Gravel.	-	-	9.5

DEVIATING SAMPLE INFORMATION

Comments
Sample deviation is determined in accordance with the UKAS note "Guidance on Deviating Samples" and based on reference standards and laboratory trials.
For samples identified as deviating, test result(s) may be compromised and may not be representative of the sample at the time of sampling.
Chemtech Environmental Ltd cannot be held responsible for the integrity of sample(s) received if Chemtech Environmental Ltd did not undertake the sampling. Such samples may be deviating.

Key

a	Sampling date not provided
b	Sampling time not provided (waters only)
c	Sample not received in appropriate containers
d	Storage Temperature
e	Headspace present in sample container
f	Sample exceeded sampling to receipt
g	Sample exceeded holding time(s)

Lab ref	Sample ID	Depth (m)	Deviating	Tests (Reason for deviation)
78054	SA03	0.30 - 0.50	N	
78055	TP08	0.10 - 0.30	N	
78056	TP07	0.10 - 0.30	N	
78057	TP02	0.10 - 0.30	N	
78058	TP01	0.60 - 1.00	N	
78059	TP12	0.10 - 0.30	N	
78060	TP03	0.10 - 0.30	N	
78061	TP05	1.00 - 1.20	N	
78062	TP06	0.60 - 1.00	N	
78063	TP04	0.60 - 0.70	N	
78064	TP09	0.35 - 0.60	N	
78065	BH05	0.10 - 0.30	N	
78066	BH02	4.00	N	
78067	BH02	1.20	N	
78068	BH04	3.00	N	
78069	BH03	5.20 - 5.30	N	
78070	BH07	7.00	N	
78071	TP01	2.00 - 2.40	N	
78072	BH08	6.00	N	

SOILS

Lab Number					78054	78055	78056	78057	78058
Client Reference					1	1	1	1	1
Sample ID					SA03	TP08	TP07	TP02	TP01
Depth (m)					0.30 - 0.50	0.10 - 0.30	0.10 - 0.30	0.10 - 0.30	0.60 - 1.00
Sampling Date					13/11/2025	13/11/2025	13/11/2025	13/11/2025	13/11/2025
Test	**Method**	**Accred**	**LoD**	**Units**					
Asbestos									
Asbestos Identification	SUBCON	SU	0	-	NAD	NAD	NAD	n/t	n/t
Metals									
Water Soluble Magnesium	CE061	N	2	mg/kg	n/t	n/t	n/t	n/t	n/t
Water Soluble Magnesium	CE061	N	1	mg/l	n/t	n/t	n/t	n/t	n/t
Water Soluble Sulphate	CE061	M	10	mg/l	216	53.8	29.9	22.7	13.1
Acid Soluble Sulphate (SO4)	CE062	M	100	mg/kg	n/t	n/t	n/t	n/t	n/t
Acid Soluble Sulphate (SO4)	CE062	M	0.01	%	n/t	n/t	n/t	n/t	n/t
Arsenic	CE264	U	1.8	mg/kg	15.8	11.8	15.0	19.9	6.1
Cadmium	CE264	M	1.6	mg/kg	3.0	< 1.6	< 1.6	< 1.6	< 1.6
Chromium	CE264	U	2	mg/kg	124	29.5	37.4	32.6	14.4
Copper	CE264	U	1.6	mg/kg	72.2	30.9	52.1	50.4	18.0
Lead	CE264	U	2.3	mg/kg	99.1	94.7	194	244	66.3
Mercury	CE264	U	0.7	mg/kg	< 0.7	< 0.7	0.9	0.9	< 0.7
Nickel	CE264	M	2.1	mg/kg	29.4	15.5	17.2	19.8	8.0
Selenium	CE264	U	3	mg/kg	< 3.0	< 3.0	< 3.0	< 3.0	3.5
Sulphur %	CE264	N	0.0032	%	n/t	n/t	n/t	n/t	n/t
Sulphur	CE264	N	32	mg/kg	n/t	n/t	n/t	n/t	n/t
Zinc	CE264	M	4	mg/kg	311	107	149	107	35.8
Colourimetric									
Water Soluble Chloride	CE261	U	1.5	mg/l	n/t	n/t	n/t	n/t	n/t
Water Soluble Chloride	CE261	U	3	mg/kg	n/t	n/t	n/t	n/t	n/t
Nitrate as N	CE261	N	1	mg/l	n/t	n/t	n/t	n/t	n/t
Nitrate as N	CE261	N	2	mg/kg	n/t	n/t	n/t	n/t	n/t
Water Soluble Chromium VI	CE263	N	0.04	mg/kg	< 0.040	< 0.040	< 0.040	< 0.040	< 0.040
Chromium III	CE208	N	2	mg/kg	124	29.5	37.4	32.6	14.4
Combustion									
Moisture Content	CE001	N	0.1	%	16.1	17.0	27.7	21.3	13.8
Soil Organic Matter	CE192	N	0.1	%	7.79	5.10	12.1	9.66	1.91
Polyaromatic hydrocarbons									
Naphthalene	CE087	M	0.016	mg/kg	< 0.016	0.034	0.033	0.031	< 0.016

SOILS

Lab Number					78054	78055	78056	78057	78058
Client Reference					1	1	1	1	1
Sample ID					SA03	TP08	TP07	TP02	TP01
Depth (m)					0.30 - 0.50	0.10 - 0.30	0.10 - 0.30	0.10 - 0.30	0.60 - 1.00
Sampling Date					13/11/2025	13/11/2025	13/11/2025	13/11/2025	13/11/2025
Test	**Method**	**Accred**	**LoD**	**Units**					
Acenaphthylene	CE087	M	0.015	mg/kg	< 0.015	< 0.015	< 0.015	< 0.015	< 0.015
Acenaphthene	CE087	M	0.013	mg/kg	< 0.013	0.123	0.017	0.035	< 0.013
Fluorene	CE087	U	0.013	mg/kg	< 0.013	0.080	0.015	0.024	< 0.013
Phenanthrene	CE087	M	0.014	mg/kg	0.088	1.48	0.192	0.553	0.026
Anthracene	CE087	U	0.017	mg/kg	0.027	0.422	0.053	0.106	< 0.017
Fluoranthene	CE087	M	0.017	mg/kg	0.209	2.77	0.433	1.75	0.055
Pyrene	CE087	M	0.016	mg/kg	0.202	2.63	0.409	1.57	0.050
Benzo(a)anthracene	CE087	U	0.012	mg/kg	0.130	1.27	0.253	0.750	0.030
Chrysene	CE087	M	0.028	mg/kg	0.111	1.15	0.247	0.674	0.031
Benzo(b)fluoranthene	CE087	M	0.02	mg/kg	0.168	1.38	0.332	0.713	0.036
Benzo(k)fluoranthene	CE087	M	0.025	mg/kg	0.067	0.584	0.126	0.287	< 0.025
Benzo(a)pyrene	CE087	U	0.019	mg/kg	0.144	1.22	0.278	0.615	0.031
Indeno(1,2,3-cd)pyrene	CE087	M	0.019	mg/kg	0.137	1.01	0.215	0.470	0.030
Dibenzo(a,h)anthracene	CE087	M	0.017	mg/kg	0.024	0.149	0.038	0.096	< 0.017
Benzo(g,h,i)perylene	CE087	M	0.019	mg/kg	0.106	0.763	0.190	0.371	0.023
Total PAH(16)	CE087	N	0.28	mg/kg	1.41	15.1	2.83	8.04	0.311
BTEX									
Benzene	CE267	U	0.001	mg/kg	n/t	n/t	< 0.001	n/t	n/t
Toluene	CE267	U	0.001	mg/kg	n/t	n/t	< 0.001	n/t	n/t
Ethylbenzene	CE267	U	0.001	mg/kg	n/t	n/t	< 0.001	n/t	n/t
MTBE	CE267	N	0.002	mg/kg	n/t	n/t	< 0.002	n/t	n/t
m,p-Xylene	CE267	U	0.002	mg/kg	n/t	n/t	< 0.002	n/t	n/t
oXylenes	CE267	U	0.002	mg/kg	n/t	n/t	< 0.002	n/t	n/t
Total Petroleum Hydrocarbons									
>C5-C6 Aliphatic (HS_1D_AL)	CE267	N	0.1	mg/kg	n/t	n/t	< 0.10	n/t	n/t
>C6-C8 Aliphatic (HS_1D_AL)	CE267	N	0.1	mg/kg	n/t	n/t	< 0.10	n/t	n/t
>C8-C10 Aliphatic (HS_1D_AL)	CE267	N	0.1	mg/kg	n/t	n/t	< 0.10	n/t	n/t
>C10-C12 Aliphatic (EH_2D_AL)	CE250	N	1	mg/kg	n/t	n/t	< 1.0	n/t	n/t
>C12-C16 Aliphatic (EH_2D_AL)	CE250	N	0.5	mg/kg	n/t	n/t	< 0.5	n/t	n/t
>C16-C21 Aliphatic (EH_2D_AL)	CE250	N	0.7	mg/kg	n/t	n/t	< 0.7	n/t	n/t
>C21-C35 Aliphatic (EH_2D_AL)	CE250	N	4	mg/kg	n/t	n/t	< 4.0	n/t	n/t

SOILS

Lab Number					78054	78055	78056	78057	78058
Client Reference					1	1	1	1	1
Sample ID					SA03	TP08	TP07	TP02	TP01
Depth (m)					0.30 - 0.50	0.10 - 0.30	0.10 - 0.30	0.10 - 0.30	0.60 - 1.00
Sampling Date					13/11/2025	13/11/2025	13/11/2025	13/11/2025	13/11/2025
Test	**Method**	**Accred**	**LoD**	**Units**					
>C35-C44 Aliphatic (EH_2D_AL)	CE250	N	0.5	mg/kg	n/t	n/t	< 0.5	n/t	n/t
>C5-C7 Aromatic (HS_1D_AR)	CE267	N	0.01	mg/kg	n/t	n/t	< 0.010	n/t	n/t
>C7-C8 Aromatic (HS_1D_AR)	CE267	N	0.01	mg/kg	n/t	n/t	< 0.010	n/t	n/t
>C8-C10 Aromatic (HS_1D_AR)	CE267	N	0.01	mg/kg	n/t	n/t	< 0.010	n/t	n/t
>C10-C12 Aromatic (EH_2D_AR)	CE250	N	0.6	mg/kg	n/t	n/t	1.3	n/t	n/t
>C12-C16 Aromatic (EH_2D_AR)	CE250	N	1	mg/kg	n/t	n/t	2.2	n/t	n/t
>C16-C21 Aromatic (EH_2D_AR)	CE250	N	2	mg/kg	n/t	n/t	< 2.0	n/t	n/t
>C21-C35 Aromatic (EH_2D_AR)	CE250	N	4.5	mg/kg	n/t	n/t	7.8	n/t	n/t
>C35-C44 Aromatic (EH_2D_AR)	CE250	N	2	mg/kg	n/t	n/t	< 2.0	n/t	n/t
Wet Chem									
pH	CE004	M	0.1	pH units	6.3	7.4	7.4	6.2	6.5

SOILS

Lab Number					78059	78060	78061	78062	78063
Client Reference					1	1	1	1	1
Sample ID					TP12	TP03	TP05	TP06	TP04
Depth (m)					0.10 - 0.30	0.10 - 0.30	1.00 - 1.20	0.60 - 1.00	0.60 - 0.70
Sampling Date					13/11/2025	13/11/2025	13/11/2025	13/11/2025	13/11/2025
Test	**Method**	**Accred**	**LoD**	**Units**					
Asbestos									
Asbestos Identification	SUBCON	SU	0	-	NAD	NAD	n/t	n/t	n/t
Metals									
Water Soluble Magnesium	CE061	N	2	mg/kg	n/t	n/t	n/t	n/t	n/t
Water Soluble Magnesium	CE061	N	1	mg/l	n/t	n/t	n/t	n/t	n/t
Water Soluble Sulphate	CE061	M	10	mg/l	27.5	14.8	16.7	25.1	20.0
Acid Soluble Sulphate (SO4)	CE062	M	100	mg/kg	n/t	n/t	n/t	n/t	n/t
Acid Soluble Sulphate (SO4)	CE062	M	0.01	%	n/t	n/t	n/t	n/t	n/t
Arsenic	CE264	U	1.8	mg/kg	22.8	21.9	5.3	8.3	35.8
Cadmium	CE264	M	1.6	mg/kg	5.1	1.7	< 1.6	< 1.6	< 1.6
Chromium	CE264	U	2	mg/kg	25.6	26.9	17.3	35.3	19.4
Copper	CE264	U	1.6	mg/kg	73.0	68.6	20.9	27.3	16.1
Lead	CE264	U	2.3	mg/kg	137	208	11.0	112	24.5
Mercury	CE264	U	0.7	mg/kg	< 0.7	< 0.7	< 0.7	< 0.7	< 0.7
Nickel	CE264	M	2.1	mg/kg	29.2	24.5	15.3	13.4	15.6
Selenium	CE264	U	3	mg/kg	< 3.0	4.9	< 3.0	< 3.0	< 3.0
Sulphur %	CE264	N	0.0032	%	n/t	n/t	n/t	n/t	n/t
Sulphur	CE264	N	32	mg/kg	n/t	n/t	n/t	n/t	n/t
Zinc	CE264	M	4	mg/kg	357	157	39.4	79.1	34.0
Colourimetric									
Water Soluble Chloride	CE261	U	1.5	mg/l	n/t	n/t	n/t	n/t	n/t
Water Soluble Chloride	CE261	U	3	mg/kg	n/t	n/t	n/t	n/t	n/t
Nitrate as N	CE261	N	1	mg/l	n/t	n/t	n/t	n/t	n/t
Nitrate as N	CE261	N	2	mg/kg	n/t	n/t	n/t	n/t	n/t
Water Soluble Chromium VI	CE263	N	0.04	mg/kg	< 0.040	< 0.040	< 0.040	< 0.040	< 0.040
Chromium III	CE208	N	2	mg/kg	25.6	26.9	17.3	35.3	19.5
Combustion									
Moisture Content	CE001	N	0.1	%	19.4	17.8	11.4	21.9	12.8
Soil Organic Matter	CE192	N	0.1	%	11.8	8.45	1.43	2.91	0.53
Polyaromatic hydrocarbons									
Naphthalene	CE087	M	0.016	mg/kg	0.045	0.041	< 0.016	< 0.016	< 0.016

SOILS

Lab Number					78059	78060	78061	78062	78063
Client Reference					1	1	1	1	1
Sample ID					TP12	TP03	TP05	TP06	TP04
Depth (m)					0.10 - 0.30	0.10 - 0.30	1.00 - 1.20	0.60 - 1.00	0.60 - 0.70
Sampling Date					13/11/2025	13/11/2025	13/11/2025	13/11/2025	13/11/2025
Test	**Method**	**Accred**	**LoD**	**Units**					
Acenaphthylene	CE087	M	0.015	mg/kg	< 0.015	< 0.015	< 0.015	< 0.015	< 0.015
Acenaphthene	CE087	M	0.013	mg/kg	0.050	0.026	< 0.013	< 0.013	< 0.013
Fluorene	CE087	U	0.013	mg/kg	0.032	0.021	< 0.013	< 0.013	< 0.013
Phenanthrene	CE087	M	0.014	mg/kg	0.399	0.296	0.019	0.100	< 0.014
Anthracene	CE087	U	0.017	mg/kg	0.102	0.071	< 0.017	0.044	< 0.017
Fluoranthene	CE087	M	0.017	mg/kg	0.766	0.679	< 0.017	0.274	< 0.017
Pyrene	CE087	M	0.016	mg/kg	0.717	0.661	< 0.016	0.288	< 0.016
Benzo(a)anthracene	CE087	U	0.012	mg/kg	0.443	0.427	< 0.012	0.176	< 0.012
Chrysene	CE087	M	0.028	mg/kg	0.376	0.397	< 0.028	0.144	< 0.028
Benzo(b)fluoranthene	CE087	M	0.02	mg/kg	0.533	0.532	< 0.020	0.176	< 0.020
Benzo(k)fluoranthene	CE087	M	0.025	mg/kg	0.223	0.229	< 0.025	0.068	< 0.025
Benzo(a)pyrene	CE087	U	0.019	mg/kg	0.504	0.466	< 0.019	0.158	< 0.019
Indeno(1,2,3-cd)pyrene	CE087	M	0.019	mg/kg	0.428	0.426	< 0.019	0.121	< 0.019
Dibenzo(a,h)anthracene	CE087	M	0.017	mg/kg	0.070	0.082	< 0.017	0.022	< 0.017
Benzo(g,h,i)perylene	CE087	M	0.019	mg/kg	0.323	0.345	< 0.019	0.106	< 0.019
Total PAH(16)	CE087	N	0.28	mg/kg	5.01	4.70	< 0.280	1.68	< 0.280
BTEX									
Benzene	CE267	U	0.001	mg/kg	n/t	n/t	n/t	n/t	n/t
Toluene	CE267	U	0.001	mg/kg	n/t	n/t	n/t	n/t	n/t
Ethylbenzene	CE267	U	0.001	mg/kg	n/t	n/t	n/t	n/t	n/t
MTBE	CE267	N	0.002	mg/kg	n/t	n/t	n/t	n/t	n/t
m,p-Xylene	CE267	U	0.002	mg/kg	n/t	n/t	n/t	n/t	n/t
oXylenes	CE267	U	0.002	mg/kg	n/t	n/t	n/t	n/t	n/t
Total Petroleum Hydrocarbons									
>C5-C6 Aliphatic (HS_1D_AL)	CE267	N	0.1	mg/kg	n/t	n/t	n/t	n/t	n/t
>C6-C8 Aliphatic (HS_1D_AL)	CE267	N	0.1	mg/kg	n/t	n/t	n/t	n/t	n/t
>C8-C10 Aliphatic (HS_1D_AL)	CE267	N	0.1	mg/kg	n/t	n/t	n/t	n/t	n/t
>C10-C12 Aliphatic (EH_2D_AL)	CE250	N	1	mg/kg	n/t	n/t	n/t	n/t	n/t
>C12-C16 Aliphatic (EH_2D_AL)	CE250	N	0.5	mg/kg	n/t	n/t	n/t	n/t	n/t
>C16-C21 Aliphatic (EH_2D_AL)	CE250	N	0.7	mg/kg	n/t	n/t	n/t	n/t	n/t
>C21-C35 Aliphatic (EH_2D_AL)	CE250	N	4	mg/kg	n/t	n/t	n/t	n/t	n/t

SOILS

Lab Number					78059	78060	78061	78062	78063
Client Reference					1	1	1	1	1
Sample ID					TP12	TP03	TP05	TP06	TP04
Depth (m)					0.10 - 0.30	0.10 - 0.30	1.00 - 1.20	0.60 - 1.00	0.60 - 0.70
Sampling Date					13/11/2025	13/11/2025	13/11/2025	13/11/2025	13/11/2025
Test	**Method**	**Accred**	**LoD**	**Units**					
>C35-C44 Aliphatic (EH_2D_AL)	CE250	N	0.5	mg/kg	n/t	n/t	n/t	n/t	n/t
>C5-C7 Aromatic (HS_1D_AR)	CE267	N	0.01	mg/kg	n/t	n/t	n/t	n/t	n/t
>C7-C8 Aromatic (HS_1D_AR)	CE267	N	0.01	mg/kg	n/t	n/t	n/t	n/t	n/t
>C8-C10 Aromatic (HS_1D_AR)	CE267	N	0.01	mg/kg	n/t	n/t	n/t	n/t	n/t
>C10-C12 Aromatic (EH_2D_AR)	CE250	N	0.6	mg/kg	n/t	n/t	n/t	n/t	n/t
>C12-C16 Aromatic (EH_2D_AR)	CE250	N	1	mg/kg	n/t	n/t	n/t	n/t	n/t
>C16-C21 Aromatic (EH_2D_AR)	CE250	N	2	mg/kg	n/t	n/t	n/t	n/t	n/t
>C21-C35 Aromatic (EH_2D_AR)	CE250	N	4.5	mg/kg	n/t	n/t	n/t	n/t	n/t
>C35-C44 Aromatic (EH_2D_AR)	CE250	N	2	mg/kg	n/t	n/t	n/t	n/t	n/t
Wet Chem									
pH	CE004	M	0.1	pH units	7.4	6.7	7.9	7.2	7.0

SOILS

Lab Number					78064	78065	78066	78067	78068
Client Reference					1	1	1	1	1
Sample ID					TP09	BH05	BH02	BH02	BH04
Depth (m)					0.35 - 0.60	0.10 - 0.30	4.00	1.20	3.00
Sampling Date					13/11/2025	13/11/2025	13/11/2025	13/11/2025	13/11/2025
Test	**Method**	**Accred**	**LoD**	**Units**					
Asbestos									
Asbestos Identification	SUBCON	SU	0	-	NAD	n/t	n/t	n/t	n/t
Metals									
Water Soluble Magnesium	CE061	N	2	mg/kg	n/t	n/t	n/t	13.7	n/t
Water Soluble Magnesium	CE061	N	1	mg/l	n/t	n/t	n/t	6.87	n/t
Water Soluble Sulphate	CE061	M	10	mg/l	51.7	20.2	19.3	33.1	13.8
Acid Soluble Sulphate (SO4)	CE062	M	100	mg/kg	n/t	n/t	n/t	6280	n/t
Acid Soluble Sulphate (SO4)	CE062	M	0.01	%	n/t	n/t	n/t	0.63	n/t
Arsenic	CE264	U	1.8	mg/kg	15.8	25.1	n/t	n/t	n/t
Cadmium	CE264	M	1.6	mg/kg	< 1.6	2.4	n/t	n/t	n/t
Chromium	CE264	U	2	mg/kg	21.2	38.8	n/t	n/t	n/t
Copper	CE264	U	1.6	mg/kg	57.3	83.2	n/t	n/t	n/t
Lead	CE264	U	2.3	mg/kg	129	334	n/t	n/t	n/t
Mercury	CE264	U	0.7	mg/kg	< 0.7	1.6	n/t	n/t	n/t
Nickel	CE264	M	2.1	mg/kg	26.2	28.0	n/t	n/t	n/t
Selenium	CE264	U	3	mg/kg	< 3.0	3.0	n/t	n/t	n/t
Sulphur %	CE264	N	0.0032	%	n/t	n/t	n/t	0.0132	n/t
Sulphur	CE264	N	32	mg/kg	n/t	n/t	n/t	132	n/t
Zinc	CE264	M	4	mg/kg	94.3	180	n/t	n/t	n/t
Colourimetric									
Water Soluble Chloride	CE261	U	1.5	mg/l	n/t	n/t	n/t	8.14	n/t
Water Soluble Chloride	CE261	U	3	mg/kg	n/t	n/t	n/t	16.3	n/t
Nitrate as N	CE261	N	1	mg/l	n/t	n/t	n/t	< 1.00	n/t
Nitrate as N	CE261	N	2	mg/kg	n/t	n/t	n/t	< 2.00	n/t
Water Soluble Chromium VI	CE263	N	0.04	mg/kg	< 0.040	< 0.040	n/t	n/t	n/t
Chromium III	CE208	N	2	mg/kg	21.3	38.8	n/t	n/t	n/t
Combustion									
Moisture Content	CE001	N	0.1	%	19.5	33.8	9.1	15.4	15.2
Soil Organic Matter	CE192	N	0.1	%	11.0	11.8	n/t	n/t	n/t
Polyaromatic hydrocarbons									
Naphthalene	CE087	M	0.016	mg/kg	0.031	0.113	n/t	n/t	n/t

SOILS

Lab Number					78064	78065	78066	78067	78068
Client Reference					1	1	1	1	1
Sample ID					TP09	BH05	BH02	BH02	BH04
Depth (m)					0.35 - 0.60	0.10 - 0.30	4.00	1.20	3.00
Sampling Date					13/11/2025	13/11/2025	13/11/2025	13/11/2025	13/11/2025
Test	**Method**	**Accred**	**LoD**	**Units**					
Acenaphthylene	CE087	M	0.015	mg/kg	< 0.015	0.017	n/t	n/t	n/t
Acenaphthene	CE087	M	0.013	mg/kg	0.028	0.510	n/t	n/t	n/t
Fluorene	CE087	U	0.013	mg/kg	0.025	0.320	n/t	n/t	n/t
Phenanthrene	CE087	M	0.014	mg/kg	0.273	2.64	n/t	n/t	n/t
Anthracene	CE087	U	0.017	mg/kg	0.071	0.518	n/t	n/t	n/t
Fluoranthene	CE087	M	0.017	mg/kg	0.437	3.10	n/t	n/t	n/t
Pyrene	CE087	M	0.016	mg/kg	0.459	2.71	n/t	n/t	n/t
Benzo(a)anthracene	CE087	U	0.012	mg/kg	0.319	1.34	n/t	n/t	n/t
Chrysene	CE087	M	0.028	mg/kg	0.298	1.29	n/t	n/t	n/t
Benzo(b)fluoranthene	CE087	M	0.02	mg/kg	0.432	1.45	n/t	n/t	n/t
Benzo(k)fluoranthene	CE087	M	0.025	mg/kg	0.162	0.546	n/t	n/t	n/t
Benzo(a)pyrene	CE087	U	0.019	mg/kg	0.445	1.25	n/t	n/t	n/t
Indeno(1,2,3-cd)pyrene	CE087	M	0.019	mg/kg	0.413	0.980	n/t	n/t	n/t
Dibenzo(a,h)anthracene	CE087	M	0.017	mg/kg	0.086	0.186	n/t	n/t	n/t
Benzo(g,h,i)perylene	CE087	M	0.019	mg/kg	0.344	0.764	n/t	n/t	n/t
Total PAH(16)	CE087	N	0.28	mg/kg	3.82	17.7	n/t	n/t	n/t
BTEX									
Benzene	CE267	U	0.001	mg/kg	n/t	n/t	n/t	n/t	n/t
Toluene	CE267	U	0.001	mg/kg	n/t	n/t	n/t	n/t	n/t
Ethylbenzene	CE267	U	0.001	mg/kg	n/t	n/t	n/t	n/t	n/t
MTBE	CE267	N	0.002	mg/kg	n/t	n/t	n/t	n/t	n/t
m,p-Xylene	CE267	U	0.002	mg/kg	n/t	n/t	n/t	n/t	n/t
oXylenes	CE267	U	0.002	mg/kg	n/t	n/t	n/t	n/t	n/t
Total Petroleum Hydrocarbons									
>C5-C6 Aliphatic (HS_1D_AL)	CE267	N	0.1	mg/kg	n/t	n/t	n/t	n/t	n/t
>C6-C8 Aliphatic (HS_1D_AL)	CE267	N	0.1	mg/kg	n/t	n/t	n/t	n/t	n/t
>C8-C10 Aliphatic (HS_1D_AL)	CE267	N	0.1	mg/kg	n/t	n/t	n/t	n/t	n/t
>C10-C12 Aliphatic (EH_2D_AL)	CE250	N	1	mg/kg	n/t	n/t	n/t	n/t	n/t
>C12-C16 Aliphatic (EH_2D_AL)	CE250	N	0.5	mg/kg	n/t	n/t	n/t	n/t	n/t
>C16-C21 Aliphatic (EH_2D_AL)	CE250	N	0.7	mg/kg	n/t	n/t	n/t	n/t	n/t
>C21-C35 Aliphatic (EH_2D_AL)	CE250	N	4	mg/kg	n/t	n/t	n/t	n/t	n/t

SOILS

Lab Number					78064	78065	78066	78067	78068
Client Reference					1	1	1	1	1
Sample ID					TP09	BH05	BH02	BH02	BH04
Depth (m)					0.35 - 0.60	0.10 - 0.30	4.00	1.20	3.00
Sampling Date					13/11/2025	13/11/2025	13/11/2025	13/11/2025	13/11/2025
Test	**Method**	**Accred**	**LoD**	**Units**					
>C35-C44 Aliphatic (EH_2D_AL)	CE250	N	0.5	mg/kg	n/t	n/t	n/t	n/t	n/t
>C5-C7 Aromatic (HS_1D_AR)	CE267	N	0.01	mg/kg	n/t	n/t	n/t	n/t	n/t
>C7-C8 Aromatic (HS_1D_AR)	CE267	N	0.01	mg/kg	n/t	n/t	n/t	n/t	n/t
>C8-C10 Aromatic (HS_1D_AR)	CE267	N	0.01	mg/kg	n/t	n/t	n/t	n/t	n/t
>C10-C12 Aromatic (EH_2D_AR)	CE250	N	0.6	mg/kg	n/t	n/t	n/t	n/t	n/t
>C12-C16 Aromatic (EH_2D_AR)	CE250	N	1	mg/kg	n/t	n/t	n/t	n/t	n/t
>C16-C21 Aromatic (EH_2D_AR)	CE250	N	2	mg/kg	n/t	n/t	n/t	n/t	n/t
>C21-C35 Aromatic (EH_2D_AR)	CE250	N	4.5	mg/kg	n/t	n/t	n/t	n/t	n/t
>C35-C44 Aromatic (EH_2D_AR)	CE250	N	2	mg/kg	n/t	n/t	n/t	n/t	n/t
Wet Chem									
pH	CE004	M	0.1	pH units	7.1	6.4	8.6	8.0	8.5

SOILS

Lab Number					78069	78070	78071	78072
Client Reference					1	1	1	1
Sample ID					BH03	BH07	TP01	BH08
Depth (m)					5.20 - 5.30	7.00	2.00 - 2.40	6.00
Sampling Date					13/11/2025	13/11/2025	13/11/2025	13/11/2025
Test	**Method**	**Accred**	**LoD**	**Units**				
Asbestos								
Asbestos Identification	SUBCON	SU	0	-	n/t	n/t	n/t	n/t
Metals								
Water Soluble Magnesium	CE061	N	2	mg/kg	n/t	n/t	16.7	n/t
Water Soluble Magnesium	CE061	N	1	mg/l	n/t	n/t	8.33	n/t
Water Soluble Sulphate	CE061	M	10	mg/l	23.3	36.0	< 10.0	37.9
Acid Soluble Sulphate (SO4)	CE062	M	100	mg/kg	n/t	n/t	180	n/t
Acid Soluble Sulphate (SO4)	CE062	M	0.01	%	n/t	n/t	0.02	n/t
Arsenic	CE264	U	1.8	mg/kg	n/t	n/t	n/t	n/t
Cadmium	CE264	M	1.6	mg/kg	n/t	n/t	n/t	n/t
Chromium	CE264	U	2	mg/kg	n/t	n/t	n/t	n/t
Copper	CE264	U	1.6	mg/kg	n/t	n/t	n/t	n/t
Lead	CE264	U	2.3	mg/kg	n/t	n/t	n/t	n/t
Mercury	CE264	U	0.7	mg/kg	n/t	n/t	n/t	n/t
Nickel	CE264	M	2.1	mg/kg	n/t	n/t	n/t	n/t
Selenium	CE264	U	3	mg/kg	n/t	n/t	n/t	n/t
Sulphur %	CE264	N	0.0032	%	n/t	n/t	0.0138	n/t
Sulphur	CE264	N	32	mg/kg	n/t	n/t	138	n/t
Zinc	CE264	M	4	mg/kg	n/t	n/t	n/t	n/t
Colourimetric								
Water Soluble Chloride	CE261	U	1.5	mg/l	n/t	n/t	4.83	n/t
Water Soluble Chloride	CE261	U	3	mg/kg	n/t	n/t	9.66	n/t
Nitrate as N	CE261	N	1	mg/l	n/t	n/t	< 1.00	n/t
Nitrate as N	CE261	N	2	mg/kg	n/t	n/t	< 2.00	n/t
Water Soluble Chromium VI	CE263	N	0.04	mg/kg	n/t	n/t	n/t	n/t
Chromium III	CE208	N	2	mg/kg	n/t	n/t	n/t	n/t
Combustion								
Moisture Content	CE001	N	0.1	%	14.0	16.9	11.7	9.5
Soil Organic Matter	CE192	N	0.1	%	n/t	n/t	n/t	n/t
Polyaromatic hydrocarbons								
Naphthalene	CE087	M	0.016	mg/kg	n/t	n/t	n/t	n/t

SOILS

Lab Number					78069	78070	78071	78072
Client Reference					1	1	1	1
Sample ID					BH03	BH07	TP01	BH08
Depth (m)					5.20 - 5.30	7.00	2.00 - 2.40	6.00
Sampling Date					13/11/2025	13/11/2025	13/11/2025	13/11/2025
Test	**Method**	**Accred**	**LoD**	**Units**				
Acenaphthylene	CE087	M	0.015	mg/kg	n/t	n/t	n/t	n/t
Acenaphthene	CE087	M	0.013	mg/kg	n/t	n/t	n/t	n/t
Fluorene	CE087	U	0.013	mg/kg	n/t	n/t	n/t	n/t
Phenanthrene	CE087	M	0.014	mg/kg	n/t	n/t	n/t	n/t
Anthracene	CE087	U	0.017	mg/kg	n/t	n/t	n/t	n/t
Fluoranthene	CE087	M	0.017	mg/kg	n/t	n/t	n/t	n/t
Pyrene	CE087	M	0.016	mg/kg	n/t	n/t	n/t	n/t
Benzo(a)anthracene	CE087	U	0.012	mg/kg	n/t	n/t	n/t	n/t
Chrysene	CE087	M	0.028	mg/kg	n/t	n/t	n/t	n/t
Benzo(b)fluoranthene	CE087	M	0.02	mg/kg	n/t	n/t	n/t	n/t
Benzo(k)fluoranthene	CE087	M	0.025	mg/kg	n/t	n/t	n/t	n/t
Benzo(a)pyrene	CE087	U	0.019	mg/kg	n/t	n/t	n/t	n/t
Indeno(1,2,3-cd)pyrene	CE087	M	0.019	mg/kg	n/t	n/t	n/t	n/t
Dibenzo(a,h)anthracene	CE087	M	0.017	mg/kg	n/t	n/t	n/t	n/t
Benzo(g,h,i)perylene	CE087	M	0.019	mg/kg	n/t	n/t	n/t	n/t
Total PAH(16)	CE087	N	0.28	mg/kg	n/t	n/t	n/t	n/t
BTEX								
Benzene	CE267	U	0.001	mg/kg	n/t	n/t	n/t	n/t
Toluene	CE267	U	0.001	mg/kg	n/t	n/t	n/t	n/t
Ethylbenzene	CE267	U	0.001	mg/kg	n/t	n/t	n/t	n/t
MTBE	CE267	N	0.002	mg/kg	n/t	n/t	n/t	n/t
m,p-Xylene	CE267	U	0.002	mg/kg	n/t	n/t	n/t	n/t
oXylenes	CE267	U	0.002	mg/kg	n/t	n/t	n/t	n/t
Total Petroleum Hydrocarbons								
>C5-C6 Aliphatic (HS_1D_AL)	CE267	N	0.1	mg/kg	n/t	n/t	n/t	n/t
>C6-C8 Aliphatic (HS_1D_AL)	CE267	N	0.1	mg/kg	n/t	n/t	n/t	n/t
>C8-C10 Aliphatic (HS_1D_AL)	CE267	N	0.1	mg/kg	n/t	n/t	n/t	n/t
>C10-C12 Aliphatic (EH_2D_AL)	CE250	N	1	mg/kg	n/t	n/t	n/t	n/t
>C12-C16 Aliphatic (EH_2D_AL)	CE250	N	0.5	mg/kg	n/t	n/t	n/t	n/t
>C16-C21 Aliphatic (EH_2D_AL)	CE250	N	0.7	mg/kg	n/t	n/t	n/t	n/t
>C21-C35 Aliphatic (EH_2D_AL)	CE250	N	4	mg/kg	n/t	n/t	n/t	n/t

SOILS

Lab Number					78069	78070	78071	78072
Client Reference					1	1	1	1
Sample ID					BH03	BH07	TP01	BH08
Depth (m)					5.20 - 5.30	7.00	2.00 - 2.40	6.00
Sampling Date					13/11/2025	13/11/2025	13/11/2025	13/11/2025
Test	**Method**	**Accred**	**LoD**	**Units**				
>C35-C44 Aliphatic (EH_2D_AL)	CE250	N	0.5	mg/kg	n/t	n/t	n/t	n/t
>C5-C7 Aromatic (HS_1D_AR)	CE267	N	0.01	mg/kg	n/t	n/t	n/t	n/t
>C7-C8 Aromatic (HS_1D_AR)	CE267	N	0.01	mg/kg	n/t	n/t	n/t	n/t
>C8-C10 Aromatic (HS_1D_AR)	CE267	N	0.01	mg/kg	n/t	n/t	n/t	n/t
>C10-C12 Aromatic (EH_2D_AR)	CE250	N	0.6	mg/kg	n/t	n/t	n/t	n/t
>C12-C16 Aromatic (EH_2D_AR)	CE250	N	1	mg/kg	n/t	n/t	n/t	n/t
>C16-C21 Aromatic (EH_2D_AR)	CE250	N	2	mg/kg	n/t	n/t	n/t	n/t
>C21-C35 Aromatic (EH_2D_AR)	CE250	N	4.5	mg/kg	n/t	n/t	n/t	n/t
>C35-C44 Aromatic (EH_2D_AR)	CE250	N	2	mg/kg	n/t	n/t	n/t	n/t
Wet Chem								
pH	CE004	M	0.1	pH units	8.6	8.5	7.7	8.6

METHOD DETAILS

METHOD	TESTNAME	METHOD SUMMARY	ANALYSIS BASIS
CE267	VPH in Soil	HS-GCFID	As submitted sample
CE250	GCXGC in Soil	DCM Extraction and GCxGC-FID	As submitted sample
SUBCON	Asbestos Soil	HSG248	Air Dried Sample
CE061	W. Sol Metals	ICPOES	Air dried sample
CE062	Acid Soluble Sulphate in Soils	HCl Extract and ICPOES	Air dried sample
CE264	Metals by ICP in Soil	ICPOES	Air dried sample
CE267	BTEX in Soils	Analysis by HSGCFID	As submitted sample
CE261	Anions by Discrete Analyser in Soils	Gallery	Air dried sample
CE263	ChromiumVI by Discrete Analyser in Soil	Gallery	Air dried sample
CE087	PAH in Soil	DCM Extraction and GCMS	As submitted sample
CE208	Chromium Hexavalent in Soil	Colorimetry	Air dried sample

REPORT INFORMATION

Report No.:25-11610, issue number 3

Key	
U	ISO17025 Accredited Result
M	ISO17025 and MCERTS Accredited Result
N	Do not currently hold accreditation
^	MCERTS accreditation not applicable for sample matrix
*	ISO17025 accreditation not applicable for sample matrix
S	Subcontracted
I/S	Insufficient Sample
U/S	Unsuitable sample
N/T	Not tested
<	Means "less than"
>	Means "greater than"

LOD refers to limit of detection, except in the case of pH soils and pH waters where it means limit of discrimination.

This report shall not be reproduced except in full, without prior written approval.

Opinions and interpretations expressed herein are outside the UKAS accreditation scope.

All testing carried out at Unit 6 Parkhead, Stanley, DH9 7YB, except for subcontracted testing.

The results relate only to the sample received.

Unless otherwise stated, sample information has been provided by the client. This may affect the validity of the results.

Moisture Content Calculated on a Wet Weight basis (at 30°C)

Unless otherwise stated, Chemtech Environmental Ltd was not responsible for sampling.

Where sampling was undertaken by Chemtech Environmental Limited it is outside the UKAS accreditation scope.

Methods, procedures and performance data are available on request.

Results reported herein relate only to the material supplied to the laboratory.

BTEX compounds are identified by retention time only and may include interference from co-eluting compounds.

For soils and solids, all results are reported on a dry basis (30°C). Samples dried at no more than 30°C in a drying cabinet.

For soils and solids, analytical results are inclusive of stones and 'inert' material, where applicable.

'Client Reference', 'Sample ID', 'Sample Location', 'Sample Type', 'Depth', 'Sample Date' and 'Sample Time' information is provided by the customer

Sample Retention and Disposal

All soil samples will be retained for a period of 4 weeks from the point of receipt

All water samples will be retained for a period of 2 weeks from the point of Reporting

Charges may apply to extended sample storage

TPH Classification - HWOL Acronym System

HS	Headspace analysis
EH	Extractable Hydrocarbons - i.e. everything extracted by the solvent
CU	Clean-up - e.g. by florisil, silica gel
1D	GC - Single coil gas chromatography
Total	Aliphatics & Aromatics
AL	Aliphatics only
AR	Aromatics only
2D	GC-GC - Double coil gas chromatography
#1	EH_Total but with humics mathematically subtracted
#2	EH_Total but with fatty acids mathematically subtracted
_	Operator - underscore to separate acronyms (exception for +)
+	Operator to indicate cumulative e.g. EH+HS_Total or EH_CU+HS_Total
MS	Mass Spectrometry

Unless specifically identified (noted as "(B)" in analyte name) all internal analysis performed at Durham site

Vat Reg No. 772 5703 18 Registered in England number 4284013

Human Health Assessment Summary - Soils Test Data						Stratum:	MG	TILL	TILL	TS	MG	MG	TILL	TILL	MG	MG	MG	MG	TILL	BoM	BoM	TILL	TS	BoM	BoM
						Location:	SA03	TP01	TP01	TP02	TP03	TP04	TP05	TP06	TP07	TP08	TP09	TP12	BH02	BH02	BH03	BH04	BH05	BH07	BH08
						Depth:	0.3-0.5	0.6-1.0	2.0-2.4	0.1-0.3	0.1-0.3	0.6-0.7	1.0-1.2	0.6-1.0	0.1-0.3	0.1-0.3	0.35-0.6	0.1-0.3	1.2	4.0	5.2-5.3	3.0	0.1-0.3	7.0	6.0
						Date:																			
Contaminant	**GAC (mg/kg)**	**No. Samples**	**Min. Value**	**Max. Value**	**No. Samples ≥GAC**																				
Moisture Content	-	19	9.1	33.8	-		16.1	13.8	11.7	21.3	17.8	12.8	11.4	21.9	27.7	17.0	19.5	19.4	15.4	9.1	14.0	15.2	33.8	16.9	9.5
Soil Organic Matter	-	12	0.53	12.10	-		7.79	1.91		9.66	8.45	0.53	1.43	2.91	12.10	5.10	11.00	11.80					11.80		
pH	-	19	6.2	8.6	-		6.3	6.5	7.7	6.2	6.7	7.0	7.9	7.2	7.4	7.4	7.1	7.4	8.0	8.6	8.6	8.5	6.4	8.5	8.6
Water Soluble Sulphate (2:1 Leachate Equivalent) (mg/l)	Note mg/l	19	< LOD	216.00	-		216	13.1	< 10.0	22.7	14.8	20.0	16.7	25.1	29.9	53.8	51.7	27.5	33.1	19.3	23.3	13.8	20.2	36.0	37.9
Arsenic	640	12	5.3	35.8	0		15.8	6.1		19.9	21.9	35.8	5.3	8.3	15.0	11.8	15.8	22.8					25.1		
Cadmium	190	12	< LOD	5.10	0		3.0	< 1.6		< 1.6	1.7	< 1.6	< 1.6	< 1.6	< 1.6	< 1.6	< 1.6	5.1					2.4		
Chromium (III)	8600	12	14.4	124.0	0		124.0	14.4		32.6	26.9	19.5	17.3	35.3	37.4	29.5	21.3	25.6					38.8		
Hexavalent Chromium (VI)	33	12	< LOD	<LOD	0		< 0.04	< 0.04		< 0.04	< 0.04	< 0.04	< 0.04	< 0.04	< 0.04	< 0.04	< 0.04	< 0.04					< 0.04		
Copper	68000	12	16.1	83.2	0		72.2	18.0		50.4	68.6	16.1	20.9	27.3	52.1	30.9	57.3	73.0					83.2		
Lead	2300	12	11.0	334.0	0		99.1	66.3		244.0	208.0	24.5	11.0	112.0	194.0	94.7	129.0	137.0					334.0		
Mercury	58.0	12	< LOD	1.6	0		< 0.7	< 0.7		0.9	< 0.7	< 0.7	< 0.7	< 0.7	0.9	< 0.7	< 0.7	< 0.7					1.6		
Nickel	980	12	8.0	29.4	0		29.4	8.0		19.8	24.5	15.6	15.3	13.4	17.2	15.5	26.2	29.2					28.0		
Selenium	12000	12	< LOD	4.9	0		< 3.0	3.5		< 3.0	4.9	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0					3.0		
Zinc	730000	12	34.0	357.0	0		311.0	35.8		107.0	157.0	34.0	39.4	79.1	149.0	107.0	94.3	357.0					180.0		
Naphthalene	1100.0	12	< LOD	0.113	0		< 0.016	< 0.016		0.031	0.041	< 0.016	< 0.016	< 0.016	0.033	0.034	0.031	0.045					0.113		
Acenaphthylene	100000	12	< LOD	0.017	0		< 0.015	< 0.015		< 0.015	< 0.015	< 0.015	< 0.015	< 0.015	< 0.015	< 0.015	< 0.015	< 0.015					0.017		
Acenaphthene	100000	12	< LOD	0.510	0		< 0.013	< 0.013		0.035	0.026	< 0.013	< 0.013	< 0.013	0.017	0.123	0.028	0.050					0.510		
Fluorene	71000	12	< LOD	0.320	0		< 0.013	< 0.013		0.024	0.021	< 0.013	< 0.013	< 0.013	0.015	0.080	0.025	0.032					0.320		
Phenanthrene	23000	12	< LOD	2.640	0		0.088	0.026		0.553	0.296	< 0.014	0.019	0.100	0.192	1.480	0.273	0.399					2.640		
Anthracene	540000	12	< LOD	0.518	0		0.027	< 0.017		0.106	0.071	< 0.017	< 0.017	0.044	0.053	0.422	0.071	0.102					0.518		
Fluoranthene	23000	12	< LOD	3.100	0		0.209	0.055		1.750	0.679	< 0.017	< 0.017	0.274	0.433	2.770	0.437	0.766					3.100		
Pyrene	54000	12	< LOD	2.710	0		0.202	0.050		1.570	0.661	< 0.016	< 0.016	0.288	0.409	2.630	0.459	0.717					2.710		
Benzo(a)anthracene	180	12	< LOD	1.340	0		0.130	0.030		0.750	0.427	< 0.012	< 0.012	0.176	0.253	1.270	0.319	0.443					1.340		
Chrysene	350	12	< LOD	1.290	0		0.111	0.031		0.674	0.397	< 0.028	< 0.028	0.144	0.247	1.150	0.298	0.376					1.290		
Benzo(b)fluoranthene	45.0	12	< LOD	1.450	0		0.168	0.036		0.713	0.532	< 0.020	< 0.020	0.176	0.332	1.380	0.432	0.533					1.450		
Benzo(k)fluoranthene	1200	12	< LOD	0.584	0		0.067	< 0.025		0.287	0.229	< 0.025	< 0.025	0.068	0.126	0.584	0.162	0.223					0.546		
Benzo(a)pyrene	36.0	12	< LOD	1.250	0		0.144	0.031		0.615	0.466	< 0.019	< 0.019	0.158	0.278	1.220	0.445	0.504					1.250		
Indeno(1,2,3-cd)pyrene	510	12	< LOD	1.010	0		0.137	0.030		0.470	0.426	< 0.019	< 0.019	0.121	0.215	1.010	0.413	0.428					0.980		
Dibenz(a,h)anthracene	3.60	12	< LOD	0.186	0		0.024	< 0.017		0.096	0.082	< 0.017	< 0.017	0.022	0.038	0.149	0.086	0.070					0.186		
Benzo(ghi)perylene	4000	12	< LOD	0.764	0		0.106	0.023		0.371	0.345	< 0.019	< 0.019	0.106	0.190	0.763	0.344	0.323					0.764		
Asbestos Detected (Detected or Not-Detected)	Y	6	0.00	0.00	0		NAD				NAD				NAD	NAD	NAD	NAD							
Petroleum Hydrocarbons Aliphatic >EC5-EC6	12000	1	< LOD	<LOD	0										< 0.10										
Petroleum Hydrocarbons Aliphatic >EC6-EC8	40000	1	< LOD	<LOD	0										< 0.10										
Petroleum Hydrocarbons Aliphatic >EC8-EC10	11000	1	< LOD	<LOD	0										< 0.10										
Petroleum Hydrocarbons Aliphatic >EC10-EC12	47000	1	< LOD	<LOD	0										< 1.0										
Petroleum Hydrocarbons Aliphatic >EC12-EC16	90000	1	< LOD	<LOD	0										< 0.5										
Petroleum Hydrocarbons Aliphatic >EC16-EC35	1800000	1	< LOD	<LOD	0										< 0.7										
Petroleum Hydrocarbons Aliphatic >EC35-EC44	1800000	1	< LOD	<LOD	0										< 4.0										
Petroleum Hydrocarbons Aromatic >EC5-EC7	86000	1	< LOD	<LOD	0										< 0.5										
Petroleum Hydrocarbons Aromatic >EC7-EC8	180000	1	< LOD	<LOD	0										< 0.010										
Petroleum Hydrocarbons Aromatic >EC8-EC10	17000	1	< LOD	<LOD	0										< 0.010										
Petroleum Hydrocarbons Aromatic >EC10-EC12	34000	1	< LOD	<LOD	0										< 0.010										
Petroleum Hydrocarbons Aromatic >EC12-EC16	38000	1	1.3	1.3	0										1.3										
Petroleum Hydrocarbons Aromatic >EC16-EC21	28000	1	2.2	2.2	0										2.2										
Petroleum Hydrocarbons Aromatic >EC21-EC35	28000	1	< LOD	<LOD	0										< 2.0										
Petroleum Hydrocarbons Aromatic >EC35-EC44	28200	1	7.8	7.8	0										7.8										
Benzene	90.00	1	< LOD	<LOD	0										< 2.0										
Toluene	180000	1	< LOD	<LOD	0										< 0.001										
Ethyl benzene	27000	1	< LOD	<LOD	0										< 0.001										
o-Xylene	14000	1	< LOD	<LOD	0										< 0.002										
m- & p-Xylene	61000	1	< LOD	<LOD	0										< 0.002										
MTBE	24000	1	< LOD	<LOD	0										< 0.002										
Mean Average SOM	**7.0**																								
Mean Average pH	**7.5**																								
Assessment Scenario Selected:	**Commercial 6% SOM**																								
Job Number:	**C6035**																								
Client:	**Ask Real Estate MBP Limited**																								
Site:	**Manchester Business Park, Aviator Way**																								
Stratum:	**Combined Results**																								

Values in RED are > the relevant screening levels and further assessment is required. Exceedance of the screening levels alone may not mean a risk is posed.

APPENDIX E

Monitoring Results

Ground Gas Monitoring Results

BROWNFIELD SOLUTIONS LTD

CLIENT:	Date	Operator	Analsyer	Weather Observations			Temp (°C)	Pressure Trend	Min Barometric Pressure (mb)	Notes
ASK REAL ESTATE MBP LTD	26/11/2025	AR	GFM436	Overcast	Light breeze	Cold	6	Steady	1017	
JOB NO.	02/12/2025	GK	GFM436	Sunny	Light breeze	Cold	5	Rising	998	
C6035	19/12/2025	AR	GFM436	Sunny	Light breeze	Cold	8	Steady	1010	
SITE:	06/01/2026	AR	GFM436	Light rain	Light breeze	Cold	0	Falling	1010	
MANCHESTER BUSINESS PARK, AVIATOR WAY										

Notes: mb = milibars; CH_4 = methane; LEL = lower explosive limit = 5%v/v; CO_2 = carbon dioxide; O_2 = oxygen; CO=carbon monoxide; H_2S = hydrogen sulphide; TVOC= Total volatile organic compounds; PPM = parts per million. Where the flow is less than the limit of detection of the instrument, the detection limit is reported (Highlighted in green). Gas Screening Values (GSVs) are rounded to 3 decimal places. Calibration Records for analysers used availble on request.

Date	Time	Location	Response zone (m)		Pressures (mb)		Gas flows (l/hr)		CH_4 (%v/v)		CH_4 (%LEL)		CO_2 (%v/v)		O_2 (%v/v)		Other Gases (PPM)			Depth to Water (m)	Well Base (m)	Gas Screening Value (CH_4) (l/hr)	Gas Screening Value (CO_2) (l/hr)	Notes
					Atmospheric Pressure	Relative Well Pressure	Initial	Steady	Peak	Steady	Peak	Steady	Peak	Steady	Peak	Steady	CO	H_2S	TVOC (PID)					
					Summary Statistcs																			
			Max. values:		1017	238.0	55.4	22.0	0.0	0.0	0.0	0.0	2.0	2.0	20.2	20.5	80.0	0.0	0.0	0.8	4.9	0.000	0.440	Highlight Box - Methane >1.0% v/v
			Min. values:		990	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	14.4	15.5	0.0	0.0	0.0	0.0	3.4	0.000	0.000	Highlight Box - Carbon Dioxide >5.0% v/v
			Top	Bottom	Worst-case (note - not worst credible) GSVs based on maximum recorded steady flow and maximum individual peak concentrations:																	0.000	0.440	Highlight Box - Water above Response Zone
Visit 1																								
	PM	Ambient			1009					0.0				0.0		20.5								
26/11/2025	15:26	BH02	1.00	5.00	1017	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	20.0	20.0	0.0	0.0		0.00	3.62	0.000	0.000	Test stopped early due to flooded well.
26/11/2025	15:08	BH04	1.00	5.00	1017	238.0	29.3	22.0	0.0	0.0	0.0	0.0	2.0	2.0	18.9	18.9	0.0	0.0		0.00	4.89	0.000	0.440	Pipe overflowed with water.
26/11/2025	14:33	BH07	1.00	5.00	1017	83.0	55.4	8.8	0.0	0.0	0.0	0.0	0.8	0.8	18.1	18.1	80.0	0.0		0.56	4.07	0.000	0.070	
		Ambient			1008					0.0				0.0		20.3								
Visit 2																								
	AM	Ambient			990					0.0				0.0		20.5								
02/12/2025	11:35	BH02	1.00	5.00	998	80.0	8.6	6.7	0.0	0.0	0.0	0.0	0.4	0.3	18.6	18.6	0.0	0.0		0.46	3.62	0.000	0.027	Bailed at 11:35 and left for 20 minutes.
02/12/2025	11:20	BH04	1.00	5.00	998	62.0	6.9	5.7	0.0	0.0	0.0	0.0	0.5	0.5	18.5	18.5	0.0	0.0		0.20	4.84	0.000	0.029	Bailed at 10:45 and left for 35 minutes.
02/12/2025	10:10	BH07	1.00	5.00	998	18.0	3.9	2.2	0.0	0.0	0.0	0.0	1.5	1.5	18.6	18.6	0.0	0.0		0.43	3.40	0.000	0.033	
		Ambient			990					0.0				0.0		20.4								
Visit 3																								
	AM	Ambient			1004					0.0				0.0		20.4								
19/12/2025	10:16	BH02	1.00	5.00	1010	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	20.1	20.3	0.0	0.0		0.00	3.60	0.000	0.000	Bailed and returned to monitor after 30 minutes
19/12/2025	10:29	BH04	1.00	5.00	1010	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	20.2	20.2	0.0	0.0		0.00	4.74	0.000	0.000	Bailed and returned to monitor after 57 minutes
19/12/2025	10:38	BH07	1.00	5.00	1010	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	20.2	20.2	0.0	0.0		0.62	3.85	0.000	0.000	Bailed and returned to monitoring after 56 minutes.
		Ambient			1002					0.0				0.0		20.4								
Visit 4																								
	PM	Ambient			1005					0.0				0.0		20.0								
06/01/2026	13:16	BH02	1.00	5.00	1011	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.5	1.5	14.4	15.5	0.0	0.0		0.62	3.42	0.000	0.000	
06/01/2026	13:27	BH04	1.00	5.00	1011	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.9	0.9	18.1	18.1	0.0	0.0		0.35	4.72	0.000	0.000	Test stopped due to high groundwater. Bailed and returned to dip but the water was over the response zone.
06/01/2026	14:10	BH07	1.00	5.00	1010	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	19.8	19.8	0.0	0.0		0.8	3.76	0.000	0.000	
		Ambient			1000					0.0				0.0		20.0								

TEST DATE AND CONDITIONS		
Date	23/01/2025	
Atmospheric Pressure	981	mB
Ambient Temperature	20.3	°C
Environics Serial No.	5089	

GAS DATA LTD
Unit D
Earlplace Business Park
Fletchamstead Highway
Coventry
CV4 9XL
Tel 02476303311 Fax 02476307711

GFM436 Final Inspection & Calibration Check Certificate

Customer	Brownfield Solutions
Certificate Number	125876
Order Number	340981

Serial Number	13233
Software Version	G436-00.0029/0010

Recalibration DUE Date
23/01/26

Instrument Checks					
Keyboard	✓		Display Contrast	✓	
Pump Flow In	500	*Accept > 200 cc/min*	Pump Flow @ -200mB	300	*Accept > 200 cc/min*
Clock Set / Running	✓		Labels Fitted	✓	

Gas Checks						
	CH_4		CO_2		O_2	
Sensor	Instrument Gas Readings %	True Gas Value %	Instrument Gas Readings %	True Gas Value %	Instrument Gas Readings %	True Gas Value %
	60.1	60	39.4	40	20.9	20.9
	Accept ±3.0		*Accept ±3.0*		*Accept ±0.5*	
	5.0	5	5.1	5	6.0	6
	Accept ±0.3		*Accept ±0.3*		*Accept ±0.3*	
Zero Reading 100% N2	0.0	0	0.0	0	0.0	0
	Accept ±0.0		*Accept ±0.0*		*Accept ±0.1*	

Optional Gas Checks						
Applied Gas & Range		Concentration Tested @ (ppm)	Instrument Readings *(ppm)*			
			Zero Reading		Instrument Gas Reading	
Gas Type	Range *(ppm)*					
H2S	5000	*1500*	0	*Accept ±0.0*	1500	*Accept ±5.0%*
CO	2000	*1000*	0	*Accept ±0.0*	995	*Accept ±5.0%*
Hexane	*2.0%*	2.0%	0	*Accept ±0.0*	1.99	*Accept ±10.0%*

Cross Gas Effects									
Applied Gas *(ppm)*		Instrument Readings *(ppm)*							
Gas Type	Concentration	Toxic 1:	H2S	Toxic 2:	CO	Toxic 3:	HEX		
H2S	*1500*	1500		0		0			
CO	*1000*	90		995		0			
Hexane	*2.0%*	0		0		1.99			

Pressure Checks			
Atmospheric Pressure [AP] *(mB)*			
Current Atmospheric Pressure (mB)		Instrument Atmospheric Pressure Reading (mB)	
AP Open Ports		981	*Accept ±2.0*
AP Port (Internal)	*+800 mB*	800	*Accept ±5.0*
	+1200mb	1200	*Accept ±5.0*

Flow Checks					
Borehole Flow			Differential Pressure		
Applied Reading *(l/h)*	Instrument Reading *(l/h)*		Applied Pressure *(Pa)*	Instrument Reading *(Pa)*	
-30	-30.0	*Accept ±3.0*	-396	-395	*Accept ±50*
-3	-3.0	*Accept ±1.0*	-17	-17	*Accept ±6.0*
0	0.0	*Accept ±0.0*	0	0	*Accept ±0.5*
3	3.0	*Accept ±0.5*	15	14	*Accept ±3.0*
30	30.0	*Accept ±3.0*	332	333	*Accept ±50*
60	60.4	*Accept ±6.0*	994	1009	*Accept ±130*
90	90.3	*Accept ±9.0*	1945	1965	*Accept ±250*

Temperature Checks		
Calibration Temperature Applied Temperature °C	Instrument Temperature Reading °C	
-10	-10.0	*Accept ±2.0*
0	0.0	*Accept ±1.0*
30	30.0	*Accept ±1.0*
60	60.0	*Accept ±1.0*
100	100.0	*Accept ±1.0*

Technician:	Date Tested:
Jack Rutland	*23/01/2025*

The instrument identified by the serial number stated above has been tested by Gas Data personnel for calibration accuracy on the date and under the ambient conditions stated. Gas Data Ltd internal BS EN ISO9001:2015, BS EN ISO14001:2015, BS EN ISO45001:2018 compliant workshop procedures were followed to apply known calibration test gases, gas flow rates, pressures and temperatures of the values stated. The results displayed on the instrument at each stage are recorded above.

Gas Data Ltd is certified to BS EN ISO9001:2015, BS EN ISO14001:2015, BS EN ISO45001:2018.

TEST DATE AND CONDITIONS		
Date	23.1.25	
Atmospheric Pressure	981	mB
Ambient Temperature	20.3	°C
Environics Serial No.	5089	

GAS DATA LTD
Unit D
Earlplace Business Park
Fletchamstead Highway
Coventry
CV4 9XL
UK +44 (0) 24 7630 3311

GAS DATA
LISTEN · ANALYSE · INFORM

GFM436-1 OUTWARD INSPECTION & QUALITY CHECK SHEET

INSTRUMENT DETAILS			
SO Number	Instrument Type	Instrument Serial Number + SW Version	Job Number(s)
340981	GFM436	13255 G436-29/10	125876

Calibration Technician ..... **Date** 23.1.25

Inspection Technician ..... **Date** 24.1.25

INSTRUMENT CHECKS		Pass (P), Fail (F) or not applicable (NA)	INSTRUMENT PACKING LIST			Tick if included
Function Tests	Dust Caps Fitted	P	Instrument			✓
	Keyboard Test (All Keys)	P	Leather Case			✓
	Backlight	P	Instrument Strap			✓
	Clock Set / Running	P	AC Battery Charger (UK)			X
	Comms Test	P	AC Battery Charger (EURO)			X
	Pump Flow Test (In & Out)	P	AC Battery Charger (US)			X
	Overall Leak Test (30mB)	n/a	AC Battery Charger (AUS)			X
	Battery Charge Test	P	Gas Sample Pipe - *(new issue)*			✓
	Service Date set to?	23.1.26	Flow Sample Pipe - *(new issue)*			✓
Channel Tests	Data Logging Enabled?	P	Hard Carry Case			✓
	Verify CH4/LEL/Hexane/PID	P	Spares Pot			X
	Verify CO2	P	Allen Key			X
	Verify O2	P	Temperature Probe			X
	Verify H2S	P	Vane Anemometer			X
	Verify CO	P	USB Cable			X
	Verify LEL	P	USB Memory stick			✓
	Verify 1st Option Gas	N/A	SM V5 Software	Ver	6.05	✓
	Verify Atmospheric pressure	P	Internal Filter Pack	Qty		X
	Verify differential pressure	P	External Filter Pack	Qty		X
	Verify flow	P	Field Guide			X
	Verify temperature probe input	P	**Extra Items:**			
	Verify vane anemometer input	P	Smoke Tubes			
DataBase Checks	Jobcard(s) completed and signed	P				
	Jobcard(s) booked off database	P				
	Calibration certificate completed	P				
	Complete & print QI record	n/a				
Label Checks	No. of Calibration label fitted	GDC 13656	**Comments:**			
	MCERTS label displayed	N/A				
	Warranty label fitted	P				
H2S Range	H2S Range from Sales Order	5000 ppm				
	H2S Range from Cal Cert	5000 ppm				
	Over-range value correct?	P				
QA Cylinders Used	No. of High Range CH4/CO2	60194				
	No. of Low Range CH4/CO2/O2	66569				
	No. of H2S	C037255				
	No. of CO	66503				
	No. of Optional Cylinder	N/A				

APPENDIX F

Waste Assessment Report

Waste Classification Report

HazWasteOnline™ classifies waste as either **hazardous** or **non-hazardous** based on its chemical composition, related legislation and the rules and data defined in the current UK or EU technical guidance (Appendix C) (note that HP 9 Infectious is not assessed). It is the responsibility of the classifier named below to:

a) understand the origin of the waste
b) select the correct List of Waste code(s)
c) confirm that the list of determinands, results and sampling plan are fit for purpose
d) select and justify the chosen metal species (Appendix B)
e) correctly apply moisture correction and other available corrections
f) add the meta data for their user-defined substances (Appendix A)
g) check that the classification engine is suitable with respect to the national destination of the waste (Appendix C)

To aid the reviewer, the laboratory results, assumptions and justifications managed by the classifier are highlighted in pale yellow.

5I0DF-GKT42-GVBU8

Report is invalid if pages are removed.

Job name

C6035 Manchester Business Park

Description/Comments

Project

C6035

Site

Manchester Business Park

Classified by

Name:
Jack Mather
Date:
08 Dec 2025 13:26 GMT
Telephone:
01606334844

Company:
Brownfield Solutions Limited
173-183 Witton Street
Northwich
CW9 5LP

HazWasteOnline™ provides a two day, hazardous waste classification course that covers the use of the software and both basic and advanced waste classification techniques. Certification has to be renewed every 3 years.

HazWasteOnline™ Certification: **CERTIFIED**

Course	Date
Hazardous Waste Classification	09 Feb 2023
Most recent 3 year Refresher	02 Dec 2025

Next 3 year Refresher due by Dec 2028

Purpose of classification

2 - Material Characterisation

Address of the waste

Unit 2000, Aviator Way, near Manchester Airport, Greater Manchester **Post Code** M22 1GE

SIC for the process giving rise to the waste

41100 Development of building projects

Description of industry/producer giving rise to the waste

Previous small number of houses and plant nursery and greenhouses.

Description of the specific process, sub-process and/or activity that created the waste

Commercial development of units for light industrial and ancillary offices.

Description of the waste

Mix of made ground and natural strata generally comprising brick, concrete, glass, plastic, ceramic, metal. Strata was generally cohesive with intermittent granular soils.

Job summary

#	Sample name	Depth [m]	Classification Result	Hazard properties	Page
1	SA03	0.30-0.50	Non Hazardous		3
2	TP01	0.60-1.00	Non Hazardous		5
3	TP01[2]	2.00-2.40	Non Hazardous		7
4	TP02	0.10-0.30	Non Hazardous		8
5	TP03	0.10-0.30	Non Hazardous		10
6	TP04	0.60-0.70	Non Hazardous		12
7	TP05	1.00-1.20	Non Hazardous		14
8	TP06	0.60-1.00	Non Hazardous		16
9	TP07	0.10-0.30	Non Hazardous		18
10	TP08	0.10-0.30	Non Hazardous		21
11	TP09	0.35-0.60	Non Hazardous		23
12	TP12	0.10-0.30	Non Hazardous		25
13	BH02	1.2	Non Hazardous		27
14	BH02[2]	4	Non Hazardous		28
15	BH03	5.20-5.30	Non Hazardous		29
16	BH04	3	Non Hazardous		30
17	BH05	0.10-0.30	Non Hazardous		31
18	BH07	7	Non Hazardous		33
19	BH08	6	Non Hazardous		34

Related documents

#	Name	Description
1	BSL Suite	waste stream template used to create this Job

Report

Created by: Jack Mather

Created date: 08 Dec 2025 13:26 GMT

Appendices	Page
Appendix A: Classifier defined and non GB MCL determinands	35
Appendix B: Rationale for selection of metal species	36
Appendix C: Version	36

Classification of sample: SA03

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample name:
SA03
Sample Depth:
0.30-0.50 m
Moisture content:
16.1%
(wet weight correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 16.1% Wet Weight Moisture Correction applied (MC)

#	Determinand	EU CLP index number	EC Number	CAS Number	CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
1	pH			PH		6.3	pH		6.3	pH	6.3 pH		
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		15.8	mg/kg	1.32	17.502	mg/kg	0.00175 %	✓	
3	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	1	3	mg/kg	1.285	3.235	mg/kg	0.000252 %	✓	
4	chromium in Cr(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<0.04	mg/kg	1.923	<0.0769	mg/kg	<0.00000769 %		<**LOD**
5	chromium in Cr(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		124	mg/kg	1.462	152.054	mg/kg	0.0152 %	✓	
6	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		72.2	mg/kg	1.126	68.202	mg/kg	0.00682 %	✓	
7	lead { lead compounds with the exception of those specified elsewhere in this Annex }	082-001-00-6			1	99.1	mg/kg		83.145	mg/kg	0.00831 %	✓	
8	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.7	mg/kg	1.353	<0.947	mg/kg	<0.0000947 %		<**LOD**
9	nickel { nickel dihydroxide }	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]		29.4	mg/kg	1.579	38.961	mg/kg	0.0039 %	✓	
10	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				<3	mg/kg	1.405	<4.215	mg/kg	<0.000422 %		<**LOD**
11	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		311	mg/kg	1.245	324.782	mg/kg	0.0325 %	✓	
12	naphthalene	601-052-00-2	202-049-5	91-20-3		<0.016	mg/kg		<0.016	mg/kg	<0.0000016 %		<**LOD**
13	acenaphthylene		205-917-1	208-96-8		<0.015	mg/kg		<0.015	mg/kg	<0.0000015 %		<**LOD**
14	acenaphthene		201-469-6	83-32-9		<0.013	mg/kg		<0.013	mg/kg	<0.0000013 %		<**LOD**

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		EU CLP index number	EC Number	CAS Number									
15		fluorene				<0.013	mg/kg		<0.013	mg/kg	<0.0000013 %		<**LOD**
			201-695-5	86-73-7									
16		phenanthrene				0.088	mg/kg		0.0738	mg/kg	0.00000738 %	✓	
			201-581-5	85-01-8									
17		anthracene				0.027	mg/kg		0.0227	mg/kg	0.00000227 %	✓	
			204-371-1	120-12-7									
18		fluoranthene				0.209	mg/kg		0.175	mg/kg	0.0000175 %	✓	
			205-912-4	206-44-0									
19		pyrene				0.202	mg/kg		0.169	mg/kg	0.0000169 %	✓	
			204-927-3	129-00-0									
20		benzo[a]anthracene				0.13	mg/kg		0.109	mg/kg	0.0000109 %	✓	
		601-033-00-9	200-280-6	56-55-3									
21		chrysene				0.111	mg/kg		0.0931	mg/kg	0.00000931 %	✓	
		601-048-00-0	205-923-4	218-01-9									
22		benzo[b]fluoranthene				0.168	mg/kg		0.141	mg/kg	0.0000141 %	✓	
		601-034-00-4	205-911-9	205-99-2									
23		benzo[k]fluoranthene				0.067	mg/kg		0.0562	mg/kg	0.00000562 %	✓	
		601-036-00-5	205-916-6	207-08-9									
24		benzo[a]pyrene; benzo[def]chrysene				0.144	mg/kg		0.121	mg/kg	0.0000121 %	✓	
		601-032-00-3	200-028-5	50-32-8									
25		indeno[123-cd]pyrene				0.137	mg/kg		0.115	mg/kg	0.0000115 %	✓	
			205-893-2	193-39-5									
26		dibenz[a,h]anthracene				0.024	mg/kg		0.0201	mg/kg	0.00000201 %	✓	
		601-041-00-2	200-181-8	53-70-3									
27		benzo[ghi]perylene				0.106	mg/kg		0.0889	mg/kg	0.00000889 %	✓	
			205-883-8	191-24-2									
										Total:	0.0688 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: TP01

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample name:
TP01
Sample Depth:
0.60-1.00 m
Moisture content:
13.8%
(wet weight correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 13.8% Wet Weight Moisture Correction applied (MC)

#	Determinand	EU CLP index number	EC Number	CAS Number	CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
1	pH			PH		6.5	pH		6.5	pH	6.5 pH		
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		6.1	mg/kg	1.32	6.943	mg/kg	0.000694 %	✓	
3	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	1	<1.6	mg/kg	1.285	<2.056	mg/kg	<0.00016 %		**<LOD**
4	chromium in Cr(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<0.04	mg/kg	1.923	<0.0769	mg/kg	<0.00000769 %		**<LOD**
5	chromium in Cr(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		14.4	mg/kg	1.462	18.142	mg/kg	0.00181 %	✓	
6	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		18	mg/kg	1.126	17.469	mg/kg	0.00175 %	✓	
7	lead { lead compounds with the exception of those specified elsewhere in this Annex }	082-001-00-6			1	66.3	mg/kg		57.151	mg/kg	0.00572 %	✓	
8	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.7	mg/kg	1.353	<0.947	mg/kg	<0.0000947 %		**<LOD**
9	nickel { nickel dihydroxide }	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]		8	mg/kg	1.579	10.892	mg/kg	0.00109 %	✓	
10	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				3.5	mg/kg	1.405	4.239	mg/kg	0.000424 %	✓	
11	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		35.8	mg/kg	1.245	38.411	mg/kg	0.00384 %	✓	
12	naphthalene	601-052-00-2	202-049-5	91-20-3		<0.016	mg/kg		<0.016	mg/kg	<0.0000016 %		**<LOD**
13	acenaphthylene		205-917-1	208-96-8		<0.015	mg/kg		<0.015	mg/kg	<0.0000015 %		**<LOD**
14	acenaphthene		201-469-6	83-32-9		<0.013	mg/kg		<0.013	mg/kg	<0.0000013 %		**<LOD**

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		EU CLP index number	EC Number	CAS Number									
15		fluorene				<0.013	mg/kg		<0.013	mg/kg	<0.0000013 %		<**LOD**
			201-695-5	86-73-7									
16		phenanthrene				0.026	mg/kg		0.0224	mg/kg	0.00000224 %	✓	
			201-581-5	85-01-8									
17		anthracene				<0.017	mg/kg		<0.017	mg/kg	<0.0000017 %		<**LOD**
			204-371-1	120-12-7									
18		fluoranthene				0.055	mg/kg		0.0474	mg/kg	0.00000474 %	✓	
			205-912-4	206-44-0									
19		pyrene				0.05	mg/kg		0.0431	mg/kg	0.00000431 %	✓	
			204-927-3	129-00-0									
20		benzo[a]anthracene				0.03	mg/kg		0.0259	mg/kg	0.00000259 %	✓	
		601-033-00-9	200-280-6	56-55-3									
21		chrysene				0.031	mg/kg		0.0267	mg/kg	0.00000267 %	✓	
		601-048-00-0	205-923-4	218-01-9									
22		benzo[b]fluoranthene				0.036	mg/kg		0.031	mg/kg	0.0000031 %	✓	
		601-034-00-4	205-911-9	205-99-2									
23		benzo[k]fluoranthene				<0.025	mg/kg		<0.025	mg/kg	<0.0000025 %		<**LOD**
		601-036-00-5	205-916-6	207-08-9									
24		benzo[a]pyrene; benzo[def]chrysene				0.031	mg/kg		0.0267	mg/kg	0.00000267 %	✓	
		601-032-00-3	200-028-5	50-32-8									
25		indeno[123-cd]pyrene				0.03	mg/kg		0.0259	mg/kg	0.00000259 %	✓	
			205-893-2	193-39-5									
26		dibenz[a,h]anthracene				<0.017	mg/kg		<0.017	mg/kg	<0.0000017 %		<**LOD**
		601-041-00-2	200-181-8	53-70-3									
27		benzo[ghi]perylene				0.023	mg/kg		0.0198	mg/kg	0.00000198 %	✓	
			205-883-8	191-24-2									
										Total:	0.0154 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: TP01[2]

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample name:
TP01[2]
Sample Depth:
2.00-2.40 m
Moisture content:
11.7%
(wet weight correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 11.7% Wet Weight Moisture Correction applied (MC)

#		Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
		EU CLP index number	EC Number	CAS Number							
1	•	pH				7.7 pH		7.7 pH	7.7 pH		
				PH							
								Total:	0%		

Key

	User supplied data
•	Determinand defined or amended by HazWasteOnline (see Appendix A)

Classification of sample: TP02

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample name:
TP02
Sample Depth:
0.10-0.30 m
Moisture content:
21.3%
(wet weight correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 21.3% Wet Weight Moisture Correction applied (MC)

#	Determinand	EU CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	pH			PH		6.2 pH		6.2 pH	6.2 pH		
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		19.9 mg/kg	1.32	20.678 mg/kg	0.00207 %	✓	
3	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	1	<1.6 mg/kg	1.285	<2.056 mg/kg	<0.00016 %		<LOD
4	chromium in Cr(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<0.04 mg/kg	1.923	<0.0769 mg/kg	<0.00000769 %		<LOD
5	chromium in Cr(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		32.6 mg/kg	1.462	37.498 mg/kg	0.00375 %	✓	
6	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		50.4 mg/kg	1.126	44.658 mg/kg	0.00447 %	✓	
7	lead { lead compounds with the exception of those specified elsewhere in this Annex }	082-001-00-6			1	244 mg/kg		192.028 mg/kg	0.0192 %	✓	
8	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		0.9 mg/kg	1.353	0.959 mg/kg	0.0000959 %	✓	
9	nickel { nickel dihydroxide }	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]		19.8 mg/kg	1.579	24.613 mg/kg	0.00246 %	✓	
10	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				<3 mg/kg	1.405	<4.215 mg/kg	<0.000422 %		<LOD
11	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		107 mg/kg	1.245	104.816 mg/kg	0.0105 %	✓	
12	naphthalene	601-052-00-2	202-049-5	91-20-3		0.031 mg/kg		0.0244 mg/kg	0.00000244 %	✓	
13	acenaphthylene		205-917-1	208-96-8		<0.015 mg/kg		<0.015 mg/kg	<0.0000015 %		<LOD
14	acenaphthene		201-469-6	83-32-9		0.035 mg/kg		0.0275 mg/kg	0.00000275 %	✓	

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		EU CLP index number	EC Number	CAS Number									
15		fluorene				0.024	mg/kg		0.0189	mg/kg	0.00000189 %	✓	
			201-695-5	86-73-7									
16		phenanthrene				0.553	mg/kg		0.435	mg/kg	0.0000435 %	✓	
			201-581-5	85-01-8									
17		anthracene				0.106	mg/kg		0.0834	mg/kg	0.00000834 %	✓	
			204-371-1	120-12-7									
18		fluoranthene				1.75	mg/kg		1.377	mg/kg	0.000138 %	✓	
			205-912-4	206-44-0									
19		pyrene				1.57	mg/kg		1.236	mg/kg	0.000124 %	✓	
			204-927-3	129-00-0									
20		benzo[a]anthracene				0.75	mg/kg		0.59	mg/kg	0.000059 %	✓	
		601-033-00-9	200-280-6	56-55-3									
21		chrysene				0.674	mg/kg		0.53	mg/kg	0.000053 %	✓	
		601-048-00-0	205-923-4	218-01-9									
22		benzo[b]fluoranthene				0.713	mg/kg		0.561	mg/kg	0.0000561 %	✓	
		601-034-00-4	205-911-9	205-99-2									
23		benzo[k]fluoranthene				0.287	mg/kg		0.226	mg/kg	0.0000226 %	✓	
		601-036-00-5	205-916-6	207-08-9									
24		benzo[a]pyrene; benzo[def]chrysene				0.615	mg/kg		0.484	mg/kg	0.0000484 %	✓	
		601-032-00-3	200-028-5	50-32-8									
25		indeno[123-cd]pyrene				0.47	mg/kg		0.37	mg/kg	0.000037 %	✓	
			205-893-2	193-39-5									
26		dibenz[a,h]anthracene				0.096	mg/kg		0.0756	mg/kg	0.00000756 %	✓	
		601-041-00-2	200-181-8	53-70-3									
27		benzo[ghi]perylene				0.371	mg/kg		0.292	mg/kg	0.0000292 %	✓	
			205-883-8	191-24-2									
										Total:	0.0432 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: TP03

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample name:
TP03
Sample Depth:
0.10-0.30 m
Moisture content:
17.8%
(wet weight correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 17.8% Wet Weight Moisture Correction applied (MC)

#	Determinand	EU CLP index number	EC Number	CAS Number	CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
1	pH			PH		6.7	pH		6.7	pH	6.7 pH		
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		21.9	mg/kg	1.32	23.768	mg/kg	0.00238 %	✓	
3	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	1	1.7	mg/kg	1.285	1.796	mg/kg	0.00014 %	✓	
4	chromium in Cr(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<0.04	mg/kg	1.923	<0.0769	mg/kg	<0.00000769 %		<**LOD**
5	chromium in Cr(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		26.9	mg/kg	1.462	32.318	mg/kg	0.00323 %	✓	
6	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		68.6	mg/kg	1.126	63.488	mg/kg	0.00635 %	✓	
7	lead { lead compounds with the exception of those specified elsewhere in this Annex }	082-001-00-6			1	208	mg/kg		170.976	mg/kg	0.0171 %	✓	
8	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.7	mg/kg	1.353	<0.947	mg/kg	<0.0000947 %		<**LOD**
9	nickel { nickel dihydroxide }	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]		24.5	mg/kg	1.579	31.81	mg/kg	0.00318 %	✓	
10	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				4.9	mg/kg	1.405	5.659	mg/kg	0.000566 %	✓	
11	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		157	mg/kg	1.245	160.635	mg/kg	0.0161 %	✓	
12	naphthalene	601-052-00-2	202-049-5	91-20-3		0.041	mg/kg		0.0337	mg/kg	0.00000337 %	✓	
13	acenaphthylene		205-917-1	208-96-8		<0.015	mg/kg		<0.015	mg/kg	<0.0000015 %		<**LOD**
14	acenaphthene		201-469-6	83-32-9		0.026	mg/kg		0.0214	mg/kg	0.00000214 %	✓	

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		EU CLP index number	EC Number	CAS Number									
15		fluorene				0.021	mg/kg		0.0173	mg/kg	0.00000173 %	✓	
			201-695-5	86-73-7									
16		phenanthrene				0.296	mg/kg		0.243	mg/kg	0.0000243 %	✓	
			201-581-5	85-01-8									
17		anthracene				0.071	mg/kg		0.0584	mg/kg	0.00000584 %	✓	
			204-371-1	120-12-7									
18		fluoranthene				0.679	mg/kg		0.558	mg/kg	0.0000558 %	✓	
			205-912-4	206-44-0									
19		pyrene				0.661	mg/kg		0.543	mg/kg	0.0000543 %	✓	
			204-927-3	129-00-0									
20		benzo[a]anthracene				0.427	mg/kg		0.351	mg/kg	0.0000351 %	✓	
		601-033-00-9	200-280-6	56-55-3									
21		chrysene				0.397	mg/kg		0.326	mg/kg	0.0000326 %	✓	
		601-048-00-0	205-923-4	218-01-9									
22		benzo[b]fluoranthene				0.532	mg/kg		0.437	mg/kg	0.0000437 %	✓	
		601-034-00-4	205-911-9	205-99-2									
23		benzo[k]fluoranthene				0.229	mg/kg		0.188	mg/kg	0.0000188 %	✓	
		601-036-00-5	205-916-6	207-08-9									
24		benzo[a]pyrene; benzo[def]chrysene				0.466	mg/kg		0.383	mg/kg	0.0000383 %	✓	
		601-032-00-3	200-028-5	50-32-8									
25		indeno[123-cd]pyrene				0.426	mg/kg		0.35	mg/kg	0.000035 %	✓	
			205-893-2	193-39-5									
26		dibenz[a,h]anthracene				0.082	mg/kg		0.0674	mg/kg	0.00000674 %	✓	
		601-041-00-2	200-181-8	53-70-3									
27		benzo[ghi]perylene				0.345	mg/kg		0.284	mg/kg	0.0000284 %	✓	
			205-883-8	191-24-2									
										Total:	0.0494 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: TP04

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample name:
TP04
Sample Depth:
0.60-0.70 m
Moisture content:
12.8%
(wet weight correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 12.8% Wet Weight Moisture Correction applied (MC)

#	Determinand	EU CLP index number	EC Number	CAS Number	CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
1	pH			PH		7	pH		7	pH	7pH		
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		35.8	mg/kg	1.32	41.217	mg/kg	0.00412 %	✓	
3	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	1	<1.6	mg/kg	1.285	<2.056	mg/kg	<0.00016 %		<LOD
4	chromium in Cr(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<0.04	mg/kg	1.923	<0.0769	mg/kg	<0.00000769 %		<LOD
5	chromium in Cr(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		19.5	mg/kg	1.462	24.852	mg/kg	0.00249 %	✓	
6	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		16.1	mg/kg	1.126	15.807	mg/kg	0.00158 %	✓	
7	lead { lead compounds with the exception of those specified elsewhere in this Annex }	082-001-00-6			1	24.5	mg/kg		21.364	mg/kg	0.00214 %	✓	
8	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.7	mg/kg	1.353	<0.947	mg/kg	<0.0000947 %		<LOD
9	nickel { nickel dihydroxide }	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]		15.6	mg/kg	1.579	21.486	mg/kg	0.00215 %	✓	
10	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				<3	mg/kg	1.405	<4.215	mg/kg	<0.000422 %		<LOD
11	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		34	mg/kg	1.245	36.903	mg/kg	0.00369 %	✓	
12	naphthalene	601-052-00-2	202-049-5	91-20-3		<0.016	mg/kg		<0.016	mg/kg	<0.0000016 %		<LOD
13	acenaphthylene		205-917-1	208-96-8		<0.015	mg/kg		<0.015	mg/kg	<0.0000015 %		<LOD
14	acenaphthene		201-469-6	83-32-9		<0.013	mg/kg		<0.013	mg/kg	<0.0000013 %		<LOD

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		EU CLP index number	EC Number	CAS Number									
15		fluorene				<0.013	mg/kg		<0.013	mg/kg	<0.0000013 %		<**LOD**
			201-695-5	86-73-7									
16		phenanthrene				<0.014	mg/kg		<0.014	mg/kg	<0.0000014 %		<**LOD**
			201-581-5	85-01-8									
17		anthracene				<0.017	mg/kg		<0.017	mg/kg	<0.0000017 %		<**LOD**
			204-371-1	120-12-7									
18		fluoranthene				<0.017	mg/kg		<0.017	mg/kg	<0.0000017 %		<**LOD**
			205-912-4	206-44-0									
19		pyrene				<0.016	mg/kg		<0.016	mg/kg	<0.0000016 %		<**LOD**
			204-927-3	129-00-0									
20		benzo[a]anthracene				<0.012	mg/kg		<0.012	mg/kg	<0.0000012 %		<**LOD**
		601-033-00-9	200-280-6	56-55-3									
21		chrysene				<0.028	mg/kg		<0.028	mg/kg	<0.0000028 %		<**LOD**
		601-048-00-0	205-923-4	218-01-9									
22		benzo[b]fluoranthene				<0.02	mg/kg		<0.02	mg/kg	<0.000002 %		<**LOD**
		601-034-00-4	205-911-9	205-99-2									
23		benzo[k]fluoranthene				<0.025	mg/kg		<0.025	mg/kg	<0.0000025 %		<**LOD**
		601-036-00-5	205-916-6	207-08-9									
24		benzo[a]pyrene; benzo[def]chrysene				<0.019	mg/kg		<0.019	mg/kg	<0.0000019 %		<**LOD**
		601-032-00-3	200-028-5	50-32-8									
25		indeno[123-cd]pyrene				<0.019	mg/kg		<0.019	mg/kg	<0.0000019 %		<**LOD**
			205-893-2	193-39-5									
26		dibenz[a,h]anthracene				<0.017	mg/kg		<0.017	mg/kg	<0.0000017 %		<**LOD**
		601-041-00-2	200-181-8	53-70-3									
27		benzo[ghi]perylene				<0.019	mg/kg		<0.019	mg/kg	<0.0000019 %		<**LOD**
			205-883-8	191-24-2									
										Total:	0.0162 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: TP05

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample name:
TP05
Sample Depth:
1.00-1.20 m
Moisture content:
11.4%
(wet weight correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 11.4% Wet Weight Moisture Correction applied (MC)

#	Determinand	EU CLP index number	EC Number	CAS Number	CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
1	pH			PH		7.9	pH		7.9	pH	7.9 pH		
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		5.3	mg/kg	1.32	6.2	mg/kg	0.00062 %	✓	
3	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	1	<1.6	mg/kg	1.285	<2.056	mg/kg	<0.00016 %		<LOD
4	chromium in Cr(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<0.04	mg/kg	1.923	<0.0769	mg/kg	<0.00000769 %		<LOD
5	chromium in Cr(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		17.3	mg/kg	1.462	22.402	mg/kg	0.00224 %	✓	
6	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		20.9	mg/kg	1.126	20.849	mg/kg	0.00208 %	✓	
7	lead { lead compounds with the exception of those specified elsewhere in this Annex }	082-001-00-6			1	11	mg/kg		9.746	mg/kg	0.000975 %	✓	
8	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.7	mg/kg	1.353	<0.947	mg/kg	<0.0000947 %		<LOD
9	nickel { nickel dihydroxide }	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]		15.3	mg/kg	1.579	21.411	mg/kg	0.00214 %	✓	
10	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				<3	mg/kg	1.405	<4.215	mg/kg	<0.000422 %		<LOD
11	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		39.4	mg/kg	1.245	43.451	mg/kg	0.00435 %	✓	
12	naphthalene	601-052-00-2	202-049-5	91-20-3		<0.016	mg/kg		<0.016	mg/kg	<0.0000016 %		<LOD
13	acenaphthylene		205-917-1	208-96-8		<0.015	mg/kg		<0.015	mg/kg	<0.0000015 %		<LOD
14	acenaphthene		201-469-6	83-32-9		<0.013	mg/kg		<0.013	mg/kg	<0.0000013 %		<LOD

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		EU CLP index number	EC Number	CAS Number									
15		fluorene				<0.013	mg/kg		<0.013	mg/kg	<0.0000013 %		<LOD
			201-695-5	86-73-7									
16		phenanthrene				0.019	mg/kg		0.0168	mg/kg	0.00000168 %	✓	
			201-581-5	85-01-8									
17		anthracene				<0.017	mg/kg		<0.017	mg/kg	<0.0000017 %		<LOD
			204-371-1	120-12-7									
18		fluoranthene				<0.017	mg/kg		<0.017	mg/kg	<0.0000017 %		<LOD
			205-912-4	206-44-0									
19		pyrene				<0.016	mg/kg		<0.016	mg/kg	<0.0000016 %		<LOD
			204-927-3	129-00-0									
20		benzo[a]anthracene				<0.012	mg/kg		<0.012	mg/kg	<0.0000012 %		<LOD
		601-033-00-9	200-280-6	56-55-3									
21		chrysene				<0.028	mg/kg		<0.028	mg/kg	<0.0000028 %		<LOD
		601-048-00-0	205-923-4	218-01-9									
22		benzo[b]fluoranthene				<0.02	mg/kg		<0.02	mg/kg	<0.000002 %		<LOD
		601-034-00-4	205-911-9	205-99-2									
23		benzo[k]fluoranthene				<0.025	mg/kg		<0.025	mg/kg	<0.0000025 %		<LOD
		601-036-00-5	205-916-6	207-08-9									
24		benzo[a]pyrene; benzo[def]chrysene				<0.019	mg/kg		<0.019	mg/kg	<0.0000019 %		<LOD
		601-032-00-3	200-028-5	50-32-8									
25		indeno[123-cd]pyrene				<0.019	mg/kg		<0.019	mg/kg	<0.0000019 %		<LOD
			205-893-2	193-39-5									
26		dibenz[a,h]anthracene				<0.017	mg/kg		<0.017	mg/kg	<0.0000017 %		<LOD
		601-041-00-2	200-181-8	53-70-3									
27		benzo[ghi]perylene				<0.019	mg/kg		<0.019	mg/kg	<0.0000019 %		<LOD
			205-883-8	191-24-2									
										Total:	0.0124 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: TP06

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample name:
TP06
Sample Depth:
0.60-1.00 m
Moisture content:
21.9%
(wet weight correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 21.9% Wet Weight Moisture Correction applied (MC)

#	Determinand	EU CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	pH			PH		7.2 pH		7.2 pH	7.2 pH		
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		8.3 mg/kg	1.32	8.559 mg/kg	0.000856 %	✓	
3	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	1	<1.6 mg/kg	1.285	<2.056 mg/kg	<0.00016 %		<LOD
4	chromium in Cr(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<0.04 mg/kg	1.923	<0.0769 mg/kg	<0.00000769 %		<LOD
5	chromium in Cr(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		35.3 mg/kg	1.462	40.294 mg/kg	0.00403 %	✓	
6	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		27.3 mg/kg	1.126	24.005 mg/kg	0.0024 %	✓	
7	lead { lead compounds with the exception of those specified elsewhere in this Annex }	082-001-00-6			1	112 mg/kg		87.472 mg/kg	0.00875 %	✓	
8	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.7 mg/kg	1.353	<0.947 mg/kg	<0.0000947 %		<LOD
9	nickel { nickel dihydroxide }	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]		13.4 mg/kg	1.579	16.53 mg/kg	0.00165 %	✓	
10	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				<3 mg/kg	1.405	<4.215 mg/kg	<0.000422 %		<LOD
11	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		79.1 mg/kg	1.245	76.895 mg/kg	0.00769 %	✓	
12	naphthalene	601-052-00-2	202-049-5	91-20-3		<0.016 mg/kg		<0.016 mg/kg	<0.0000016 %		<LOD
13	acenaphthylene		205-917-1	208-96-8		<0.015 mg/kg		<0.015 mg/kg	<0.0000015 %		<LOD
14	acenaphthene		201-469-6	83-32-9		<0.013 mg/kg		<0.013 mg/kg	<0.0000013 %		<LOD

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		EU CLP index number	EC Number	CAS Number									
15		fluorene				<0.013	mg/kg		<0.013	mg/kg	<0.0000013 %		<**LOD**
			201-695-5	86-73-7									
16		phenanthrene				0.1	mg/kg		0.0781	mg/kg	0.00000781 %	✓	
			201-581-5	85-01-8									
17		anthracene				0.044	mg/kg		0.0344	mg/kg	0.00000344 %	✓	
			204-371-1	120-12-7									
18		fluoranthene				0.274	mg/kg		0.214	mg/kg	0.0000214 %	✓	
			205-912-4	206-44-0									
19		pyrene				0.288	mg/kg		0.225	mg/kg	0.0000225 %	✓	
			204-927-3	129-00-0									
20		benzo[a]anthracene				0.176	mg/kg		0.137	mg/kg	0.0000137 %	✓	
		601-033-00-9	200-280-6	56-55-3									
21		chrysene				0.144	mg/kg		0.112	mg/kg	0.0000112 %	✓	
		601-048-00-0	205-923-4	218-01-9									
22		benzo[b]fluoranthene				0.176	mg/kg		0.137	mg/kg	0.0000137 %	✓	
		601-034-00-4	205-911-9	205-99-2									
23		benzo[k]fluoranthene				0.068	mg/kg		0.0531	mg/kg	0.00000531 %	✓	
		601-036-00-5	205-916-6	207-08-9									
24		benzo[a]pyrene; benzo[def]chrysene				0.158	mg/kg		0.123	mg/kg	0.0000123 %	✓	
		601-032-00-3	200-028-5	50-32-8									
25		indeno[123-cd]pyrene				0.121	mg/kg		0.0945	mg/kg	0.00000945 %	✓	
			205-893-2	193-39-5									
26		dibenz[a,h]anthracene				0.022	mg/kg		0.0172	mg/kg	0.00000172 %	✓	
		601-041-00-2	200-181-8	53-70-3									
27		benzo[ghi]perylene				0.106	mg/kg		0.0828	mg/kg	0.00000828 %	✓	
			205-883-8	191-24-2									
										Total:	0.0255 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: TP07

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample name:
TP07
Sample Depth:
0.10-0.30 m
Moisture content:
27.7%
(wet weight correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 27.7% Wet Weight Moisture Correction applied (MC)

#	Determinand	EU CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	pH			PH		7.4 pH		7.4 pH	7.4 pH		
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		15 mg/kg	1.32	14.319 mg/kg	0.00143 %	✓	
3	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	1	<1.6 mg/kg	1.285	<2.056 mg/kg	<0.00016 %		<LOD
4	chromium in Cr(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<0.04 mg/kg	1.923	<0.0769 mg/kg	<0.00000769 %		<LOD
5	chromium in Cr(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		37.4 mg/kg	1.462	39.521 mg/kg	0.00395 %	✓	
6	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		52.1 mg/kg	1.126	42.41 mg/kg	0.00424 %	✓	
7	lead { lead compounds with the exception of those specified elsewhere in this Annex }	082-001-00-6			1	194 mg/kg		140.262 mg/kg	0.014 %	✓	
8	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		0.9 mg/kg	1.353	0.881 mg/kg	0.0000881 %	✓	
9	nickel { nickel dihydroxide }	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]		17.2 mg/kg	1.579	19.642 mg/kg	0.00196 %	✓	
10	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				<3 mg/kg	1.405	<4.215 mg/kg	<0.000422 %		<LOD
11	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		149 mg/kg	1.245	134.089 mg/kg	0.0134 %	✓	
12	naphthalene	601-052-00-2	202-049-5	91-20-3		0.033 mg/kg		0.0239 mg/kg	0.00000239 %	✓	
13	acenaphthylene		205-917-1	208-96-8		<0.015 mg/kg		<0.015 mg/kg	<0.0000015 %		<LOD
14	acenaphthene		201-469-6	83-32-9		0.017 mg/kg		0.0123 mg/kg	0.00000123 %	✓	

#		Determinand	EU CLP index number	EC Number	CAS Number	CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
15		fluorene		201-695-5	86-73-7		0.015	mg/kg		0.0108	mg/kg	0.00000108 %	✓	
16		phenanthrene		201-581-5	85-01-8		0.192	mg/kg		0.139	mg/kg	0.0000139 %	✓	
17		anthracene		204-371-1	120-12-7		0.053	mg/kg		0.0383	mg/kg	0.00000383 %	✓	
18		fluoranthene		205-912-4	206-44-0		0.433	mg/kg		0.313	mg/kg	0.0000313 %	✓	
19		pyrene		204-927-3	129-00-0		0.409	mg/kg		0.296	mg/kg	0.0000296 %	✓	
20		benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3		0.253	mg/kg		0.183	mg/kg	0.0000183 %	✓	
21		chrysene	601-048-00-0	205-923-4	218-01-9		0.247	mg/kg		0.179	mg/kg	0.0000179 %	✓	
22		benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2		0.332	mg/kg		0.24	mg/kg	0.000024 %	✓	
23		benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9		0.126	mg/kg		0.0911	mg/kg	0.00000911 %	✓	
24		benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32-8		0.278	mg/kg		0.201	mg/kg	0.0000201 %	✓	
25		indeno[123-cd]pyrene		205-893-2	193-39-5		0.215	mg/kg		0.155	mg/kg	0.0000155 %	✓	
26		dibenz[a,h]anthracene	601-041-00-2	200-181-8	53-70-3		0.038	mg/kg		0.0275	mg/kg	0.00000275 %	✓	
27		benzo[ghi]perylene		205-883-8	191-24-2		0.19	mg/kg		0.137	mg/kg	0.0000137 %	✓	
28		TPH (C6 to C40) petroleum group			TPH		11.3	mg/kg		8.17	mg/kg	0.000817 %	✓	
29		benzene	601-020-00-8	200-753-7	71-43-2		<2	mg/kg		<2	mg/kg	<0.0002 %		<**LOD**
30		toluene	601-021-00-3	203-625-9	108-88-3		<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<**LOD**
31		ethylbenzene	601-023-00-4	202-849-4	100-41-4		<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<**LOD**
32		xylene	601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]		<0.002	mg/kg		<0.002	mg/kg	<0.0000002 %		<**LOD**
											Total:	0.0401 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
CLP: Note 1	Only the metal concentration has been used for classification

Supplementary Hazardous Property Information

HP 3(i): Flammable "flammable liquid waste: liquid waste having a flash point below 60°C or waste gas oil, diesel and light heating oils having a flash point > 55°C and <= 75°C"

Force this Hazardous Property to non-hazardous for cumulative determinand results below the concentration of: 1000 mg/kg (0.1%) because: Concentration too low to be considered flammable. Low concentrations of short chain hydrocarbons. Discounted as this is a solid waste without a free draining liquid phase.

Hazard Statements hit:

Flam. Liq. 3; H226 "Flammable liquid and vapour."

Because of determinand:

TPH (C6 to C40) petroleum group (conc.: 0.00081%)

Classification of sample: TP08

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample name:
TP08
Sample Depth:
0.10-0.30 m
Moisture content:
17%
(wet weight correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 17% Wet Weight Moisture Correction applied (MC)

#	Determinand	EU CLP index number	EC Number	CAS Number	CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
1	pH			PH		7.4	pH		7.4	pH	7.4 pH		
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		11.8	mg/kg	1.32	12.931	mg/kg	0.00129 %	✓	
3	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	1	<1.6	mg/kg	1.285	<2.056	mg/kg	<0.00016 %		<**LOD**
4	chromium in Cr(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<0.04	mg/kg	1.923	<0.0769	mg/kg	<0.00000769 %		<**LOD**
5	chromium in Cr(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		29.5	mg/kg	1.462	35.786	mg/kg	0.00358 %	✓	
6	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		30.9	mg/kg	1.126	28.876	mg/kg	0.00289 %	✓	
7	lead { lead compounds with the exception of those specified elsewhere in this Annex }	082-001-00-6			1	94.7	mg/kg		78.601	mg/kg	0.00786 %	✓	
8	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.7	mg/kg	1.353	<0.947	mg/kg	<0.0000947 %		<**LOD**
9	nickel { nickel dihydroxide }	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]		15.5	mg/kg	1.579	20.32	mg/kg	0.00203 %	✓	
10	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				<3	mg/kg	1.405	<4.215	mg/kg	<0.000422 %		<**LOD**
11	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		107	mg/kg	1.245	110.543	mg/kg	0.0111 %	✓	
12	naphthalene	601-052-00-2	202-049-5	91-20-3		0.034	mg/kg		0.0282	mg/kg	0.00000282 %	✓	
13	acenaphthylene		205-917-1	208-96-8		<0.015	mg/kg		<0.015	mg/kg	<0.0000015 %		<**LOD**
14	acenaphthene		201-469-6	83-32-9		0.123	mg/kg		0.102	mg/kg	0.0000102 %	✓	

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		EU CLP index number	EC Number	CAS Number									
15		fluorene				0.08	mg/kg		0.0664	mg/kg	0.00000664 %	✓	
			201-695-5	86-73-7									
16		phenanthrene				1.48	mg/kg		1.228	mg/kg	0.000123 %	✓	
			201-581-5	85-01-8									
17		anthracene				0.422	mg/kg		0.35	mg/kg	0.000035 %	✓	
			204-371-1	120-12-7									
18		fluoranthene				2.77	mg/kg		2.299	mg/kg	0.00023 %	✓	
			205-912-4	206-44-0									
19		pyrene				2.63	mg/kg		2.183	mg/kg	0.000218 %	✓	
			204-927-3	129-00-0									
20		benzo[a]anthracene				1.27	mg/kg		1.054	mg/kg	0.000105 %	✓	
		601-033-00-9	200-280-6	56-55-3									
21		chrysene				1.15	mg/kg		0.954	mg/kg	0.0000954 %	✓	
		601-048-00-0	205-923-4	218-01-9									
22		benzo[b]fluoranthene				1.38	mg/kg		1.145	mg/kg	0.000115 %	✓	
		601-034-00-4	205-911-9	205-99-2									
23		benzo[k]fluoranthene				0.584	mg/kg		0.485	mg/kg	0.0000485 %	✓	
		601-036-00-5	205-916-6	207-08-9									
24		benzo[a]pyrene; benzo[def]chrysene				1.22	mg/kg		1.013	mg/kg	0.000101 %	✓	
		601-032-00-3	200-028-5	50-32-8									
25		indeno[123-cd]pyrene				1.01	mg/kg		0.838	mg/kg	0.0000838 %	✓	
			205-893-2	193-39-5									
26		dibenz[a,h]anthracene				0.149	mg/kg		0.124	mg/kg	0.0000124 %	✓	
		601-041-00-2	200-181-8	53-70-3									
27		benzo[ghi]perylene				0.763	mg/kg		0.633	mg/kg	0.0000633 %	✓	
			205-883-8	191-24-2									
										Total:	0.03 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: TP09

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample name:
TP09
Sample Depth:
0.35-0.60 m
Moisture content:
19.5%
(wet weight correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 19.5% Wet Weight Moisture Correction applied (MC)

#	Determinand	EU CLP index number	EC Number	CAS Number	CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
1	pH			PH		7.1	pH		7.1	pH	7.1 pH		
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		15.8	mg/kg	1.32	16.793	mg/kg	0.00168 %	✓	
3	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	1	<1.6	mg/kg	1.285	<2.056	mg/kg	<0.00016 %		<LOD
4	chromium in Cr(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<0.04	mg/kg	1.923	<0.0769	mg/kg	<0.00000769 %		<LOD
5	chromium in Cr(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		21.3	mg/kg	1.462	25.061	mg/kg	0.00251 %	✓	
6	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		57.3	mg/kg	1.126	51.933	mg/kg	0.00519 %	✓	
7	lead { lead compounds with the exception of those specified elsewhere in this Annex }	082-001-00-6			1	129	mg/kg		103.845	mg/kg	0.0104 %	✓	
8	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.7	mg/kg	1.353	<0.947	mg/kg	<0.0000947 %		<LOD
9	nickel { nickel dihydroxide }	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]		26.2	mg/kg	1.579	33.313	mg/kg	0.00333 %	✓	
10	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				<3	mg/kg	1.405	<4.215	mg/kg	<0.000422 %		<LOD
11	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		94.3	mg/kg	1.245	94.488	mg/kg	0.00945 %	✓	
12	naphthalene	601-052-00-2	202-049-5	91-20-3		0.031	mg/kg		0.025	mg/kg	0.0000025 %	✓	
13	acenaphthylene		205-917-1	208-96-8		<0.015	mg/kg		<0.015	mg/kg	<0.0000015 %		<LOD
14	acenaphthene		201-469-6	83-32-9		0.028	mg/kg		0.0225	mg/kg	0.00000225 %	✓	

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		EU CLP index number	EC Number	CAS Number									
15		fluorene				0.025	mg/kg		0.0201	mg/kg	0.00000201 %	✓	
			201-695-5	86-73-7									
16		phenanthrene				0.273	mg/kg		0.22	mg/kg	0.000022 %	✓	
			201-581-5	85-01-8									
17		anthracene				0.071	mg/kg		0.0572	mg/kg	0.00000572 %	✓	
			204-371-1	120-12-7									
18		fluoranthene				0.437	mg/kg		0.352	mg/kg	0.0000352 %	✓	
			205-912-4	206-44-0									
19		pyrene				0.459	mg/kg		0.369	mg/kg	0.0000369 %	✓	
			204-927-3	129-00-0									
20		benzo[a]anthracene				0.319	mg/kg		0.257	mg/kg	0.0000257 %	✓	
		601-033-00-9	200-280-6	56-55-3									
21		chrysene				0.298	mg/kg		0.24	mg/kg	0.000024 %	✓	
		601-048-00-0	205-923-4	218-01-9									
22		benzo[b]fluoranthene				0.432	mg/kg		0.348	mg/kg	0.0000348 %	✓	
		601-034-00-4	205-911-9	205-99-2									
23		benzo[k]fluoranthene				0.162	mg/kg		0.13	mg/kg	0.000013 %	✓	
		601-036-00-5	205-916-6	207-08-9									
24		benzo[a]pyrene; benzo[def]chrysene				0.445	mg/kg		0.358	mg/kg	0.0000358 %	✓	
		601-032-00-3	200-028-5	50-32-8									
25		indeno[123-cd]pyrene				0.413	mg/kg		0.332	mg/kg	0.0000332 %	✓	
			205-893-2	193-39-5									
26		dibenz[a,h]anthracene				0.086	mg/kg		0.0692	mg/kg	0.00000692 %	✓	
		601-041-00-2	200-181-8	53-70-3									
27		benzo[ghi]perylene				0.344	mg/kg		0.277	mg/kg	0.0000277 %	✓	
			205-883-8	191-24-2									
										Total:	0.0329 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: TP12

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample name:
TP12
Sample Depth:
0.10-0.30 m
Moisture content:
19.4%
(wet weight correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 19.4% Wet Weight Moisture Correction applied (MC)

#	Determinand	EU CLP index number	EC Number	CAS Number	CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
1	pH			PH		7.4	pH		7.4	pH	7.4 pH		
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		22.8	mg/kg	1.32	24.263	mg/kg	0.00243 %	✓	
3	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	1	5.1	mg/kg	1.285	5.283	mg/kg	0.000411 %	✓	
4	chromium in Cr(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<0.04	mg/kg	1.923	<0.0769	mg/kg	<0.00000769 %		<**LOD**
5	chromium in Cr(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		25.6	mg/kg	1.462	30.157	mg/kg	0.00302 %	✓	
6	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		73	mg/kg	1.126	66.245	mg/kg	0.00662 %	✓	
7	lead { lead compounds with the exception of those specified elsewhere in this Annex }	082-001-00-6			1	137	mg/kg		110.422	mg/kg	0.011 %	✓	
8	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.7	mg/kg	1.353	<0.947	mg/kg	<0.0000947 %		<**LOD**
9	nickel { nickel dihydroxide }	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]		29.2	mg/kg	1.579	37.174	mg/kg	0.00372 %	✓	
10	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				<3	mg/kg	1.405	<4.215	mg/kg	<0.000422 %		<**LOD**
11	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		357	mg/kg	1.245	358.156	mg/kg	0.0358 %	✓	
12	naphthalene	601-052-00-2	202-049-5	91-20-3		0.045	mg/kg		0.0363	mg/kg	0.00000363 %	✓	
13	acenaphthylene		205-917-1	208-96-8		<0.015	mg/kg		<0.015	mg/kg	<0.0000015 %		<**LOD**
14	acenaphthene		201-469-6	83-32-9		0.05	mg/kg		0.0403	mg/kg	0.00000403 %	✓	

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		EU CLP index number	EC Number	CAS Number									
15		fluorene				0.032	mg/kg		0.0258	mg/kg	0.00000258 %	✓	
			201-695-5	86-73-7									
16		phenanthrene				0.399	mg/kg		0.322	mg/kg	0.0000322 %	✓	
			201-581-5	85-01-8									
17		anthracene				0.102	mg/kg		0.0822	mg/kg	0.00000822 %	✓	
			204-371-1	120-12-7									
18		fluoranthene				0.766	mg/kg		0.617	mg/kg	0.0000617 %	✓	
			205-912-4	206-44-0									
19		pyrene				0.717	mg/kg		0.578	mg/kg	0.0000578 %	✓	
			204-927-3	129-00-0									
20		benzo[a]anthracene				0.443	mg/kg		0.357	mg/kg	0.0000357 %	✓	
		601-033-00-9	200-280-6	56-55-3									
21		chrysene				0.376	mg/kg		0.303	mg/kg	0.0000303 %	✓	
		601-048-00-0	205-923-4	218-01-9									
22		benzo[b]fluoranthene				0.533	mg/kg		0.43	mg/kg	0.000043 %	✓	
		601-034-00-4	205-911-9	205-99-2									
23		benzo[k]fluoranthene				0.223	mg/kg		0.18	mg/kg	0.000018 %	✓	
		601-036-00-5	205-916-6	207-08-9									
24		benzo[a]pyrene; benzo[def]chrysene				0.504	mg/kg		0.406	mg/kg	0.0000406 %	✓	
		601-032-00-3	200-028-5	50-32-8									
25		indeno[123-cd]pyrene				0.428	mg/kg		0.345	mg/kg	0.0000345 %	✓	
			205-893-2	193-39-5									
26		dibenz[a,h]anthracene				0.07	mg/kg		0.0564	mg/kg	0.00000564 %	✓	
		601-041-00-2	200-181-8	53-70-3									
27		benzo[ghi]perylene				0.323	mg/kg		0.26	mg/kg	0.000026 %	✓	
			205-883-8	191-24-2									
										Total:	0.0635 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: BH02

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample name:
BH02
Sample Depth:
1.2 m
Moisture content:
15.4%
(wet weight correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 15.4% Wet Weight Moisture Correction applied (MC)

#		Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
		EU CLP index number	EC Number	CAS Number							
1	●	pH		PH		8 pH		8 pH	8pH		
								Total:	0%		

Key

	User supplied data
●	Determinand defined or amended by HazWasteOnline (see Appendix A)

Classification of sample: BH02[2]

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample name:
BH02[2]
Sample Depth:
4 m
Moisture content:
9.1%
(wet weight correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 9.1% Wet Weight Moisture Correction applied (MC)

#		Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
		EU CLP index number	EC Number	CAS Number							
1	●	pH				8.6 pH		8.6 pH	8.6 pH		
				PH							
								Total:	0%		

Key

	User supplied data
●	Determinand defined or amended by HazWasteOnline (see Appendix A)

Classification of sample: BH03

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample name:
BH03
Sample Depth:
5.20-5.30 m
Moisture content:
14%
(wet weight correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 14% Wet Weight Moisture Correction applied (MC)

#		Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
		EU CLP index number	EC Number	CAS Number							
1	•	pH		PH		8.6 pH		8.6 pH	8.6 pH		
								Total:	0%		

Key

	User supplied data
•	Determinand defined or amended by HazWasteOnline (see Appendix A)

Classification of sample: BH04

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample name:
BH04
Sample Depth:
3 m
Moisture content:
15.2%
(wet weight correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 15.2% Wet Weight Moisture Correction applied (MC)

#		Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
		EU CLP index number	EC Number	CAS Number							
1	•	pH				8.5 pH		8.5 pH	8.5 pH		
				PH							
								Total:	0%		

Key

	User supplied data
•	Determinand defined or amended by HazWasteOnline (see Appendix A)

Classification of sample: BH05

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample name:
BH05
Sample Depth:
0.10-0.30 m
Moisture content:
33.8%
(wet weight correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 33.8% Wet Weight Moisture Correction applied (MC)

#	Determinand	EU CLP index number	EC Number	CAS Number	CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
1	pH			PH		6.4	pH		6.4	pH	6.4 pH		
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		25.1	mg/kg	1.32	21.939	mg/kg	0.00219 %	✓	
3	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	1	2.4	mg/kg	1.285	2.042	mg/kg	0.000159 %	✓	
4	chromium in Cr(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<0.04	mg/kg	1.923	<0.0769	mg/kg	<0.00000769 %		<LOD
5	chromium in Cr(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		38.8	mg/kg	1.462	37.541	mg/kg	0.00375 %	✓	
6	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		83.2	mg/kg	1.126	62.012	mg/kg	0.0062 %	✓	
7	lead { lead compounds with the exception of those specified elsewhere in this Annex }	082-001-00-6			1	334	mg/kg		221.108	mg/kg	0.0221 %	✓	
8	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		1.6	mg/kg	1.353	1.434	mg/kg	0.000143 %	✓	
9	nickel { nickel dihydroxide }	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]		28	mg/kg	1.579	29.278	mg/kg	0.00293 %	✓	
10	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				3	mg/kg	1.405	2.79	mg/kg	0.000279 %	✓	
11	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		180	mg/kg	1.245	148.32	mg/kg	0.0148 %	✓	
12	naphthalene	601-052-00-2	202-049-5	91-20-3		0.113	mg/kg		0.0748	mg/kg	0.00000748 %	✓	
13	acenaphthylene		205-917-1	208-96-8		0.017	mg/kg		0.0113	mg/kg	0.00000113 %	✓	
14	acenaphthene		201-469-6	83-32-9		0.51	mg/kg		0.338	mg/kg	0.0000338 %	✓	

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		EU CLP index number	EC Number	CAS Number									
15		fluorene				0.32	mg/kg		0.212	mg/kg	0.0000212 %	✓	
			201-695-5	86-73-7									
16		phenanthrene				2.64	mg/kg		1.748	mg/kg	0.000175 %	✓	
			201-581-5	85-01-8									
17		anthracene				0.518	mg/kg		0.343	mg/kg	0.0000343 %	✓	
			204-371-1	120-12-7									
18		fluoranthene				3.1	mg/kg		2.052	mg/kg	0.000205 %	✓	
			205-912-4	206-44-0									
19		pyrene				2.71	mg/kg		1.794	mg/kg	0.000179 %	✓	
			204-927-3	129-00-0									
20		benzo[a]anthracene				1.34	mg/kg		0.887	mg/kg	0.0000887 %	✓	
		601-033-00-9	200-280-6	56-55-3									
21		chrysene				1.29	mg/kg		0.854	mg/kg	0.0000854 %	✓	
		601-048-00-0	205-923-4	218-01-9									
22		benzo[b]fluoranthene				1.45	mg/kg		0.96	mg/kg	0.000096 %	✓	
		601-034-00-4	205-911-9	205-99-2									
23		benzo[k]fluoranthene				0.546	mg/kg		0.361	mg/kg	0.0000361 %	✓	
		601-036-00-5	205-916-6	207-08-9									
24		benzo[a]pyrene; benzo[def]chrysene				1.25	mg/kg		0.828	mg/kg	0.0000828 %	✓	
		601-032-00-3	200-028-5	50-32-8									
25		indeno[123-cd]pyrene				0.98	mg/kg		0.649	mg/kg	0.0000649 %	✓	
			205-893-2	193-39-5									
26		dibenz[a,h]anthracene				0.186	mg/kg		0.123	mg/kg	0.0000123 %	✓	
		601-041-00-2	200-181-8	53-70-3									
27		benzo[ghi]perylene				0.764	mg/kg		0.506	mg/kg	0.0000506 %	✓	
			205-883-8	191-24-2									
										Total:	0.0538 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: BH07

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample name:
BH07
Sample Depth:
7 m
Moisture content:
16.9%
(wet weight correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 16.9% Wet Weight Moisture Correction applied (MC)

#		Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
		EU CLP index number	EC Number	CAS Number							
1	•	pH		PH		8.5 pH		8.5 pH	8.5 pH		
								Total:	0%		

Key

	User supplied data
•	Determinand defined or amended by HazWasteOnline (see Appendix A)

Classification of sample: BH08

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample name:
BH08
Sample Depth:
6 m
Moisture content:
9.5%
(wet weight correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 9.5% Wet Weight Moisture Correction applied (MC)

#		Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
		EU CLP index number	EC Number	CAS Number							
1	•	pH				8.6 pH		8.6 pH	8.6 pH		
				PH							
								Total:	0%		

Key

	User supplied data
•	Determinand defined or amended by HazWasteOnline (see Appendix A)

Appendix A: Classifier defined and non GB MCL determinands

pH (CAS Number: PH)

Description/Comments: Appendix C4
Data source: WM3 1st Edition 2015
Data source date: 25 May 2015
Hazard Statements: None.

chromium(III) oxide (worst case) (EC Number: 215-160-9, CAS Number: 1308-38-9)

Description/Comments: Data from C&L Inventory Database
Data source: https://echa.europa.eu/information-on-chemicals/cl-inventory-database/-/discli/details/33806
Data source date: 17 Jul 2015
Hazard Statements: Acute Tox. 4; H332 , Acute Tox. 4; H302 , Eye Irrit. 2; H319 , STOT SE 3; H335 , Skin Irrit. 2; H315 , Resp. Sens. 1; H334 , Skin Sens. 1; H317 , Repr. 1B; H360FD , Aquatic Acute 1; H400 , Aquatic Chronic 1; H410

lead compounds with the exception of those specified elsewhere in this Annex

GB MCL index number: 082-001-00-6
Description/Comments: Least-worst case: IARC considers lead compounds Group 2A; Probably carcinogenic to humans; Lead REACH Consortium, following MCL protocols, considers many simple lead compounds to be Carcinogenic category 2
Additional Hazard Statement(s): Carc. 2; H351
Reason for additional Hazards Statement(s):
20 Nov 2021 - Carc. 2; H351 hazard statement sourced from: IARC Group 2A (Sup 7, 87) 2006; Lead REACH Consortium www.reach-lead.eu/substanceinformation.html. Review date 29/09/2015

acenaphthylene (EC Number: 205-917-1, CAS Number: 208-96-8)

Description/Comments: Data from C&L Inventory Database
Data source: http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 17 Jul 2015
Hazard Statements: Acute Tox. 4; H302 , Acute Tox. 1; H330 , Acute Tox. 1; H310 , Eye Irrit. 2; H319 , STOT SE 3; H335 , Skin Irrit. 2; H315

acenaphthene (EC Number: 201-469-6, CAS Number: 83-32-9)

Description/Comments: Data from C&L Inventory Database
Data source: http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 17 Jul 2015
Hazard Statements: Eye Irrit. 2; H319 , STOT SE 3; H335 , Skin Irrit. 2; H315 , Aquatic Acute 1; H400 , Aquatic Chronic 1; H410 , Aquatic Chronic 2; H411

fluorene (EC Number: 201-695-5, CAS Number: 86-73-7)

Description/Comments: Data from C&L Inventory Database
Data source: http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 06 Aug 2015
Hazard Statements: Aquatic Acute 1; H400 , Aquatic Chronic 1; H410

phenanthrene (EC Number: 201-581-5, CAS Number: 85-01-8)

Description/Comments: Data from C&L Inventory Database
Data source: http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 06 Aug 2015
Hazard Statements: Acute Tox. 4; H302 , Eye Irrit. 2; H319 , STOT SE 3; H335 , Carc. 2; H351 , Skin Sens. 1; H317 , Aquatic Acute 1; H400 , Aquatic Chronic 1; H410 , Skin Irrit. 2; H315

anthracene (EC Number: 204-371-1, CAS Number: 120-12-7)

Description/Comments: Data from C&L Inventory Database
Data source: http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 17 Jul 2015
Hazard Statements: Eye Irrit. 2; H319 , STOT SE 3; H335 , Skin Irrit. 2; H315 , Skin Sens. 1; H317 , Aquatic Acute 1; H400 , Aquatic Chronic 1; H410

fluoranthene (EC Number: 205-912-4, CAS Number: 206-44-0)

Description/Comments: Data from C&L Inventory Database
Data source: http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 21 Aug 2015
Hazard Statements: Acute Tox. 4; H302 , Aquatic Acute 1; H400 , Aquatic Chronic 1; H410

pyrene (EC Number: 204-927-3, CAS Number: 129-00-0)

Description/Comments: Data from C&L Inventory Database; SDS Sigma Aldrich 2014
Data source: http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 21 Aug 2015
Hazard Statements: Skin Irrit. 2; H315 , Eye Irrit. 2; H319 , STOT SE 3; H335 , Aquatic Acute 1; H400 , Aquatic Chronic 1; H410

- **indeno[123-cd]pyrene** (EC Number: 205-893-2, CAS Number: 193-39-5)

Description/Comments: Data from C&L Inventory Database
Data source: http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 06 Aug 2015
Hazard Statements: Carc. 2; H351

- **benzo[ghi]perylene** (EC Number: 205-883-8, CAS Number: 191-24-2)

Description/Comments: Data from C&L Inventory Database; SDS Sigma Aldrich 28/02/2015
Data source: http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 23 Jul 2015
Hazard Statements: Aquatic Acute 1; H400 , Aquatic Chronic 1; H410

- **TPH (C6 to C40) petroleum group** (CAS Number: TPH)

Description/Comments: Unknown Oil

Hazard statements taken from WM3 1st Edition 2015
Data source: WM3 1st Edition 2015
Data source date: 25 May 2015
Hazard Statements: Flam. Liq. 3; H226 , Asp. Tox. 1; H304 , STOT RE 2; H373 , Muta. 1B; H340 , Carc. 1B; H350 , Repr. 2; H361d , Aquatic Chronic 2; H411

- **ethylbenzene** (EC Number: 202-849-4, CAS Number: 100-41-4)

GB MCL index number: 601-023-00-4
Description/Comments:
Additional Hazard Statement(s): Carc. 2; H351
Reason for additional Hazards Statement(s):
20 Nov 2021 - Carc. 2; H351 hazard statement sourced from: IARC Group 2B (77) 2000

Appendix B: Rationale for selection of metal species

arsenic {arsenic trioxide}

Worst case species based on hazard statements

cadmium {cadmium sulfide}

Worst case species based on hazard statements

chromium in Cr(VI) compounds {chromium(VI) oxide}

Worst case species based on hazard statements

chromium in Cr(III) compounds {chromium(III) oxide (worst case)}

Worst case species based on hazard statements

copper {dicopper oxide; copper (I) oxide}

Most likely common species

lead {lead compounds with the exception of those specified elsewhere in this Annex}

Absence of hexavalent chromium indicates it unlikely that lead chromate is present within the site soils.

mercury {mercury dichloride}

Worst case species based on hazard statements

nickel {nickel dihydroxide}

Worst case species based on hazard statements

selenium {selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex}

Worst case species based on hazard statements

zinc {zinc oxide}

Absence of hexavalent chromium indicates it unlikely that zinc chromate is present within the site soils. Given the presence of groundwater underlying the site at shallow depths an insoluble form has been selected (zinc oxide).

Appendix C: Version

HazWasteOnline Classification Engine: WM3 1st Edition v1.2.GB - Oct 2021
HazWasteOnline Classification Engine Version: 2025.339.6914.12493 (07 Dec 2025)
HazWasteOnline Database: 2025.339.6914.12493 (07 Dec 2025)

This classification utilises the following guidance and legislation:
WM3 v1.2.GB - Waste Classification - 1st Edition v1.2.GB - Oct 2021
CLP Regulation - Regulation 1272/2008/EC of 16 December 2008
1st ATP - Regulation 790/2009/EC of 10 August 2009
2nd ATP - Regulation 286/2011/EC of 10 March 2011
3rd ATP - Regulation 618/2012/EU of 10 July 2012
4th ATP - Regulation 487/2013/EU of 8 May 2013
Correction to 1st ATP - Regulation 758/2013/EU of 7 August 2013
5th ATP - Regulation 944/2013/EU of 2 October 2013
6th ATP - Regulation 605/2014/EU of 5 June 2014
WFD Annex III replacement - Regulation 1357/2014/EU of 18 December 2014
Revised List of Waste 2014 - Decision 2014/955/EU of 18 December 2014
7th ATP - Regulation 2015/1221/EU of 24 July 2015
8th ATP - Regulation (EU) 2016/918 of 19 May 2016
9th ATP - Regulation (EU) 2016/1179 of 19 July 2016
10th ATP - Regulation (EU) 2017/776 of 4 May 2017
HP14 amendment - Regulation (EU) 2017/997 of 8 June 2017
13th ATP - Regulation (EU) 2018/1480 of 4 October 2018
14th ATP - Regulation (EU) 2020/217 of 4 October 2019
15th ATP - Regulation (EU) 2020/1182 of 19 May 2020
The Chemicals (Health and Safety) and Genetically Modified Organisms (Contained Use)(Amendment etc.) (EU Exit) Regulations 2020 - UK: 2020 No. 1567 of 16th December 2020
The Waste and Environmental Permitting etc. (Legislative Functions and Amendment etc.) (EU Exit) Regulations 2020 - UK: 2020 No. 1540 of 16th December 2020
GB MCL List - version 1.1 of 09 June 2021
GB MCL List v2.0 - version 2.0 of 20th October 2023
GB MCL List v3.0 - version 3.0 of 11th January 2024
GB MCL List v4.0 - version 4.0 of 2nd March 2024
GB MCL List v5.0 - version 5.0 of 26th June 2024
GB MCL List v6.0 - version 6.0 of 15th February 2025
GB MCL List v7.0 - version 7.0 of 23rd September 2025

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