



Geo-Environmental Assessment

Charlie Ratchford Centre, Belmont St, Camden

Presented to McAuliffe Civil Engineering Ltd

Issued: June 2021

Delta-Simons Project No. 21-0166.01






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Report Details

Client	McAuliffe Civil Engineering Ltd
Report Title	Geo-Environmental Assessment
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Executive Summary

Brief	<p>Delta-Simons Environmental Consultants Limited (“Delta-Simons”) was instructed by McAuliffe Civil Engineering Ltd (the “Client”) to prepare an interpretive Geo-Environmental Assessment for the redevelopment of land at the Charlie Ratchford Centre, Belmont Street, Camden, NW1 8HF (hereafter referred to as the ‘Site’) based on factual information provided by McAuliffe.</p> <p>The proposed development is for high rise residential end use comprising three connecting buildings up to 10 storeys high with associated external hardstanding and soft landscaped areas. The purpose of this assessment is to identify the potential for land contamination issues to be present at the Site in the context of the proposed development, to support the planning application and to provide a geotechnical assessment.</p>
Site Setting	<p>The Site comprises a day care centre developed in the 1970s, previously the Site comprised residential housing.</p> <p>Surrounding land uses are mainly residential with a school to the west.</p>
Ground Conditions	<p>The current ground investigation recorded a generally thin granular Made Ground with ash, brick, concrete, ceramic and flint, which is in turn underlain by London Clay bedrock (Unproductive Strata) to >33 m bgl. No groundwater was encountered during the intrusive investigation or monitoring visit.</p>
Land Contamination Assessment	<p><u>Human Health</u></p> <p>Widespread or significant contamination of the Site has not been identified. Elevated lead and slightly elevated PAHs and aromatic TPH C16-C21 concentrations have been recorded in the shallow Made Ground at the Site. No asbestos or sources of potentially volatile contaminants have been identified.</p> <p>Risks to future Site users can be mitigated through the development by hardcover and clean soil cover in soft landscaped areas to break the potential pollutant linkages.</p> <p><u>Controlled Waters</u></p> <p>No potential risk to controlled waters has been identified, given the absence of potential sources and the underlying London Clay.</p> <p><u>Ground Gas</u></p> <p>No potential source of hazardous ground gases have been identified. Preliminary ground gas monitoring indicates the Site can be classified as CS1 – NHBC Green. However, further monitoring may be required to support the planning process.</p>
Geotechnical Assessment	<p>Based on the foundation loads anticipated for the proposed multistorey development, traditional shallow foundations are not considered appropriate to support proposed structural loads, therefore a piled foundation solution is recommended. Ground bearing floor slabs should be suspended.</p> <p>Buried concrete may be designed in accordance with DS-41 and AC-4.</p>
Recommendations	<p>Based on the findings of this report, the following recommendations are made;</p> <ul style="list-style-type: none"> ▲ Post demolition supplementary investigation may be required to confirm the depth and nature of Made Ground beneath the existing buildings; ▲ Additional ground gas monitoring may be required to address planning condition requirements; and

	▲ Upon completion of any supplementary investigation works, preparation of a Remediation and Verification Strategy, to address planning condition requirements to outline the measures to mitigate any unacceptable risks to human health/controlled waters receptors.
This is intended as a summary only. Further detail and the limitations of the assessment are provided within the main body of the Report.	

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1.0 Introduction

1.1 Appointment

Delta-Simons Environmental Consultants Limited (“Delta-Simons”) was instructed by McAuliffe Civil Engineering Ltd (the “Client”) to prepare a Geo-Environmental Assessment for the redevelopment of land at the Charlie Ratchford Centre, Belmont Street, Camden, NW1 8HF (the “Site”).

1.2 Context & Purpose

The aim of the works was to complete a geo-environmental assessment of the proposed development area. The investigation has obtained information regarding ground conditions, from which risks to end-users, the environment and structures have been assessed, with mitigation measures suggested where necessary.

The investigation has also gathered geotechnical information to inform comment on the preliminary design of foundations and infrastructure. The report provides recommendations for further work (where appropriate) based on the findings of the investigation.

It is understood that the Site is to be developed for residential end use, with the construction of a part five-storey, part seven-storey and part ten-storey building with associated landscaping works.

1.3 Scope of Works

The scope of the investigation and layout of this report has been designed with consideration of guidance on Land Contamination: Risk Management pages of the [GOV.UK](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/810197/NPPF_Feb_2019_revised.pdf) web pages, the relevant requirements of the National Planning Policy Framework 2019 (NPPF) (paragraphs 170 & 178-180)¹ and the Planning Practice Guidance (Land Affected by Contamination)².

The project was carried out to an agreed brief as set out in Delta-Simons’ proposal dated 2nd February 2021 (Ref. 21-0166.01). Delta-Simons has been provided with factual information by the Client undertaken in line with the scope of works is outlined in Section 3.2.1.

Specific sections of this report may generally follow guidance set out in Eurocode 7 for a Ground Investigation Report (GIR), as defined in BS EN 1997-1:2004 and BS EN 1997-2:2007. Eurocode 7 includes specific guidance on the number and spacing of investigation positions, methods of investigation and sample quality to be achieved which may not have been met by this investigation. The report also includes information which may support a Geotechnical Design Report (GDR) as defined in BS EN 1997-1:2004; however, unless otherwise explicitly stated, the investigation has not been undertaken in accordance with Eurocode 7 and the preliminary geotechnical interpretation, assessments, risk register and recommendations presented within this report may not meet the full requirements of a GDR.

1.4 Existing Information

The following information has been made available to Delta-Simons for review:

- ▲ Factual letter report provided by McAuliffe Civil Engineering Ltd dated 10th June 2021 (Ref: VIST3619) (Included as Appendix B);
- ▲ Phase 1 and Phase 2 Ground Conditions Assessment – Charlie Ratchford Extra-Care Scheme, Crogsland Road, Camden, by Peter Brett Associates LLP (Reference: 31103/3501 R001/rev1), dated April 2015;
- ▲ Phase 1 Ground Conditions Assessment – Charlie Ratchford Centre, Belmont Street, Camden, by Stantec UK Ltd (Reference: 43006/3501/R001/Rev01), dated September 2020 (Included within Appendix B);

The 2015 Phase 1 and Phase 2 Ground Conditions Assessment relates to off-Site relative to the current Site, but is part of the wider development.

¹ https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/810197/NPPF_Feb_2019_revised.pdf

² <https://www.gov.uk/guidance/land-affected-by-contamination>

1.5 Limitations

The assessment is limited to the issues agreed within the proposal for the works. Notes on limitations associated with this assessment are provided in Appendix A. In addition, there are the following specific limitations that apply to this assessment:

- ▲ Current Site layout and buildings prevented good Site coverage being achieved with the investigation. Further supplementary investigation may be required to confirm the findings of this assessment for the purposes of discharging planning; and
- ▲ At the time of the report issue, no proposed loadings have been provided by the developer's engineer.

2.0 Site Details

2.1 Site Setting

A summary of the current Site status, environmental setting and key historical features is presented below. This has been summarised from the existing reports listed in Section 1.4 which should be consulted for further detail.

Co-ordinates	Centred approximately at National Grid Reference 528270, 184480.	Elevation	29 – 30 m AOD.
		Area	0.3 Ha.
Site Location	<p>The Site is located approximately 0.9 km northwest of Camden town centre. A Site location map is provided as Figure 1.</p> <p>The Site is located in a predominantly residential area, with some commercial uses to the south and west of the Site.</p>		
Current Site Use	<p>The Site currently comprises a single storey building named the Charlie Ratchford Centre, which is operated by London Borough of Camden Council as a day centre for elderly residents in the borough.</p> <p>A hardstanding car park is present to the east of the building, with a soft standing landscaped area to the south of the building.</p>		
Proposed Development	<p>The proposed development is for high rise residential end use comprising three connecting buildings up to 10 storeys high with associated external hardstanding and soft landscaped areas. Identified human and built environment receptors relevant to the proposed development comprise:</p> <ul style="list-style-type: none"> ▲ Construction workers; ▲ Third parties during construction (adjacent Site users and adjacent residents); ▲ Future Site users and maintenance workers; and ▲ The Built Environment (new buildings and infrastructure/utilities). 		
Environmental Setting	<p>Information held by the British Geological Survey (BGS) indicates that the Site is directly underlain by bedrock London Clay Formation, underlain by Lambeth Group, Thanet Sand Formation, and the Seaford and Newhaven Chalk Formations at depth. Made Ground is anticipated to be present overlying the natural London Clay Formation, associated with the current and former developments of the Site.</p> <p>Investigation works in 2014, undertaken on the land to the west of Crogsland Road by Ground Technology Services Ltd under direction of Peter Brett Associates LLP, identified moderate thicknesses of Made Ground (to between 1.2 metres and 2.1 metres below ground level (m bgl)), over London Clay Formation to a maximum confirmed depth of >30.4 m bgl (base not proven).</p> <p>The Environment Agency classifies the London Clay Formation as Unproductive Strata, with the Lambeth Group and Thanet Sand Formations classified as Secondary A Aquifers and the Seaford and Newhaven Chalk Formation, at depth, as a Principal Aquifer. The Site is not located within a source protection zone. The nearest groundwater abstraction is located approximately 540 m northeast, used by Kentish Town Sports Centre for commercial/industrial/public services: drinking, cooking, sanitary, washing (small garden).</p> <p>Due to the thickness of the London Clay in the immediate area of the Site, the underlying Secondary A and Principal Aquifers, and associated groundwater</p>		

	<p>abstraction, are not considered to be at risk from any potential contamination associated with the Site.</p> <p>The nearest surface watercourse is the Grand Union Regent's Canal, located approximately 460 m south. The nearest surface water abstraction is located approximately 465 m southeast, abstracting from the Grand Union Regents Canal for non-evaporative cooling, and spray irrigation (direct). A culverted stretch of the River Fleet is noted to be located approximately 200 m east of the Site; although it is understood that the river is now classified as a sewer rather than a true river.</p> <p>Due to the artificial nature of the Grand Union Regent's Canal and the canalised nature of the River Fleet, it is unlikely that these features are in continuity with any surrounding groundwater, and the features and associated abstractions are not considered to be at risk from any potential contamination at the Site.</p> <p>No controlled water/environmental receptors have been identified as at risk from any potential contamination associated with the Site.</p> <p>According to the Envirocheck Report, included in the 2020 Stantec report (within Appendix B), the Site is not located in an area which is affected by coal mining and is not located within a non-coal mining area. There is a moderate risk of ground stability hazards associated with shrinking or swelling clay. All other ground stability hazards are rated as very low or no hazard.</p>
Key Historical Features	<p><u>On-Site</u></p> <p>From the earliest map edition, 1851, the Site was undeveloped until the early 1870s by which time, two rows of residential terraces were present. These remained present until circa 1970. By 1974, the current building had been constructed on-Site. No significant changes have been noted to current day.</p> <p><u>Off-Site</u></p> <p>Main off-Site sources in the surrounding area include railway lines, sidings, coal depot and a goods yard present approximately 100 m south, a paint works (later a pencil works) approximately 40 m northeast, an engineering works approximately 15 m north, a garage approximately 125 m west, various works from 50 m to 250 m southeast, and a garage/petrol filling station 30 m south.</p>
Relevant Regulatory Information	<p>According to radon maps published by Public Health England (https://www.ukradon.org/radonmaps/), the Site is located in an area where less than 1% of houses are above the action level of 200 Bq/m³. No radon protection measures are considered to be required.</p> <p>There are no current or historical landfills located within 500 m of the Site.</p> <p>There are no statutory ecological receptors located within 1 km of the Site.</p>
Summary of Previous Reports	<p>The 2020 Stantec report included photographs taken during a walkover survey of the Site by a Peter Brett Associates representative on 25th January 2018, although no summary of the findings of the walkover was included in the text.</p> <p>Photographs indicated the Site to still be in use at the time of the walkover with the main building constructed on one level. To the north of the building, the Site sloped upwards to the northern boundary in the form of a landscaped grass bank. To the west of the building, the Site was paved, with a concrete retaining wall forming the western boundary due to the close proximity of the building to the adjacent Crogsland Road. The retaining wall was approximately 1.2 m high.</p> <p>A number of well-established trees were present on the south of the Site.</p> <p>The 2015 Peter Brett Associates report was undertaken on the site on the opposite side of Crogsland Road and involved intrusive investigation. Identified ground</p>

	<p>conditions comprised Made Ground of variable composition to between 1.20 m bgl and 2.10 m bgl, with underground obstructions from previous developments present, over London Clay Formation, which comprised a brown or grey clay, with occasional silt or sand partings and claystone nodules, encountered to a depth of >30.40 m bgl. The London Clay was identified as having a high plasticity and a minimum safe bearing capacity of 50 kPa at near surface, increasing to 220 kPa at depth. Groundwater was encountered in the London Clay at 26.4 m bgl, and perched groundwater was noted at the base of the Made Ground locally at around 1.25 m bgl.</p> <p><i>Whilst the contaminant concentrations of the adjacent site have limited bearing on the Site itself, the contaminants in the Made Ground may be indicative of those that could be expected on-Site.</i> The investigation identified some elevated concentrations of lead and individual PAHs in Made Ground soils, considered to be associated with man-made inclusions in the Made Ground materials, which exceeded the assessment criteria protective of a residential end use with plant uptake in private gardens.</p> <p>Groundwater contaminant concentrations were found to be generally below screening criteria protective of drinking water sources or surface watercourses. Slightly elevated concentrations of sulphates, selenium and ammoniacal nitrogen were considered the result of background quality of the groundwater, given the urban location and absence of specific site sources.</p>
Additional Information	<p>Since the walkover, undertaken in 2018, the area to the north of the Site building has been used for a compound containing stacked temporary offices associated with the development of the site on the opposite side of Crogsland Road, understood to be the first phase of the development for which the Site is the next phase.</p>

3.0 Site Investigation

3.1 Intrusive Investigation

The Client scoped and carried out intrusive investigation work between 1st and 15th February 2021 to assess the potential linkages and to provide geotechnical information.

3.2 Scope of Ground Investigation and Rationale

The ground investigation, completed by others, comprised the following items:

- ▲ Service avoidance exercise;
- ▲ All intrusive locations were logged to BS 5930:2015+A1:2020 Code of Practice for Site Investigations;
- ▲ Drilling of three Cable Percussive Boreholes (BH101 to BH103) to a maximum depth of 33.30 m bgl;
- ▲ Excavation of two hand-dug trial pits (BH104 and BH105) to a maximum depth of 1.10 m bgl in areas inaccessible for the drilling rig.

The locations of the boreholes were positioned in accessible locations around the existing building.

3.3 Ground Investigation Factual Data

Borehole logs, prepared by Delta-Simons based on the factual information provided by the Client, are presented as Appendix C, the SPT Calibration Certificates, in accordance with *BS EN ISO 22476-3:2005 (incorporating corrigendum No. 1 2007), Geotechnical investigation and testing - Field testing - Part 3: Standard penetration test for SPT trip hammers* are included within Appendix B.

3.4 In-Situ Testing and Sampling

SPT tests or U100s were undertaken in all boreholes at 1.00 m intervals until 5.00 m bgl, then every 1.5 m bgl thereafter. The results of these tests are presented in the borehole logs. Corrected SPT values are included in Appendix C.

Sampling comprised undisturbed U100s, and disturbed tub and jar samples as detailed on the borehole logs.

3.5 Geotechnical Laboratory Testing

A selection of soil samples were scheduled and submitted by the Client to the UKAS accredited laboratory for a range of geotechnical testing, the results of which are included in Appendix B.

The programme of geotechnical testing undertaken on samples obtained from the natural soils is presented within the table below. The purpose of the laboratory testing was to assess the classification properties of the soils encountered in order to inform the outline geotechnical design advice.

Analysis	No. Tested	Rationale
Moisture content	58	To enable geotechnical assessment of cohesive soils
Plastic and liquid limits	58	
Quick Undrained triaxial	19	
Particle size distribution	58	To enable geotechnical assessment of cohesive and granular soils

3.6 Environmental Sampling, In-Situ Testing and Laboratory Analysis

Soils collected for laboratory analysis were placed in a variety of containers appropriate to the anticipated testing suite. Records of the samples taken as part of the site investigation works, including their depths and location, are included within the exploratory hole records in Appendix B and C.

Samples were transported to the laboratory and scheduled for analysis by the Client on completion of the site investigation works.

The rationale for chemical analysis is presented in the table below and the results of the chemical laboratory testing are included in Appendix B.

Analytes	No. of Soil Samples Tested	Rationale
Asbestos	6	Common potential contaminant – Analysed in all samples of Made Ground.
pH, As, B, Cd, Cu, Cr, Hg, Pb, Ni, Se Zn, speciated Polycyclic Aromatic Hydrocarbons (PAH)	10	Potential contaminants of concern, common to many sites.
Total Petroleum Hydrocarbons, Criteria Working Group Method (TPHCWG), Benzene, Toluene, Ethylbenzene and Xylene (BTEX)	10	Speciated analysis to provide a detailed screen of the sampled soils for petroleum hydrocarbon contamination.
Volatile and Semi-Volatile Organic Compounds (VOC and SVOC)	10	Specific analysis to target a broad range of common volatile and semi-volatile organic compounds, which might be contaminants of concern.
BRE Suite	5	To assess potential for chemical attack on buried concrete within the London Clay formation.

3.7 Monitoring Programme

One round of groundwater level and ground gas monitoring were undertaken on the three installed wells (BH101 to BH103) on 22nd February 2021. Measurements of the depth to groundwater within the monitoring wells were taken using an electronic dip meter.

To characterise the ground gas regime at the site, an infrared gas meter was used to measure gas flow, concentrations of carbon dioxide (CO₂), methane (CH₄) and oxygen (O₂) in percentage by volume. Initial and steady state concentrations were recorded. The atmospheric pressure before and during monitoring, together with the weather conditions, was recorded.

All monitoring results obtained to date together with the temporal conditions are contained within Appendix B.

4.0 Ground Summary

4.1 Introduction

The sections below summarise the ground and groundwater conditions encountered during the site investigation.

4.2 Ground Model

A summary of the observed ground conditions at the Site is provided below.

Summary of Observed Ground Conditions				
Strata	Typical Strata Description	Depth Range of Strata Base (m)	Maximum Proven Thickness (m)	Comments
Surfacing	Reinforced concrete hardstanding and flag stone.	0.12 – 0.20	0.20	BH101, BH102, BH105
	Topsoil	0.15 – 0.20	0.20	BH103, BH104
Made Ground	Encountered in all locations. Comprising sandy, gravelly clay, with the gravel component comprising ash, flint, brick, concrete and ceramic fragments.	0.6 – >1.10	>1.1	Encountered in all locations. Base not proven in hand pits BH104 and BH105.
London Clay Formation	Firm to very stiff light brown and grey clay with selenite crystals. Thin siltstone bands in BH101 at 16.6 – 16.8 m bgl and 19.5 – 20.0 m bgl, BH102 at 32.0 – 32.15 m bgl and BH103 at 14.23 – 14.70 m bgl.	>21.50 - >33.30	>32.6	Encountered in all locations. Base not proven.

4.3 Visual and Olfactory Evidence of Contamination

No visual or olfactory evidence of potential gross contamination was observed during the investigation.

4.4 Groundwater

4.4.1 Strikes During Investigations

Groundwater was not encountered in any location during hand pitting and drilling works.

4.4.2 Levels During Monitoring Programme

Groundwater levels were monitored on one occasion on 22nd February 2021, in the three installed wells. All locations were recorded as dry to installed depth.

4.5 Material Properties

The table below summarises the factual material properties based upon the results of in-situ and laboratory test data and where appropriate provides derived geotechnical parameters.

Parameter	Made Ground	London Clay Formation
Moisture Content - w	-	25 % – 43 %
Liquid Limit - w _L	-	57 % – 83 %
Plastic Limit - w _P	-	26 % – 35 %
Plasticity Index - IP	-	30 % – 53 %
Bulk Unit Weight - γ	-	1.83 – 1.98 kN/m ³
Uncorrected SPT N Value	-	6 – 54
Corrected ¹ SPT (N ₆₀)	-	6.2 – 55.8
Undrained Shear Strength ² – c _u	-	10 – 274 kPa
Notes: 1. SPT N values corrected for energy delivered to drive rods utilising the determined energy ratio (Er): N ₆₀ = (Er x N)/60 after BS EN ISO 22476-3:2005. 2. From laboratory test results. 3.		

4.6 Geochemical Testing

Geochemical analysis was undertaken on 5 soil samples of London Clay Formation, tested for selective contaminants (BRE Special Digest 1:2005 (3rd Edition), Concrete in Aggressive Ground, the results of which are summarised in the table below.

Tests	No. of Tests	Minimum	Maximum
Soil - pH	5	7.8	9.6
Soil - Total Sulphur	3	0.402%	0.744%
Soil – Acid Soluble Sulphate	3	0.054%	1.61%
Soil - Water Soluble Sulphate	5	366 mg/L	3,270 mg/L

No groundwater was encountered during the investigation.

4.7 Ground Gas Data

Preliminary ground gas monitoring results are presented in Appendix B and are summarised in the table below, one rounds of gas monitoring was undertaken one week after the final intrusive investigation works.

Barometric pressures ranged from 1011 mB to 1012 mB during the visit.

Exploratory Hole	Steady Gas Concentration (% v/v)			Steady Flow Rate (l/hr)	Response Zone (m bgl)		Stratum	Flooded?
	Methane	Carbon Dioxide	Oxygen		From	To		
BH101	0.3	2.2	10.5	<0.1	0.2	5.0	MG/LCF	N
BH102	<0.1	1.3	15.6	<0.1	0.2	5.0	MG/LCF	N
BH103	<0.1	1.1	18.6	<0.1	0.2	5.0	MG/LCF	N
Notes: MG = Made Ground LCF = London Clay Formation								

5.0 Geotechnical Assessment

5.1 Summary of Development Proposals

The Site is proposed for redevelopment comprising a three connecting buildings of up to 10 storeys high for residential apartment uses and associated external hard and soft landscaping. Existing buildings require demolition to accommodate the proposed properties.

No basements or significant retaining wall structures are proposed.

At the time of writing, structural and floor loadings and final levels were unknown. Consequently, the information provided below should be treated as preliminary and will be subject to review once a scheme and levels have been finalised.

5.2 Foundations

5.2.1 Spread Foundations

The Made Ground is considered to be too unpredictable, variable, weak and compressible in its existing condition for conventional shallow foundations at the Site.

Based on the foundation loads anticipated for the proposed multistorey development traditional shallow foundations are not considered appropriate to support proposed structural load and therefore a piled foundation solution is recommended. However, for preliminary design purposes, for any ancillary lightly loaded structure that may form part of the development, based on the site investigation undertaken, shallow strip foundations or pads up to 2m x 2m may be considered to be suitable for light loads founded at an approximate minimum depth of 1m bgl within the firm London Clay (where soils exhibit an undrained shear strength in excess of 50kPa), resulting in an allowable bearing capacity of 100kPa would likely be achieved for such foundations (limited to less than 25 mm settlement). Foundations may need to be locally deepened with respect to building near trees and the high volume change potential soils.

All foundation excavations should be inspected by a suitably qualified geotechnical engineer prior to casting to ensure the appropriate depth, founding medium and strength characteristics have been achieved.

5.2.2 Volume Change Potential

The volume change potential should be considered in any foundation schedule for structures and services located within the influence zone of trees or bushes (proposed, existing or to be removed) and appropriate precautions and/or founding depths should be designed accordingly. In cohesive soils, foundations will therefore need to be designed in accordance with NHBC Standard Chapter 4.2 '*Building Near Trees*' (2016).

The A-Line Plot presented in Appendix B suggests that the London Clay is of high to very high plasticity. The liquid limit and plasticity index results suggest that the London Clay has a high volume change potential.

5.2.3 Piling

A piled foundation solution using traditional bored or continuous flight auger (CFA) piles transferring loads to competent geology may be suitable for the expected design loads, utilising both skin friction and end bearing capacity.

The precise method of pile installation and applicability of proprietary systems, diameters and depths required would need to be informed based on the results of this investigation, by discussions with a piling contractor with suitable experience.

For preliminary design purposes, the following allowable CFA pile loads have been assessed based on commonly accepted methods for determining pile base resistance and skin friction/adhesion (utilising a bulk Factor of Safety of 2.5.); any negative skin friction effects associated with Made Ground strata has been ignored. Pile groups are assumed to be free standing with a spacing no less than three pile diameters. Commercial pile designers may use different parameters, design factors or safety factors than published methods. The values

in the table below are likely to be significantly lower where loose soils or voiding associated with dissolution features are encountered.

Estimated Allowable Pile Capacities (Bored Piles)		
Typical Pile Size/Depth		Single Pile
0.6 m diameter	15 m	630 kN
0.75 m diameter	15 m	830 kN
0.9 m diameter	15 m	1,050 kN

Individual pile/pile group loads will be a function of the surface area of the piles to be employed at the Site and their method of construction.

It is recommended that during demolition of the building, all relict basements, foundations, piles caps and other obstructions are removed and the locations of existing piles (if present) recorded to avoid in-ground obstructions during piling.

Normal static and dynamic load testing (including uplift tests) should be considered to achieve satisfactory quality control/assurance in accordance with good practice.

There will be a requirement for the placement of a suitably engineered piling mat, which should be designed and validated by a suitably qualified and experienced engineer.

5.2.4 Floor Slabs

Due to the depth of Made Ground and presence of high volume change potential soils (London Clay), it is recommended that floor slabs are suspended, transferring loads to foundations.

5.3 Roads and Pavements

It is recommended that plate CBR tests are undertaken at formation level after demolition prior to finalising pavement design.

5.4 Drainage and Soakage Tests

No infiltration testing has been undertaken as part of this assessment. However, given the shallow depth of the low permeability London Clay it is considered that soakaway drainage systems would not be viable at the Site.

5.5 Excavations & Obstructions

It is expected that conventional mechanical excavators will readily remove the Made Ground and London Clay bedrock likely to be encountered in shallow excavations although a breaker may be required to remove any existing concrete hardstanding.

All shallow foundation or services excavations at the Site should be considered unstable, therefore, temporary support of all excavations should be considered when excavating on-Site.

5.6 Groundwater

Significant groundwater would not be anticipated during the excavations required as part of the proposed development. Should any perched groundwater be encountered, then local dewatering via sump and pump should be suitable, however, treatment prior to disposal to sewer may be required.

5.7 Slopes & Retaining Features

The topography of the current Site and surrounding area is generally level. No significant slopes or retaining wall features are included within the proposed development.

5.8 Earthworks

A significant cut and fill operation is not anticipated to facilitate the proposed development.

5.9 Chemical Attack on Buried Concrete

In accordance with the recommendations of BRE Special Digest 1, 'Concrete in Aggressive Ground' 2005, the conditions of the soils at the site be classified as Design Sulphate Class DS-4 for soils, when considering the most appropriate type of concrete to be used at the site in order to resist chemical attack from elevated sulphate present in the soils (assuming potentially pyritic soils - no groundwater data available).

6.0 Generic Quantitative Risk Assessment

6.1 Introduction

The presence of hazardous substances in or on a site is generally only of concern if an actual or potential unacceptable risk exists. Legislation and guidance on the assessment of contaminated sites, consistent with UK best practice, acknowledges the need for a tiered risk-based approach. A Preliminary Risk Assessment is presented in Section 2.2. This section represents a Generic Quantitative Risk Assessment (GQRA) being a comparison of site contaminant levels against Generic Assessment Criteria.

6.2 Human Health GQRA

The assessment of risks in relation to human health has been undertaken using Generic Assessment Criteria (GAC) as detailed within the appropriate tables. Risks from soil, groundwater and Non-Aqueous Phase Liquids (NAPL) have been considered. The GAC are predominantly based on long term (chronic) risk to health. However, in the limited circumstances where short-term (acute) risks are more pronounced, these GAC have been utilised to ensure a thorough and conservative initial assessment is undertaken.

The end use scenario adopted for the assessment is a residential end use with plant uptake, considered appropriate based on the proposed residential development, given the presence of private courtyard areas included in the design.

6.2.1 Risks from Soil Sources

Based on the proposed use of the Site for light industrial use, the soil and groundwater chemical data has been compared against a residential end use GAC for 1% soil organic matter (SOM) content.

The laboratory results for contaminants exceeding detection limit compared to their respective GAC are presented in the table below.

The primary exposure pathways considered in the risk assessment are as follows:

- ▲ Ingestion of soil and indoor dust and/or oral background exposure;
- ▲ Consumption of home-grown produce and attached soil;
- ▲ Inhalation of dust (background and indoor);
- ▲ Direct dermal contact; and
- ▲ Inhalation of vapour (background and indoor).

Contaminant	No. Samples	Max Conc. (mg/kg)	GAC (mg/kg)	GAC Source	No. Exceed GAC	Volatile	Location of Exceedances (depth) = Concentration (mg/kg)	Area of Site of Exceedance
Asbestos	5	Not Detected	Detected	DS	0	N	-	-
Metals and metalloids								
Arsenic	8	30	37	LQM	0	N	-	-
Boron		3.5	290	LQM	0	N	-	-
Cadmium		3.5	11	LQM	0	N	-	-
Chromium		69	910	LQM	0	N	-	-
Copper		130	2,400	LQM	0	N	-	-
Lead		870	200	C4SL	5	N	BH101 (0.30) = 630 BH103 (0.35) = 610 BH103 (0.60) = 510 BH104 (0.30) = 870 BH105 (0.30) = 810	
Mercury		1.3	40	LQM	0	Y	-	-
Nickel		81	130	LQM	0	N	-	-
Selenium		<1.0	250	LQM	0	N	-	-
Zinc		550	3,700	LQM	0	N	-	-
Polyaromatic Hydrocarbons								
Naphthalene	8	2.8	2.3	LQM	1	Y	BH103 (0.60) = 2.8	
Acenaphthylene		7.0	170	LQM	0	Y	-	-
Acenaphthene		4.0	210	LQM	0	Y	-	-
Fluorene		8.6	170	LQM	0	Y	-	-
Phenanthrene		65	95	LQM	0	N	-	-
Anthracene		9.7	2,400	LQM	0	N	-	-
Fluoranthene		70	280	LQM	0	N	-	-
Pyrene		55	620	LQM	0	N	-	-

Contaminant	No. Samples	Max Conc. (mg/kg)	GAC (mg/kg)	GAC Source	No. Exceed GAC	Volatile	Location of Exceedances (depth) = Concentration (mg/kg)	Area of Site of Exceedance
Benzo[a]anthracene	8	22	7.2	LQM	1	N	BH103 (0.60) = 22	
Chrysene		18	15	LQM	1	N	BH103 (0.60) = 18	
Benzo[b]fluoranthene		26	2.6	LQM	1	N	BH103 (0.60) = 26	
Benzo[k]fluoranthene		7.5	77	LQM	0	N	-	-
Benzo[a]pyrene		21	2.2	LQM	1	N	BH103 (0.60) = 21	
Indeno(1,2,3-c,d)pyrene		9.2	27	LQM	0	N	-	-
Dibenz(a,h)anthracene		2.3	0.24	LQM	1	N	BH103 (0.60) = 2.3	
Benzo[g,h,i]perylene		11	320	LQM	0	N	-	-
Petroleum Hydrocarbons								
Benzene	8	<1.0	0.2	C4SI	0	Y	-	-
Toluene		<1.0	130	LQM	0	Y	-	-
Ethylbenzene		<1.0	47	LQM	0	Y	-	-
o-Xylene		<1.0	60	LQM	0	Y	-	-
m/p-Xylene		<1.0	56	LQM	0	Y	-	-
MTBE		<1.0	49	EIC	0	Y	-	-
Aliphatic TPH >C5-C6	8	<0.001	42	LQM	0	Y	-	-
Aliphatic TPH >C6-C8		<0.001	100	LQM	0	Y	-	-
Aliphatic TPH >C8-C10		<0.001	27	LQM	0	Y	-	-
Aliphatic TPH >C10-C12		14	130	LQM	0	Y	-	-
Aliphatic TPH >C12-C16		66	1,100	LQM	0	N	-	-
Aliphatic TPH >C16-C21		72	65,000	LQM	0	N	-	-
Aliphatic TPH >C21-C35		65						
Aromatic TPH >C5-C7		<0.001	70	LQM	0	Y	-	-
Aromatic TPH >C7-C8		<0.001	130	LQM	0	Y	-	-
Aromatic TPH >C8-C10		<0.001	34	LQM	0	Y	-	-

Contaminant	No. Samples	Max Conc. (mg/kg)	GAC (mg/kg)	GAC Source	No. Exceed GAC	Volatile	Location of Exceedances (depth) = Concentration (mg/kg)	Area of Site of Exceedance
Aromatic TPH >C10-C12	8	8	74	LQM	0	Y	-	-
Aromatic TPH >C12-C16		67	140	LQM	0	Y	-	-
Aromatic TPH >C16-C21		290	260	LQM	1	N	BH103 (0.60) = 290	
Aromatic TPH >C21-C35		270	1,100	LQM	0	N	-	-
Total Petroleum Hydrocarbons		740	5,000	DS	0	Y	-	-
Other Organic Contamination (including VOC and SVOC results)								
2,4-dimethylphenol	8	0.5	19	EIC	0	Y	-	-
2-methylnaphthalene		3.3	No GAC	No GAC	N/A	Y	Associated with PAH compounds.	
Dibenzofuran		5.0	No GAC	No GAC	N/A	N		
Carbazole		5.3	No GAC	No GAC	N/A	N		
Anthraquinone		11	No GAC	No GAC	N/A	N	-	-
Notes: Shaded = Maximum concentration exceeds GAC C4SL = Category 4 Screening Levels (C4SLs) published by DEFRA. DS = In-house GAC derived by Delta-Simons Environmental Consultants Ltd, 2018. EIC = Guidance values produced by the Environmental Industries Commission (EIC), the Associated of Geotechnical and Geoenvironmental Specialists (AGS) and Contaminated Land Application in Real Environments (CL:AIRE) in December 2009. LQM = Land Quality Management/CIEH S4UIs for Human Health Risk Assessment, 2014. AGAC = Acute Generic Assessment Criteria published by the Society of Brownfield Risk Assessment (SoBRA) 2019 No GAC = No Generic Assessment Criteria value available for compound.								

6.2.2 Risks from Non-Aqueous Phase Liquids (NAPL)

Widespread or significant contamination of the soils has not been identified at the Site.

Elevated concentrations of lead have been identified in the shallow Made Ground soils, whilst localised PAH and aromatic TPH has been identified in the Made Ground in one location. The identified concentrations are considered typical of levels with urban Made Ground.

Asbestos has not been identified in the five Made Ground samples tested.

No sources of potentially volatile contaminants have been identified.

The soil analysis results are considered further in the Conceptual Site Model (CSM) presented in Section 8.0 with regard to potential contaminant linkages.

6.2.3 Risks from Non-Aqueous Phase Liquids (NAPL)

Soil and groundwater exposure models used in generating Generic Assessment Criteria do not account for the potential for NAPL to represent a source of risk to human health, principally due to the production of vapours. Whilst it is possible to calculate theoretical soil saturation limits, in reality, due to co-solubility effects, these are not an appropriate indicator of the presence of NAPL. In order to assess the presence of NAPL, for petroleum hydrocarbons, an assessment criterion of 5,000 mg/kg has been applied based on professional experience.

The following has been identified in relation to NAPL at the Site:

- ▲ No observations of NAPL were made within the soils observed during drilling;
- ▲ No concentrations of Total Petroleum Hydrocarbons in excess of 5,000 mg/kg were recorded;
- ▲ No NAPL was measured during groundwater monitoring works.

On this basis, there is no evidence of NAPL being present on the Site.

6.3 Built Environment

6.3.1 Potable Water Supply Pipes

The investigation requirements for the selection of potable water pipe material are set out in UKWIR Report 10/WM/03/21. Guidance for the Selection of Water Supply Pipes to be used in Brownfield Sites (UKWIR, 2010). This report has very specific and onerous investigation requirements and as such the detailed investigation of each utility route was not within the scope of this investigation.

A preliminary review of the results indicates that a relevant linkage is unlikely to exist associated with organic contaminants and therefore contaminant polyethylene (PE) and/or polyvinyl chloride (PVC) water supply pipes may be suitable for use on the development.

It should be noted that at the time of this investigation the future routes of water supply pipes had not been established, hence the investigation and sampling strategy is not likely to be considered fully compliant with UKWIR recommendations. Consequently, a targeted investigation and specific sampling/analytical strategy may be required at a later date once the route(s) of the supply pipe(s) are known. In addition, it is recommended that the relevant water supply company be contacted at an early stage to confirm its requirements for assessment, which may not necessarily be the same as those recommended by UKWIR.

6.3.2 Building Materials

Risks to building materials associated with aggressive ground conditions is addressed in Section 5.9.

6.4 Waste Classification

This investigation was not undertaken to advise on the classification or potential management routes for waste materials that are likely to be generated during the construction phase of the project. Classification and management of wastes either on to site, off site or within the development are likely to require further

investigation and assessment. The extent of such work will depend on the particular management option that is being considered and could, for example, involve the use of waste acceptance criteria analyses.

7.0 Bulk Ground Gas Risk Assessment

7.1 Ground Gas Conceptual Site Model

7.1.1 Sources

No significant potential sources of hazardous ground gases have been identified.

Historically the Site comprised residential housing prior to the current day centre use.

The Made Ground at the Site was generally shallow and comprises granular materials including ash, brick, concrete, ceramic and flints. No organic/degradable materials were recorded. The underlying London Clay is not considered a potential source of ground gas.

Surrounding historical land uses, which include larger residential uses are not considered potential off-site sources of ground gases.

No current waste management facilities (landfills) have been identified within a 250m radius of the site.

7.1.2 Receptors

The principal receptors under consideration are future residents. Other receptors include adjacent site occupiers and future maintenance/construction workers.

7.1.3 Pathways

The underlying geology is likely to be of variable permeability with respect to ground gases. The shallow Made Ground is heterogeneous and likely to allow preferential migration locally. The underlying London Clay will limit vertical migration from below and also lateral migration.

Based on the above, migration from off-site sources (if present) is considered unlikely.

Future maintenance/construction workers may come into contact with hazardous ground gases via entry into below ground confined spaces such as excavations or service entries/inspection points.

7.2 Duration & Extent of Monitoring

Ground gas monitoring has been carried out on one occasion to provide preliminary ground gas assessment. The monitoring completed at the site is therefore not in accordance with the recommended frequency for a proposed residential development, however, it is noted that the ground gas generation potential of the Site is very low.

Ground gas monitoring was undertaken at three locations.

7.3 Ground Gas Risk Assessment

7.3.1 Background

Based on the proposed residential end use, the following documents have been consulted when assessing the gas regime at the site:

- ▲ NHBC/RSK Group PLC (2007), Guidance on Evaluation of Development Proposals on Sites where Methane and Carbon Dioxide are Present, Report Edition No. 4.
- ▲ British Standards Institute (BSI, 2015): Code of practice for the design of protective measures for methane and carbon dioxide ground gases for new buildings, BS:8485.

The presence of a source of hazardous gas within the ground does not necessarily indicate a risk will be present. Consideration of recorded gas flows together with source concentrations can allow an initial assessment to be made of the potential both for generation and subsequent migration of gas. A Characteristic Situation (CS) is derived from an assessment of the ground gas data and forms the basis of determining mitigation measures.

7.3.2 Gas Screening Value (GSV)

The Gas Screening Value (gas concentration as a fraction x maximum recorded flow) is used to provide an initial assessment of risks to future site users. The GSVs calculated for the monitoring wells are presented in the following table.

Location	Maximum Methane (%v/v)	Maximum Carbon Dioxide (%v/v)	Maximum Flow Rate (l/hr)	GSV/Characteristic Situation				Flooded well
				Methane		Carbon Dioxide		
				GSV	CS	GSV	CS	
BH101	0.3	2.2	<0.1	0.0003	1	0.0022	1	N
BH102	<0.1	1.3	<0.1	<0.0001	1	0.0013	1	N
BH103	<0.1	1.1	<0.1	<0.0001	1	0.0011	1	N
Notes:	CS1+ = Calculated GSV is CS1; however, peak methane exceeds 1%v/v and/or peak carbon dioxide exceeds 5%v/v, therefore, consider increase in CS value.							

The preliminary data indicates that the Site can be provisionally classified as CS1 (very low hazard potential) in accordance with BS 8485:2015 Table 2 and Green in accordance with NHBC classification.

It is noted that the coverage of this ground gas assessment is limited; however the classification is consistent with the understanding of the ground conditions and absence of potential sources.

7.4 Ground Gas Risk Mitigation

At this time, based on the conceptual model and a single ground gas monitoring visit no ground gas mitigation measures have been identified as required.

However, further monitoring may be required to support the planning application process.

7.5 Radon

The Site is located within an area where radon protective measures are not required.

7.6 Organic Vapours

No potential sources of volatile vapours have been identified.

8.0 Conceptual Site Model

A CSM is presented in the table below, and has been formulated taking into account all of the available data from the assessment and intrusive investigation, suitable for a Site with a proposed residential end-use.

Source	Pathways	Receptors	Confirmed Risk?	Mitigation
<p>Potentially contaminated soils beneath the Site.</p> <p>Principally, Made Ground, including lead, and localised, slightly elevated PAHs and petroleum hydrocarbons.</p>	Direct contact/ ingestion and inhalation of dust and vapours.	Site users.	Yes	<p>Though widespread significant contamination has not been identified, elevated concentrations of lead, and slightly elevated PAHs and hydrocarbons were identified in the Made Ground. Considered typical of urban soils.</p> <p>Risks will be mitigated during the development through provision of hard cover over the majority of the Site which will break the potential exposure pathways. Clean cover soils will be required in landscaping areas.</p> <p>No potential sources of volatile vapours have been identified.</p>
	<p>Direct contact, ingestion and inhalation of dust and vapours.</p> <p>Nuisance dusts and odours.</p>	Neighbours during redevelopment earthworks.	Possible	<p>The risks posed to construction workers and off-Site receptors during the redevelopment of the Site can be mitigated through best practice to minimise nuisance during earthworks.</p> <p>Good standards of personal hygiene should be observed and appropriate levels of personal protective equipment (PPE) provided and utilised to reduce the potential risks to groundworkers.</p> <p>An asbestos survey should be undertaken prior to demolition by a specialist contractor and removed in accordance with legislation to prevent further contamination of the ground/release of dust and fibres to air.</p>
		Maintenance workers during any future sub-surface works at the Site.	Possible	
	Leaching of contaminants and vertical migration.	Groundwater beneath the Site and off-Site receptors.	No	<p>No groundwater was encountered during the investigation. However, no potential soil sources have been identified and the Site is underlain by a significant thickness of lower permeability London Clay deposits. Therefore, no potential risks to controlled waters have been identified.</p>

Ground gas.	Vertical and lateral migration of ground gases.	Site users & buildings on-Site.	No	<p>No potential sources of hazardous ground gases have been identified at the Site. Preliminary data based on the known ground conditions and limited monitoring indicates that the Site may be classified as CS1 (very low risk).</p> <p>Ground gas protection measures are unlikely to be required, however, this may need to be confirmed through further monitoring.</p>
Potentially contaminated soil and groundwater from off-Site sources.	Lateral migration and subsequent inhalation.	Groundwater beneath the Site and future Site users.	No	<p>No significant potential sources of off-Site contamination have been identified to date. The underlying lower permeability London Clay and absence of groundwater recorded at the Site will limited the lateral migration of any contamination.</p> <p>Potential risks would be mitigated as above with regards on-Site sources.</p>
Localised 'hotspots' of contamination within areas not directly investigated	All pathways	All Receptors	Yes	<p>As with all previously developed sites, a discovery strategy should be implemented during the development to ensure that potential contamination is appropriately assessed and reported.</p>

9.0 Conclusions & Recommendations

9.1 Geotechnical Summary

Based on the foundation loads anticipated for the proposed multistorey development, traditional shallow foundations are not considered appropriate to support proposed structural loads, therefore a piled foundation solution is recommended.

The precise method of pile installation and applicability of proprietary systems, diameters and depths required would need to be informed based on the results of this investigation, by discussions with a piling contractor with suitable experience.

Due to the depth of Made Ground and presence of high volume change potential soils (London Clay), it is recommended that floor slabs are suspended, transferring loads to foundations.

Buried concrete may be designed in accordance with DS-41 and AC-4.

9.2 Contamination Issues

The investigation has been carried out in order to provide information on the quality of the soil and groundwater beneath the Site in the context of land contamination and provide information on the ground gas regime beneath the Site for a residential end use. The assessment is being completed prior to the proposed redevelopment of the Site.

9.2.1 Human Health

Widespread or significant contamination of the Site has not been identified. Elevated lead and slightly elevated PAHs and aromatic TPH C16-C21 concentrations have been recorded in the shallow Made Ground at the Site, considered representative of typical urban Made Ground. However, no asbestos or sources of potentially volatile contaminants have been identified.

Risks to future site users can be addressed through development by breaking the potential direct contact pathways through hardcover or certified suitable for use imported subsoil and topsoil in the soft landscaped areas.

Although no asbestos containing materials (ACM) were identified in the samples analysed, ACM may be present within the buildings currently on-Site. An asbestos survey should be undertaken prior to demolition by a specialist contractor and removed in accordance with legislation to prevent further contamination of the ground. Groundworkers and sub-surface maintenance workers should be made aware of the possibility of encountering contaminated soils through toolbox talks and in particular the potential presence of asbestos and an appropriate protocol to mitigate exposure of the workforce and general public should be in place. The Contractor will need to prepare a risk assessment which identifies a safe system of work to handle the asbestos containing soils which is likely to include asbestos awareness training, a protocol for unexpected finds (should gross asbestos material be identified) as well as safe working procedures such as damping down of excavations and stockpiles in line with general dust generation mitigation. The risk assessment will need to identify the appropriate levels of PPE and/or RPE required. This recommendation should be captured in Site health and safety documentation and in maintenance plans.

9.2.2 Controlled Waters

No groundwater was encountered during the investigation. However, no potential soil sources have been identified and the Site is underlain by a significant thickness of lower permeability London Clay deposits. Therefore, no potential risks to controlled waters have been identified.

9.2.3 Ground Gas

No potential source of hazardous ground gases have been identified. Preliminary ground gas monitoring indicates the Site can be classified as CS1 – NHBC Green. However, further monitoring may be required to support the planning process.

9.3 Recommendations for Supplementary Work

Based on the findings of this report, the following recommendations for supplementary works are made;

- ▲ Post demolition supplementary investigation may be required to confirm the depth and nature of Made Ground beneath the existing buildings;
- ▲ Additional ground gas monitoring may be required to address planning condition requirements; and
- ▲ Upon completion of any supplementary investigation works, preparation of a Remediation and Verification Strategy, to address planning condition requirements to outline the measures to mitigate any unacceptable risks to human health/controlled waters receptors.

Waste classification has not been undertaken as part of the scope of works, should it be proposed to remove materials from the Site then specific additional investigations may be needed to classify the materials in accordance with current regulatory requirements.

Appendix A – Limitations

Limitations

The recommendations contained in this Report represent Delta-Simons professional opinions, based upon the information listed in the Report, exercising the duty of care required of an experienced Environmental Consultant. Delta-Simons does not warrant or guarantee that the Site is free of hazardous or potentially hazardous materials or conditions.

Due to the evolving regulatory climate specific to Per Fluoro Alkyl Substances (PFAS), the scope of works is not intended to be conclusive as it relates to the identification of any PFAS related issues. While Delta-Simons may advise its Client if Delta-Simons becomes aware of the use of PFAS at the subject property, Delta-Simons makes no representation nor accepts any liability that any or all PFAS issues have been identified and/or revealed to its client through its scope of work, as presented herein.

Delta-Simons obtained, reviewed and evaluated information in preparing this Report from the Client and others. Delta-Simons conclusions, opinions and recommendations has been determined using this information. Delta-Simons does not warrant the accuracy of the information provided to it and will not be responsible for any opinions which Delta-Simons has expressed, or conclusions which it has reached in reliance upon information which is subsequently proven to be inaccurate.

This Report was prepared by Delta-Simons for the sole and exclusive use of the Client and for the specific purpose for which Delta-Simons was instructed. Nothing contained in this Report shall be construed to give any rights or benefits to anyone other than the Client and Delta-Simons, and all duties and responsibilities undertaken are for the sole and exclusive benefit of the Client and not for the benefit of any other party. In particular, Delta-Simons does not intend, without its written consent, for this Report to be disseminated to anyone other than the Client or to be used or relied upon by anyone other than the Client. Use of the Report by any other person is unauthorised and such use is at the sole risk of the user. Anyone using or relying upon this Report, other than the Client, agrees by virtue of its use to indemnify and hold harmless Delta-Simons from and against all claims, losses and damages (of whatsoever nature and howsoever or whensoever arising), arising out of or resulting from the performance of the work by the Consultant.

Appendix B – McAuliffe Factual Report

Your Ref: N/A
Our Ref: VIST3619

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10/06/2021

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Vistry Partnerships London
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By Email

Re: The Charlie Ratchford Centre, Belmont Street, Camden, London, NW1 8HF

Please find enclosed a factual summary of the ground investigation works carried out at the former Charlie Ratchford Centre, Belmont Street, Camden, London, NE1 8HF.

1.0 Introduction & Project Understanding

McAuliffe Civil Engineering Limited (MCEL) received an instruction to undertake intrusive ground investigation works at the Former Charlie Ratchford Centre, Belmont Street, Camden, London, NW1 8HF. These works were undertaken to facilitate preparatory works for the proposed development under planning application 2020/5063/P. A site location plan is enclosed in Appendix A.

The proposed redevelopment of the site is set to include demolition of the existing building, and erection of 3no. residential blocks ranging through 5, 7, and 10-storeys in height.

The works were instructed by the client Vistry Partnerships, and undertaken in accordance with our tender submission, reference 210125 VIST 3619 Belmont Street -GeoEnv Rev 3.

A Preliminary Contaminated Land Assessment has been previously carried out on site by Stantec, reference 43006/3501/001, Rev 01, dated September 2020 which was reviewed in preparation of the site works, and writing of this letter report. A copy of the Stantec report is provided in Appendix D.

Intrusive investigations have not been previously undertaken at the site but have been carried out 20m from the western boundary on the associated Crogsland Road development.

The intrusive investigation on which this report is based, consisted of the advancement of 3no. cable percussive boreholes, and 2no. hand pits. In-situ soil testing and sampling was also undertaken, with 3no. combined groundwater, and ground gas monitoring wells being installed.

This letter report summarises the findings of the investigation, taking into consideration previously undertaken works. Borehole records, data plots and laboratory analytical results are also enclosed.

2.0 Factual Ground Investigation Information

2.1 Field Work

The intrusive site investigation was undertaken between 1st and 15th February 2021, with follow-up well gauging and ground gas monitoring being carried out on 22nd February 2021.

2no. hand dug pits were advanced in areas that were inaccessible by the drill rig. The hand pits were advanced up to 1.1m bgl and logged, with Made Ground soil samples collected and scheduled for laboratory analysis prior to backfilling with the soil arisings.

3no. boreholes were advanced using cable percussion techniques to depths of up to 33.3 m below existing ground level to provide information on ground conditions and to recover samples of the materials encountered for laboratory testing.

Ground conditions were investigated by carrying out in-situ field tests, as well as recovering disturbed samples (small and bulk), and undisturbed U100 thick-walled core samples from the boreholes.

Sub-contracted chemical and geo-technical laboratory analysis was undertaken by i2 Analytical Ltd. (i2) who are UKAS and MCERTS accredited. Samples were transported under temperature-controlled conditions using i2's own fleet of delivery vehicles with sample reports presented in Appendix B, and C.

In-situ Standard Penetration Tests (SPT's) were undertaken throughout the depth of the boreholes to provide an indication of the in-situ soil stiffness. The number of blows required to advance a standard split spoon over the final 300mm of a 450mm total drive was recorded as the 'N' value, with findings being presented in Section 3.2.

Following borehole advancement, 3no. combined groundwater and ground gas monitoring wells were installed to allow groundwater (not encountered during the field work)) and ground gas levels to be monitored and recorded. The monitoring wells were constructed using 50 mm internal diameter HDPE slotted pipe between 0.2 and 5.0m below ground level (m bgl), and plain 50mm internal diameter HDPE pipe from 0.2 m to ground level. BS124/EN125 rated monitoring well covers were installed at existing ground level at each location.

2.2 Laboratory Testing

2.2.1 Chemical Laboratory Testing

A programme of chemical laboratory testing was carried out on soil samples to determine the concentrations of a range of commonly occurring potential contaminants, with a total of 15no. soil samples being scheduled for laboratory analysis as detailed in Table 1.

A list of the determinants in the schedule of analysis is presented in Table 2.

Number of Tests		
Test Suite	Made Ground	Natural
Asbestos	6	-
Metals	7	3
TPH CWG	7	3
Speciated 16 PAHs	7	3
VOC	7	3
SVOC	7	3
BRE	-	5

Table 1: Chemical Tests Scheduled

Determinand	Accreditation Status		Methodology	Detection Limit	Units
Asbestos Screen & ID	ISO17025	None	HSG 248	NAD / Type	N/a
TPH CWG inc BTEX & MTBE	ISO17025	MCERTS	GC/MS - GC/FID	<0.001 - <10	mg/kg
PAH - Speciated (EPA 16)	ISO17025	MCERTS	GC/MS	< 0.05	mg/kg
Arsenic (aqua regia extractable)	ISO17025	MCERTS	ICP-OES	<1	mg/kg
Boron - Water Soluble	ISO17025	MCERTS	ICP-OES	<0.2	mg/kg
Cadmium (aqua regia extractable)	ISO17025	MCERTS	ICP-OES	<0.2	mg/kg
Chromium (aqua regia extractable)	ISO17025	MCERTS	ICP-OES	<1	mg/kg
Copper (aqua regia extractable)	ISO17025	MCERTS	ICP-OES	<1	mg/kg
Lead (aqua regia extractable)	ISO17025	MCERTS	ICP-OES	<1	mg/kg
Mercury (aqua regia extractable)	ISO17025	MCERTS	ICP-OES	<0.3	mg/kg
Nickel (aqua regia extractable)	ISO17025	MCERTS	ICP-OES	<1	mg/kg
Selenium (aqua regia extractable)	ISO17025	MCERTS	ICP-OES	<1	mg/kg
Zinc (aqua regia extractable)	ISO17025	MCERTS	ICP-OES	<1	mg/kg
SVOC	ISO17025*	MCERTS*	GC/MS	<0.05 - <0.3*	mg/kg
VOCs	ISO17025*	MCERTS*	HS-GC/MS	< 1	µg/kg
BRE SD1 Suite					
pH (2.5:1 Extract)	ISO17025	MCERTS	Potentiometric	+ / - 0.1	pH Units
Sulphate (as SO ₄) - Water Soluble (2:1)	ISO17025	MCERTS	CP-OES	<1.25	mg/l
Sulphate (as SO ₄) - Total	ISO17025	None	CP-OES	<0.005	%
Sulphur - Total	None	None	CP-OES	<0.005	%
Ammonium (NH ₄ ⁺)	ISO17025	MCERTS	Colorimetric	<0.005	mg/l
Magnesium - Water Soluble (2:1)	None	None	CP-OES	<2.5	mg/l
Nitrate (as NO ₃) - Water Soluble (2:1)	None	None	Colorimetric	<2.5	mg/l
Chloride - Water Soluble (2:1)	ISO17025	MCERTS	Colorimetric	<0.5	mg/l

* =Depending on compound

Table 2: Suite of Determinants

Chemical laboratory test reports included in Appendix B.

2.2.2 Geotechnical Laboratory Testing

A programme of geotechnical laboratory testing was carried out to determine the physical properties of selected samples of the materials encountered on site.

The testing was scheduled by MCEL and carried out in accordance with BS 1377 (1990) by i2 Analytical.

A total of 77 no. soil samples were collected and scheduled for geotechnical laboratory testing as detailed in Table 3.

Test Description	Number of Tests
Moisture Content	58
Plasticity Index - 4 point Liquid Limit	58
Particle Size Distribution (wet / dry sieve)	58
Quick Undrained Multi stage Triaxial Test	19

Table 3: Scheduled Geo-technical Tests

The water-soluble sulphate and pH results obtained as part of the chemical analysis will be used in combination with BRE Special Digest 1 to allow buried concrete to be designed.

The results of the geotechnical laboratory testing are presented as Appendix C and summarised in Section 3.2 of this report.

2.3 Gas Monitoring

Each of the monitoring wells installed in the boreholes as part of the investigation has been monitored to determine the water level and the concentrations of methane, carbon monoxide, carbon dioxide, hydrogen sulphide and oxygen together with gas flow rates and atmospheric pressure.

A Photo-Ionization Detector (PID) was used during the visit to assess the installations for the presence of volatile organic compounds (VOCs).

A measurement to the base of each monitoring well was also made to confirm the depth of the installation.

The monitoring results are presented in Section 3.4 below.

3.0 Ground Conditions

The British Geological Survey (BGS) online mapping of the area indicates the site to be underlain by the London Clay Formation. The deposits encountered in this investigation comprised the following sequence:

- Made Ground
- London Clay Formation

3.1 Made Ground

Made Ground was encountered in all the boreholes and comprised a sandy, gravelly, clay with the gravel consisting of brick, concrete, and ceramic fragments to a maximum unproven depth of 1.1m bgl (HP/BH104).

3.2 London Clay Formation

Soils interpreted to represent the London Clay Formation were encountered beneath the made ground, to a maximum depth of 33.3m bgl. The London Clay Formation was encountered as a clay with occasional siltstone. The siltstone was recovered as a fine to coarse gravel within the clay.

SPTs were undertaken throughout the depth of the London Clay Formation. Due to the shallow nature of the Made Ground no tests were carried out with those materials.

The results of the SPT tests ranged from N=6 (BH101 at 2.00m bgl) to N=>50 at numerous depths.

Tests were discontinued (refused) at a number of depths and locations due to N-value being greater than 50. The first SPT refusal in BH101 was encountered at a depth of 18.5m bgl, in BH102 at a depth of 23.0m bgl, and in BH103 at a depth of 20.0m bgl with results summarised below.

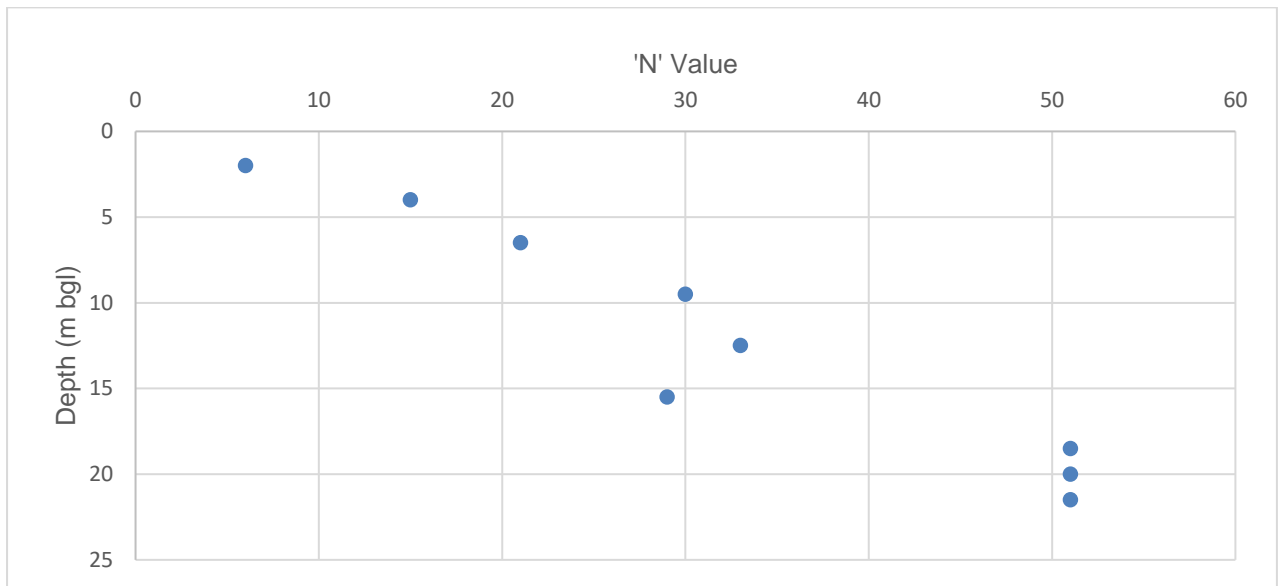


Plate 1: BH101 SPT 'N' Value -vs- Depth

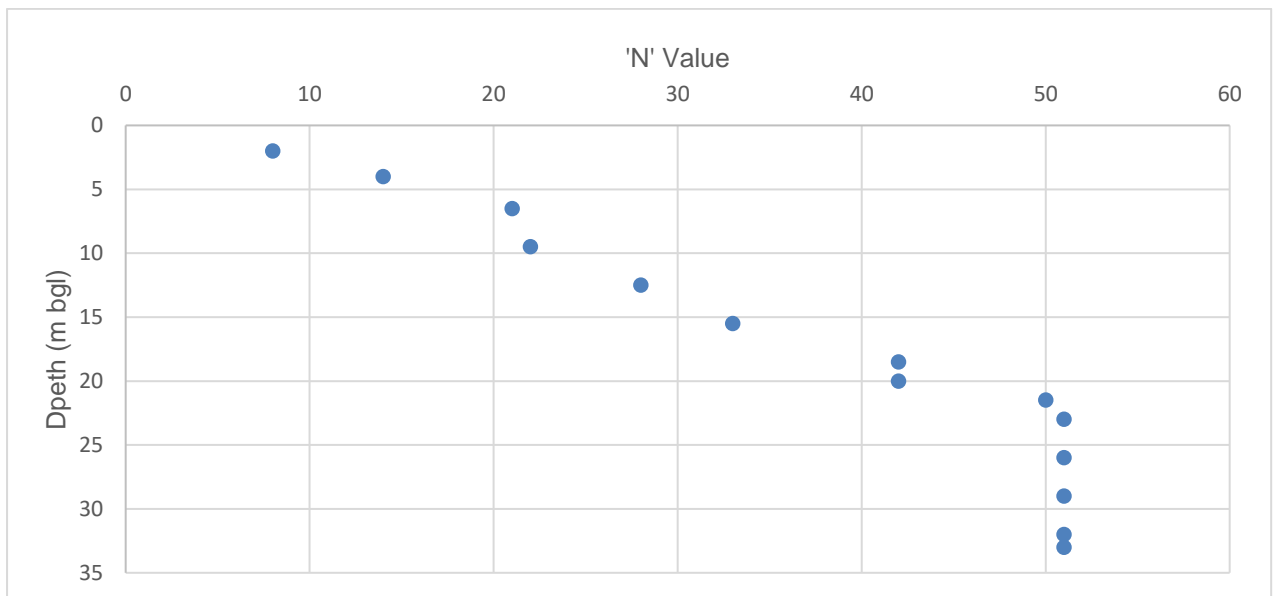


Plate 2: BH102 SPT 'N' Value -vs- Depth

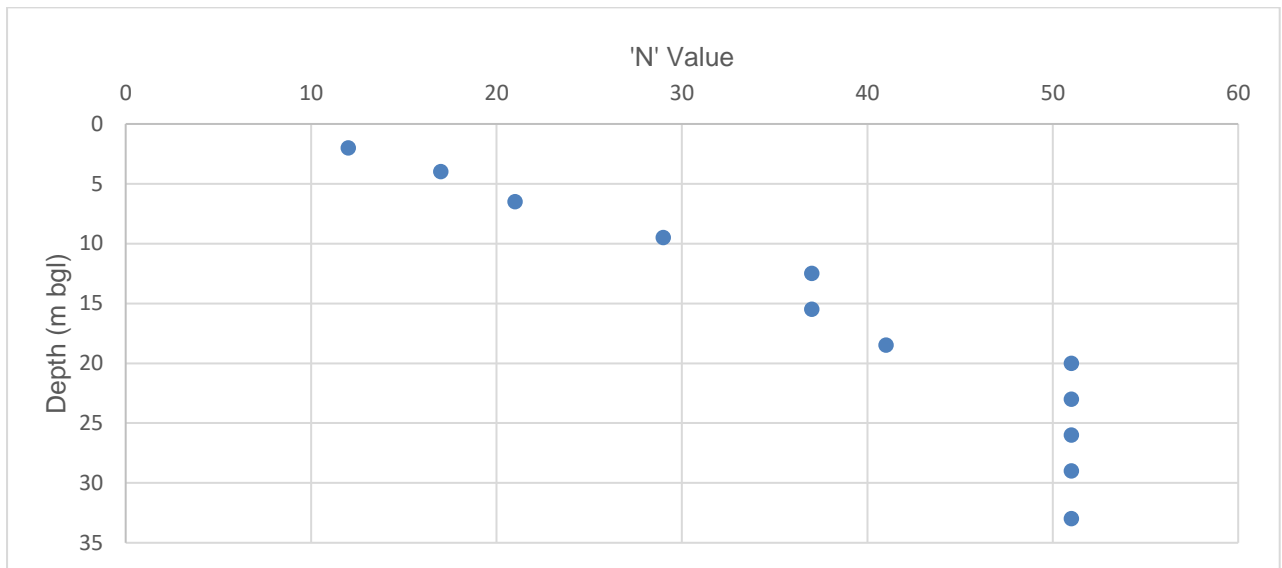


Plate 3: BH103 SPT 'N' Value -vs- Depth

Atterberg Limits and moisture content were determined for 58no. samples from the London Clay Formation. From the samples tested, the liquid limit (WL) was found to range between 57% and 83%, the plastic limit (Wp) was found to range between 26% and 35%, and the Plasticity Index (Ip) was found to range between 30% and 53%. The moisture content of the samples was found to range between 25% and 37%.

Unconsolidated Undrained Multi-Stage Triaxial tests were conducted on 19no. undisturbed U100 sample cores to determine the undrained shear strength at depth across the site with test results ranging from 41 kPa– 231 kPa in BH101, 23 kPa- 200 kPa in BH102, and 10kPa – 274 kPa in BH103.

5no. samples were selected and tested to allow assessment of the aggressive chemical environment for concrete within the site (by others).

The particle size distribution was determined on 58no. samples.

Laboratory Test Certificates are presented in Appendix C.

3.3 Groundwater

Groundwater was not encountered during the advancement of any of the boreholes and was not present during the follow-up well gauging, and ground-gas monitoring visit on 22nd February 2021.

3.4 Ground Gases

Table 4 provides a summary of the gas monitoring results from the single monitoring visit undertaken on 22nd February 2021.

Location	CO ₂ (%)	O ₂ (%)	H ₂ S (ppm)	CO (ppm)	CH ₄ (%)	VOCs (ppm)	Atmospheric (Pressure)	Peak Flow Rate (l/hr)	DTW (m btoc)	Depth of Installation (m btoc)
BH101	2.2	10.5	0.0	0.0	0.3	0.0	1011	0.0 - +0.1	-	5.105
BH102	1.3	15.6	0.0	0.0	0.0	0.0	1012	0.0 - +0.1	-	4.993
BH103	1.1	18.6	0.0	0.0	0.0	0.0	1011	0.0 - +0.1	-	5.104

-meters below top of casing (m btoc)

-Depth to Water (DTW)

Table 4: Summary of ground gas monitoring results

4.0 General

The ground conditions at the site were recorded to be made ground to 1.1m bgl overlying stiff grey clay to 33.3m bgl.

MCEL have instructed Delta-Simons to carry out a Geo-Environmental Assessment Report based on the factual data contained within this report.

We trust that you will find the enclosed information of value but should you have any queries please do not hesitate to contact the writer at the above noted address.

Yours sincerely,



Matthew Handley

Senior Remediation Project Manager

Email: matthew@mcauliffegroup.co.uk

Office: 0208 102 0570 **Mobile:** 07831 661 191



APPENDIX A

DRAWINGS

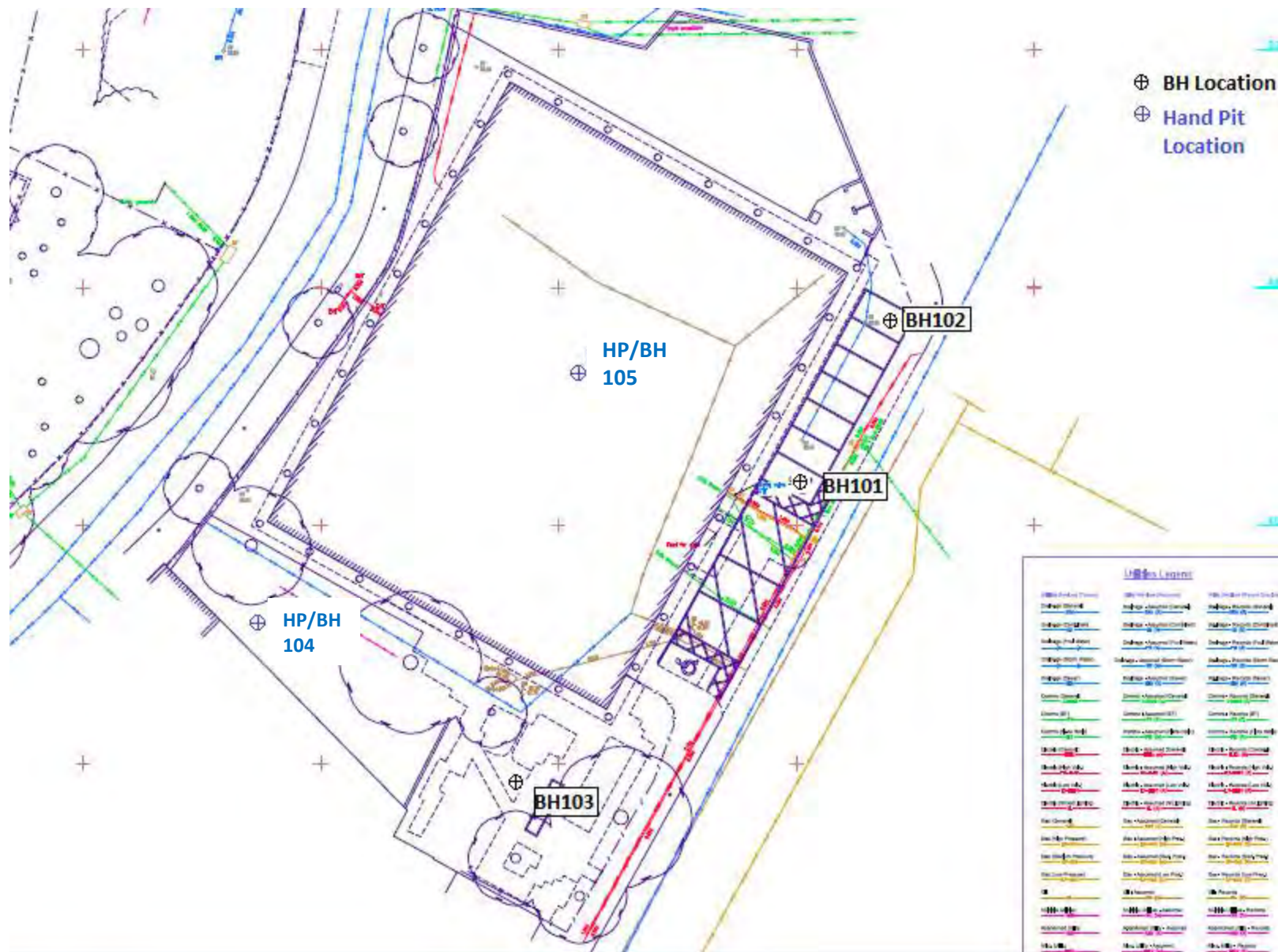


Figure 1 – Belmont Street BH/HP Location Plan

APPENDIX B

LABORATORY CHEMICAL DATA

**Matthew Handley**

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Analytical Report Number : 21-54706

Replaces Analytical Report Number: 21-54706, issue no. 1
Additional analysis undertaken.

Project / Site name:	Belmont Street	Samples received on:	03/02/2021
Your job number:	VIST3619	Samples instructed on/ Analysis started on:	03/02/2021
Your order number:	M-VIST003619/0002	Analysis completed by:	16/02/2021
Report Issue Number:	2	Report issued on:	16/02/2021
Samples Analysed:	5 soil samples		

Signed: 

Karolina Marek
PL Head of Reporting Team
For & on behalf of i2 Analytical Ltd.

Standard Geotechnical, Asbestos and Chemical Testing Laboratory located at: ul. Pionierów 39, 41 -711 Ruda Śląska, Poland.

Accredited tests are defined within the report, opinions and interpretations expressed herein are outside the scope of accreditation.

Standard sample disposal times, unless otherwise agreed with the laboratory, are :

soils	- 4 weeks from reporting
leachates	- 2 weeks from reporting
waters	- 2 weeks from reporting
asbestos	- 6 months from reporting

Excel copies of reports are only valid when accompanied by this PDF certificate.

Any assessments of compliance with specifications are based on actual analytical results with no contribution from uncertainty of measurement.
Application of uncertainty of measurement would provide a range within which the true result lies.
An estimate of measurement uncertainty can be provided on request.

Analytical Report Number: 21-54706
Project / Site name: Belmont Street

Lab Sample Number				1758008	1758009	1758010	1758011	1758012
Sample Reference				BH104	BH105	BH105	BH101	BH101
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.30	0.30	0.90	0.30	4.00
Date Sampled				02/02/2021	02/02/2021	02/02/2021	03/02/2021	03/02/2021
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
Stone Content	%	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	17	22	25	21	22
Total mass of sample received	kg	0.001	NONE	1.0	1.2	0.5	1.0	0.3

Asbestos in Soil	Type	N/A	ISO 17025	Not-detected	Not-detected	Not-detected	Not-detected	-
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Speciated PAHs

Naphthalene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthylene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Fluorene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Phenanthrene	mg/kg	0.05	MCERTS	1.2	1.1	< 0.05	< 0.05	< 0.05
Anthracene	mg/kg	0.05	MCERTS	0.32	< 0.05	< 0.05	< 0.05	< 0.05
Fluoranthene	mg/kg	0.05	MCERTS	2.3	2.8	< 0.05	< 0.05	< 0.05
Pyrene	mg/kg	0.05	MCERTS	2.1	2.5	< 0.05	< 0.05	< 0.05
Benzo(a)anthracene	mg/kg	0.05	MCERTS	1.3	1.4	< 0.05	< 0.05	< 0.05
Chrysene	mg/kg	0.05	MCERTS	1.3	1.1	< 0.05	< 0.05	< 0.05
Benzo(b)fluoranthene	mg/kg	0.05	MCERTS	1.5	1.4	< 0.05	< 0.05	< 0.05
Benzo(k)fluoranthene	mg/kg	0.05	MCERTS	0.43	0.72	< 0.05	< 0.05	< 0.05
Benzo(a)pyrene	mg/kg	0.05	MCERTS	1.2	1.3	< 0.05	< 0.05	< 0.05
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	0.66	0.64	< 0.05	< 0.05	< 0.05
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	0.82	0.78	< 0.05	< 0.05	< 0.05

Total PAH

Speciated Total EPA-16 PAHs	mg/kg	0.8	MCERTS	13.2	13.8	< 0.80	< 0.80	< 0.80
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Heavy Metals / Metalloids

Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	30	28	18	16	14
Boron (water soluble)	mg/kg	0.2	MCERTS	0.7	1	1.9	2.7	0.7
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	2.2	3.5	< 0.2	< 0.2	< 0.2
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	54	69	69	34	55
Copper (aqua regia extractable)	mg/kg	1	MCERTS	130	120	36	61	36
Lead (aqua regia extractable)	mg/kg	1	MCERTS	870	810	40	630	19
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	1	1.1	< 0.3	< 0.3	< 0.3
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	39	48	81	24	47
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	550	540	94	150	91

Monoaromatics & Oxygenates

Benzene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Toluene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Ethylbenzene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
p & m-xylene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
o-xylene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0

Analytical Report Number: 21-54706
Project / Site name: Belmont Street

Lab Sample Number				1758008	1758009	1758010	1758011	1758012
Sample Reference				BH104	BH105	BH105	BH101	BH101
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.30	0.30	0.90	0.30	4.00
Date Sampled				02/02/2021	02/02/2021	02/02/2021	03/02/2021	03/02/2021
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					

Petroleum Hydrocarbons

TPH-CWG - Aliphatic >EC5 - EC6	mg/kg	0.001	MCERTS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
TPH-CWG - Aliphatic >EC6 - EC8	mg/kg	0.001	MCERTS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
TPH-CWG - Aliphatic >EC8 - EC10	mg/kg	0.001	MCERTS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
TPH-CWG - Aliphatic >EC10 - EC12	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	14	< 1.0
TPH-CWG - Aliphatic >EC12 - EC16	mg/kg	2	MCERTS	5.5	< 2.0	< 2.0	66	< 2.0
TPH-CWG - Aliphatic >EC16 - EC21	mg/kg	8	MCERTS	18	< 8.0	< 8.0	72	< 8.0
TPH-CWG - Aliphatic >EC21 - EC35	mg/kg	8	MCERTS	62	27	< 8.0	65	< 8.0
TPH-CWG - Aliphatic (EC5 - EC35)	mg/kg	10	MCERTS	85	27	< 10	220	< 10

TPH-CWG - Aromatic >EC5 - EC7	mg/kg	0.001	MCERTS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
TPH-CWG - Aromatic >EC7 - EC8	mg/kg	0.001	MCERTS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
TPH-CWG - Aromatic >EC8 - EC10	mg/kg	0.001	MCERTS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
TPH-CWG - Aromatic >EC10 - EC12	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aromatic >EC12 - EC16	mg/kg	2	MCERTS	< 2.0	5.2	< 2.0	24	< 2.0
TPH-CWG - Aromatic >EC16 - EC21	mg/kg	10	MCERTS	13	18	< 10	25	< 10
TPH-CWG - Aromatic >EC21 - EC35	mg/kg	10	MCERTS	40	25	< 10	27	< 10
TPH-CWG - Aromatic (EC5 - EC35)	mg/kg	10	MCERTS	53	49	< 10	77	< 10

VOCs

Chloromethane	µg/kg	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Chloroethane	µg/kg	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Bromomethane	µg/kg	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Vinyl Chloride	µg/kg	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Trichlorofluoromethane	µg/kg	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,1-Dichloroethene	µg/kg	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,1,2-Trichloro 1,2,2-Trifluoroethane	µg/kg	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Cis-1,2-dichloroethene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,1-Dichloroethane	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
2,2-Dichloropropane	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Trichloromethane	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,1,1-Trichloroethane	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2-Dichloroethane	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,1-Dichloropropene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Trans-1,2-dichloroethene	µg/kg	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Benzene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Tetrachloromethane	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2-Dichloropropane	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Trichloroethene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Dibromomethane	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Bromodichloromethane	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Cis-1,3-dichloropropene	µg/kg	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Trans-1,3-dichloropropene	µg/kg	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Toluene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,1,2-Trichloroethane	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,3-Dichloropropane	µg/kg	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Dibromochloromethane	µg/kg	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Tetrachloroethene	µg/kg	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2-Dibromoethane	µg/kg	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Chlorobenzene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,1,1,2-Tetrachloroethane	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Ethylbenzene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0

Analytical Report Number: 21-54706
Project / Site name: Belmont Street

Lab Sample Number				1758008	1758009	1758010	1758011	1758012
Sample Reference				BH104	BH105	BH105	BH101	BH101
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.30	0.30	0.90	0.30	4.00
Date Sampled				02/02/2021	02/02/2021	02/02/2021	03/02/2021	03/02/2021
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
p & m-Xylene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Styrene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Tribromomethane	µg/kg	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
o-Xylene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,1,2,2-Tetrachloroethane	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Isopropylbenzene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Bromobenzene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
n-Propylbenzene	µg/kg	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
2-Chlorotoluene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
4-Chlorotoluene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,3,5-Trimethylbenzene	µg/kg	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
tert-Butylbenzene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2,4-Trimethylbenzene	µg/kg	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
sec-Butylbenzene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,3-Dichlorobenzene	µg/kg	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
p-Isopropyltoluene	µg/kg	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2-Dichlorobenzene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,4-Dichlorobenzene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Butylbenzene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2-Dibromo-3-chloropropane	µg/kg	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2,4-Trichlorobenzene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Hexachlorobutadiene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2,3-Trichlorobenzene	µg/kg	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0

SVOCs

Aniline	mg/kg	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Phenol	mg/kg	0.2	ISO 17025	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
2-Chlorophenol	mg/kg	0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Bis(2-chloroethyl)ether	mg/kg	0.2	MCERTS	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
1,3-Dichlorobenzene	mg/kg	0.2	MCERTS	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
1,2-Dichlorobenzene	mg/kg	0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
1,4-Dichlorobenzene	mg/kg	0.2	MCERTS	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
Bis(2-chloroisopropyl)ether	mg/kg	0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
2-Methylphenol	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
Hexachloroethane	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Nitrobenzene	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
4-Methylphenol	mg/kg	0.2	NONE	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
Isophorone	mg/kg	0.2	MCERTS	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
2-Nitrophenol	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
2,4-Dimethylphenol	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
Bis(2-chloroethoxy)methane	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
1,2,4-Trichlorobenzene	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
Naphthalene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
2,4-Dichlorophenol	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
4-Chloroaniline	mg/kg	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Hexachlorobutadiene	mg/kg	0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
4-Chloro-3-methylphenol	mg/kg	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
2,4,6-Trichlorophenol	mg/kg	0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
2,4,5-Trichlorophenol	mg/kg	0.2	MCERTS	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
2-Methylnaphthalene	mg/kg	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
2-Chloronaphthalene	mg/kg	0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Dimethylphthalate	mg/kg	0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
2,6-Dinitrotoluene	mg/kg	0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1

Analytical Report Number: 21-54706
Project / Site name: Belmont Street

Lab Sample Number				1758008	1758009	1758010	1758011	1758012
Sample Reference				BH104	BH105	BH105	BH101	BH101
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.30	0.30	0.90	0.30	4.00
Date Sampled				02/02/2021	02/02/2021	02/02/2021	03/02/2021	03/02/2021
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
Acenaphthylene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
2,4-Dinitrotoluene	mg/kg	0.2	MCERTS	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
Dibenzofuran	mg/kg	0.2	MCERTS	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
4-Chlorophenyl phenyl ether	mg/kg	0.3	ISO 17025	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
Diethyl phthalate	mg/kg	0.2	MCERTS	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
4-Nitroaniline	mg/kg	0.2	MCERTS	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
Fluorene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Azobenzene	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
Bromophenyl phenyl ether	mg/kg	0.2	MCERTS	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
Hexachlorobenzene	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
Phenanthrene	mg/kg	0.05	MCERTS	1.2	1.1	< 0.05	< 0.05	< 0.05
Anthracene	mg/kg	0.05	MCERTS	0.32	< 0.05	< 0.05	< 0.05	< 0.05
Carbazole	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
Dibutyl phthalate	mg/kg	0.2	MCERTS	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
Anthraquinone	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
Fluoranthene	mg/kg	0.05	MCERTS	2.3	2.8	< 0.05	< 0.05	< 0.05
Pyrene	mg/kg	0.05	MCERTS	2.1	2.5	< 0.05	< 0.05	< 0.05
Butyl benzyl phthalate	mg/kg	0.3	ISO 17025	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
Benzo(a)anthracene	mg/kg	0.05	MCERTS	1.3	1.4	< 0.05	< 0.05	< 0.05
Chrysene	mg/kg	0.05	MCERTS	1.3	1.1	< 0.05	< 0.05	< 0.05
Benzo(b)fluoranthene	mg/kg	0.05	MCERTS	1.5	1.4	< 0.05	< 0.05	< 0.05
Benzo(k)fluoranthene	mg/kg	0.05	MCERTS	0.43	0.72	< 0.05	< 0.05	< 0.05
Benzo(a)pyrene	mg/kg	0.05	MCERTS	1.2	1.3	< 0.05	< 0.05	< 0.05
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	0.66	0.64	< 0.05	< 0.05	< 0.05
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	0.82	0.78	< 0.05	< 0.05	< 0.05

U/S = Unsuitable Sample I/S = Insufficient Sample



Analytical Report Number : 21-54706

Project / Site name: Belmont Street

* These descriptions are only intended to act as a cross check if sample identities are questioned. The major constituent of the sample is intended to act with respect to MCERTS validation. The laboratory is accredited for sand, clay and loam (MCERTS) soil types. Data for unaccredited types of solid should be interpreted with care.

Stone content of a sample is calculated as the % weight of the stones not passing a 10 mm sieve. Results are not corrected for stone content.

Lab Sample Number	Sample Reference	Sample Number	Depth (m)	Sample Description *
1758008	BH104	None Supplied	0.3	Brown clay and sand with brick and rubble.
1758009	BH105	None Supplied	0.3	Brown clay and sand with gravel and vegetation.
1758010	BH105	None Supplied	0.9	Light brown clay with gravel.
1758011	BH101	None Supplied	0.3	Brown clay and sand with gravel.
1758012	BH101	None Supplied	4	Brown clay with gravel.

Analytical Report Number : 21-54706
Project / Site name: Belmont Street

Water matrix abbreviations: Surface Water (SW) Potable Water (PW) Ground Water (GW)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Metals in soil by ICP-OES	Determination of metals in soil by aqua-regia digestion followed by ICP-OES.	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil.	L038-PL	D	MCERTS
Asbestos identification in soil	Asbestos Identification with the use of polarised light microscopy in conjunction with disperion staining techniques.	In house method based on HSG 248	A001-PL	D	ISO 17025
Boron, water soluble, in soil	Determination of water soluble boron in soil by hot water extract followed by ICP-OES.	In-house method based on Second Site Properties version 3	L038-PL	D	MCERTS
Moisture Content	Moisture content, determined gravimetrically. (30 oC)	In house method.	L019-UK/PL	W	NONE
Speciated EPA-16 PAHs in soil	Determination of PAH compounds in soil by extraction in dichloromethane and hexane followed by GC-MS with the use of surrogate and internal standards.	In-house method based on USEPA 8270	L064-PL	D	MCERTS
Stones content of soil	Standard preparation for all samples unless otherwise detailed. Gravimetric determination of stone > 10 mm as % dry weight.	In-house method based on British Standard Methods and MCERTS requirements.	L019-UK/PL	D	NONE
Semi-volatile organic compounds in soil	Determination of semi-volatile organic compounds in soil by extraction in dichloromethane and hexane followed by GC-MS.	In-house method based on USEPA 8270	L064-PL	D	MCERTS
Volatile organic compounds in soil	Determination of volatile organic compounds in soil by headspace GC-MS.	In-house method based on USEPA8260	L073B-PL	W	MCERTS
BTEX and MTBE in soil (Monoaromatics)	Determination of BTEX in soil by headspace GC-MS.	In-house method based on USEPA8260	L073B-PL	W	MCERTS
TPHCWG (Soil)	Determination of hexane extractable hydrocarbons in soil by GC-MS/GC-FID.	In-house method with silica gel split/clean up.	L088/76-PL	W	MCERTS
D.O. for Gravimetric Quant if Screen/ID positive	Dependent option for Gravimetric Quant if Screen/ID positive scheduled.	In house asbestos methods A001 & A006.	A006-PL	D	NONE

For method numbers ending in 'UK' analysis have been carried out in our laboratory in the United Kingdom.

For method numbers ending in 'PL' analysis have been carried out in our laboratory in Poland.

Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC.

**Matthew Handley**

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Analytical Report Number : 21-55593

Project / Site name:	Belmont Street	Samples received on:	03/02/2021
Your job number:	MC-VIST3619	Samples instructed on/ Analysis started on:	03/02/2021
Your order number:	MC-VIST3619	Analysis completed by:	17/02/2021
Report Issue Number:	1	Report issued on:	17/02/2021
Samples Analysed:	1 soil sample		

Signed:

Agnieszka Czerwińska
Technical Reviewer (Reporting Team)
For & on behalf of i2 Analytical Ltd.

Standard Geotechnical, Asbestos and Chemical Testing Laboratory located at: ul. Pionierów 39, 41 -711 Ruda Śląska, Poland.

Accredited tests are defined within the report, opinions and interpretations expressed herein are outside the scope of accreditation.

Standard sample disposal times, unless otherwise agreed with the laboratory, are :

soils - 4 weeks from reporting
leachates - 2 weeks from reporting
waters - 2 weeks from reporting
asbestos - 6 months from reporting

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Any assessments of compliance with specifications are based on actual analytical results with no contribution from uncertainty of measurement.
Application of uncertainty of measurement would provide a range within which the true result lies.
An estimate of measurement uncertainty can be provided on request.



Analytical Report Number: 21-55593
Project / Site name: Belmont Street
Your Order No: MC-VIST3619

Lab Sample Number				1763500
Sample Reference				BH101
Sample Number				None Supplied
Depth (m)				4.2
Date Sampled				03/02/2021
Time Taken				None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status	
Stone Content	%	0.1	NONE	< 0.1
Moisture Content	%	0.01	NONE	25
Total mass of sample received	kg	0.001	NONE	0.9

General Inorganics

pH - Automated	pH Units	N/A	MCERTS	8.2
Total Sulphate as SO ₄	%	0.005	MCERTS	1.61
Water Soluble SO ₄ 16hr extraction (2:1 Leachate Equivale	g/l	0.00125	MCERTS	3.6
Water Soluble Chloride (2:1) (leachate equivalent)	mg/l	0.5	MCERTS	73
Total Sulphur	%	0.005	MCERTS	0.744
Water Soluble Nitrate (2:1) as N (leachate equivalent)	mg/l	2	NONE	< 2.0

Heavy Metals / Metalloids

Magnesium (water soluble)	mg/kg	5	NONE	730
Magnesium (leachate equivalent)	mg/l	2.5	NONE	370

U/S = Unsuitable Sample I/S = Insufficient Sample



Analytical Report Number : 21-55593
Project / Site name: Belmont Street

* These descriptions are only intended to act as a cross check if sample identities are questioned. The major constituent of the sample is intended to act with respect to MCERTS validation. The laboratory is accredited for sand, clay and loam (MCERTS) soil types. Data for unaccredited types of solid should be interpreted with care.

Stone content of a sample is calculated as the % weight of the stones not passing a 10 mm sieve. Results are not corrected for stone content.

Lab Sample Number	Sample Reference	Sample Number	Depth (m)	Sample Description *
1763500	BH101	None Supplied	4.2	Brown clay.



Analytical Report Number : 21-55593

Project / Site name: Belmont Street

Water matrix abbreviations: Surface Water (SW) Potable Water (PW) Ground Water (GW)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Sulphate, water soluble, in soil (16hr extraction)	Determination of water soluble sulphate by ICP-OES. Results reported directly (leachate equivalent) and corrected for extraction ratio (soil equivalent).	In house method.	L038-PL	D	MCERTS
Magnesium, water soluble, in soil	Determination of water soluble magnesium by extraction with water followed by ICP-OES.	In-house method based on TRL 447	L038-PL	D	NONE
Moisture Content	Moisture content, determined gravimetrically. (30 oC)	In house method.	L019-UK/PL	W	NONE
pH in soil (automated)	Determination of pH in soil by addition of water followed by automated electrometric measurement.	In house method.	L099-PL	D	MCERTS
Stones content of soil	Standard preparation for all samples unless otherwise detailed. Gravimetric determination of stone > 10 mm as % dry weight.	In-house method based on British Standard Methods and MCERTS requirements.	L019-UK/PL	D	NONE
Total Sulphate in soil as %	Determination of total sulphate in soil by extraction with 10% HCl followed by ICP-OES.	In house method.	L038-PL	D	MCERTS
Total Sulphur in soil as %	Determination of total sulphur in soil by extraction with aqua-regia, potassium bromide/bromate followed by ICP-OES.	In house method.	L038-PL	D	MCERTS
Water Soluble Nitrate (2:1) as N in soil	Determination of nitrate by reaction with sodium salicylate and colorimetry.	In-house method based on Examination of Water and Wastewater & Polish Standard Method PN-82/C-04579.08, 2:1 extraction.	L078-PL	W	NONE
Chloride, water soluble, in soil	Determination of Chloride colorimetrically by discrete analyser.	In house method.	L082-PL	D	MCERTS

For method numbers ending in 'UK' analysis have been carried out in our laboratory in the United Kingdom.

For method numbers ending in 'PL' analysis have been carried out in our laboratory in Poland.

Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC.

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Analytical Report Number : 21-55819

Project / Site name:	Belmont Street	Samples received on:	09/02/2021
Your job number:	VIST3619	Samples instructed on/ Analysis started on:	09/02/2021
Your order number:	M-VIST003619/0002	Analysis completed by:	16/02/2021
Report Issue Number:	1	Report issued on:	16/02/2021
Samples Analysed:	3 soil samples		

Signed: 

Agnieszka Czerwińska
Technical Reviewer (Reporting Team)
For & on behalf of i2 Analytical Ltd.

Standard Geotechnical, Asbestos and Chemical Testing Laboratory located at: ul. Pionierów 39, 41 -711 Ruda Śląska, Poland.

Accredited tests are defined within the report, opinions and interpretations expressed herein are outside the scope of accreditation.

Standard sample disposal times, unless otherwise agreed with the laboratory, are :

soils - 4 weeks from reporting
leachates - 2 weeks from reporting
waters - 2 weeks from reporting
asbestos - 6 months from reporting

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Any assessments of compliance with specifications are based on actual analytical results with no contribution from uncertainty of measurement.
Application of uncertainty of measurement would provide a range within which the true result lies.
An estimate of measurement uncertainty can be provided on request.

Analytical Report Number: 21-55819
Project / Site name: Belmont Street

Lab Sample Number				1764768	1764769	1764770
Sample Reference				BH102	BH102	BH102
Sample Number				None Supplied	None Supplied	None Supplied
Depth (m)				0.25	2.80	5.80
Date Sampled				05/02/2021	08/02/2021	08/02/2021
Time Taken				None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status			
Stone Content	%	0.1	NONE	< 0.1	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	19	22	17
Total mass of sample received	kg	0.001	NONE	1	1	0.4

Asbestos in Soil	Type	N/A	ISO 17025	Not-detected	-	-
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General Inorganics

pH - Automated	pH Units	N/A	MCERTS	-	8.5	-
Total Sulphate as SO ₄	%	0.005	MCERTS	-	0.143	-
Water Soluble SO ₄ 16hr extraction (2:1 Leachate Equivalent)	g/l	0.00125	MCERTS	-	0.79	-
Water Soluble SO ₄ 16hr extraction (2:1 Leachate Equivalent)	mg/l	1.25	MCERTS	-	792	-
Water Soluble Chloride (2:1) (leachate equivalent)	mg/l	0.5	MCERTS	-	38	-
Total Sulphur	%	0.005	MCERTS	-	0.068	-
Ammoniacal Nitrogen as NH ₄	mg/kg	0.5	MCERTS	-	< 0.5	-
Ammonium as NH ₄ (10:1 leachate equivalent)	mg/l	0.05	MCERTS	-	< 0.05	-
Water Soluble Nitrate (2:1) as N (leachate equivalent)	mg/l	2	NONE	-	< 2.0	-

Speciated PAHs

Naphthalene	mg/kg	0.05	MCERTS	< 0.05	-	< 0.05
Acenaphthylene	mg/kg	0.05	MCERTS	< 0.05	-	< 0.05
Acenaphthene	mg/kg	0.05	MCERTS	< 0.05	-	< 0.05
Fluorene	mg/kg	0.05	MCERTS	< 0.05	-	< 0.05
Phenanthrene	mg/kg	0.05	MCERTS	0.29	-	< 0.05
Anthracene	mg/kg	0.05	MCERTS	< 0.05	-	< 0.05
Fluoranthene	mg/kg	0.05	MCERTS	0.71	-	< 0.05
Pyrene	mg/kg	0.05	MCERTS	0.74	-	< 0.05
Benzo(a)anthracene	mg/kg	0.05	MCERTS	0.41	-	< 0.05
Chrysene	mg/kg	0.05	MCERTS	0.33	-	< 0.05
Benzo(b)fluoranthene	mg/kg	0.05	MCERTS	0.43	-	< 0.05
Benzo(k)fluoranthene	mg/kg	0.05	MCERTS	0.18	-	< 0.05
Benzo(a)pyrene	mg/kg	0.05	MCERTS	0.34	-	< 0.05
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	0.24	-	< 0.05
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	< 0.05	-	< 0.05
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	0.29	-	< 0.05

Total PAH

Speciated Total EPA-16 PAHs	mg/kg	0.8	MCERTS	3.96	-	< 0.80
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Heavy Metals / Metalloids

Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	20	-	14
Boron (water soluble)	mg/kg	0.2	MCERTS	1.9	-	3.7
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	< 0.2	-	< 0.2
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	33	-	53
Copper (aqua regia extractable)	mg/kg	1	MCERTS	49	-	37
Lead (aqua regia extractable)	mg/kg	1	MCERTS	350	-	17
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	1.5	-	< 0.3
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	27	-	49
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	1.3	-	< 1.0
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	110	-	95

Magnesium (water soluble)	mg/kg	5	NONE	-	180	-
Magnesium (leachate equivalent)	mg/l	2.5	NONE	-	92	-



Analytical Report Number: 21-55819
Project / Site name: Belmont Street

Lab Sample Number				1764768	1764769	1764770
Sample Reference				BH102	BH102	BH102
Sample Number				None Supplied	None Supplied	None Supplied
Depth (m)				0.25	2.80	5.80
Date Sampled				05/02/2021	08/02/2021	08/02/2021
Time Taken				None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status			

Monoaromatics & Oxygenates

Benzene	µg/kg	1	MCERTS	< 1.0	-	< 1.0
Toluene	µg/kg	1	MCERTS	< 1.0	-	< 1.0
Ethylbenzene	µg/kg	1	MCERTS	< 1.0	-	< 1.0
p & m-xylene	µg/kg	1	MCERTS	< 1.0	-	< 1.0
o-xylene	µg/kg	1	MCERTS	< 1.0	-	< 1.0
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	1	MCERTS	< 1.0	-	< 1.0

Petroleum Hydrocarbons

TPH-CWG - Aliphatic >EC5 - EC6	mg/kg	0.001	MCERTS	< 0.001	-	< 0.001
TPH-CWG - Aliphatic >EC6 - EC8	mg/kg	0.001	MCERTS	< 0.001	-	< 0.001
TPH-CWG - Aliphatic >EC8 - EC10	mg/kg	0.001	MCERTS	< 0.001	-	< 0.001
TPH-CWG - Aliphatic >EC10 - EC12	mg/kg	1	MCERTS	7.2	-	< 1.0
TPH-CWG - Aliphatic >EC12 - EC16	mg/kg	2	MCERTS	65	-	< 2.0
TPH-CWG - Aliphatic >EC16 - EC21	mg/kg	8	MCERTS	92	-	< 8.0
TPH-CWG - Aliphatic >EC21 - EC35	mg/kg	8	MCERTS	30	-	< 8.0
TPH-CWG - Aliphatic (EC5 - EC35)	mg/kg	10	MCERTS	190	-	< 10

TPH-CWG - Aromatic >EC5 - EC7	mg/kg	0.001	MCERTS	< 0.001	-	< 0.001
TPH-CWG - Aromatic >EC7 - EC8	mg/kg	0.001	MCERTS	< 0.001	-	< 0.001
TPH-CWG - Aromatic >EC8 - EC10	mg/kg	0.001	MCERTS	< 0.001	-	< 0.001
TPH-CWG - Aromatic >EC10 - EC12	mg/kg	1	MCERTS	< 1.0	-	< 1.0
TPH-CWG - Aromatic >EC12 - EC16	mg/kg	2	MCERTS	25	-	< 2.0
TPH-CWG - Aromatic >EC16 - EC21	mg/kg	10	MCERTS	42	-	< 10
TPH-CWG - Aromatic >EC21 - EC35	mg/kg	10	MCERTS	27	-	< 10
TPH-CWG - Aromatic (EC5 - EC35)	mg/kg	10	MCERTS	95	-	< 10



Analytical Report Number: 21-55819
Project / Site name: Belmont Street

Lab Sample Number				1764768	1764769	1764770
Sample Reference				BH102	BH102	BH102
Sample Number				None Supplied	None Supplied	None Supplied
Depth (m)				0.25	2.80	5.80
Date Sampled				05/02/2021	08/02/2021	08/02/2021
Time Taken				None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status			

VOCs

Chloromethane	µg/kg	1	ISO 17025	< 1.0	-	< 1.0
Chloroethane	µg/kg	1	NONE	< 1.0	-	< 1.0
Bromomethane	µg/kg	1	ISO 17025	< 1.0	-	< 1.0
Vinyl Chloride	µg/kg	1	NONE	< 1.0	-	< 1.0
Trichlorofluoromethane	µg/kg	1	NONE	< 1.0	-	< 1.0
1,1-Dichloroethene	µg/kg	1	NONE	< 1.0	-	< 1.0
1,1,2-Trichloro 1,2,2-Trifluoroethane	µg/kg	1	ISO 17025	< 1.0	-	< 1.0
Cis-1,2-dichloroethene	µg/kg	1	MCERTS	< 1.0	-	< 1.0
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	1	MCERTS	< 1.0	-	< 1.0
1,1-Dichloroethane	µg/kg	1	MCERTS	< 1.0	-	< 1.0
2,2-Dichloropropane	µg/kg	1	MCERTS	< 1.0	-	< 1.0
Trichloromethane	µg/kg	1	MCERTS	< 1.0	-	< 1.0
1,1,1-Trichloroethane	µg/kg	1	MCERTS	< 1.0	-	< 1.0
1,2-Dichloroethane	µg/kg	1	MCERTS	< 1.0	-	< 1.0
1,1-Dichloropropene	µg/kg	1	MCERTS	< 1.0	-	< 1.0
Trans-1,2-dichloroethene	µg/kg	1	NONE	< 1.0	-	< 1.0
Benzene	µg/kg	1	MCERTS	< 1.0	-	< 1.0
Tetrachloromethane	µg/kg	1	MCERTS	< 1.0	-	< 1.0
1,2-Dichloropropane	µg/kg	1	MCERTS	< 1.0	-	< 1.0
Trichloroethene	µg/kg	1	MCERTS	< 1.0	-	< 1.0
Dibromomethane	µg/kg	1	MCERTS	< 1.0	-	< 1.0
Bromodichloromethane	µg/kg	1	MCERTS	< 1.0	-	< 1.0
Cis-1,3-dichloropropene	µg/kg	1	ISO 17025	< 1.0	-	< 1.0
Trans-1,3-dichloropropene	µg/kg	1	ISO 17025	< 1.0	-	< 1.0
Toluene	µg/kg	1	MCERTS	< 1.0	-	< 1.0
1,1,2-Trichloroethane	µg/kg	1	MCERTS	< 1.0	-	< 1.0
1,3-Dichloropropane	µg/kg	1	ISO 17025	< 1.0	-	< 1.0
Dibromochloromethane	µg/kg	1	ISO 17025	< 1.0	-	< 1.0
Tetrachloroethene	µg/kg	1	NONE	< 1.0	-	< 1.0
1,2-Dibromoethane	µg/kg	1	ISO 17025	< 1.0	-	< 1.0
Chlorobenzene	µg/kg	1	MCERTS	< 1.0	-	< 1.0
1,1,1,2-Tetrachloroethane	µg/kg	1	MCERTS	< 1.0	-	< 1.0
Ethylbenzene	µg/kg	1	MCERTS	< 1.0	-	< 1.0
p & m-Xylene	µg/kg	1	MCERTS	< 1.0	-	< 1.0
Styrene	µg/kg	1	MCERTS	< 1.0	-	< 1.0
Tribromomethane	µg/kg	1	NONE	< 1.0	-	< 1.0
o-Xylene	µg/kg	1	MCERTS	< 1.0	-	< 1.0
1,1,2,2-Tetrachloroethane	µg/kg	1	MCERTS	< 1.0	-	< 1.0
Isopropylbenzene	µg/kg	1	MCERTS	< 1.0	-	< 1.0
Bromobenzene	µg/kg	1	MCERTS	< 1.0	-	< 1.0
n-Propylbenzene	µg/kg	1	ISO 17025	< 1.0	-	< 1.0
2-Chlorotoluene	µg/kg	1	MCERTS	< 1.0	-	< 1.0
4-Chlorotoluene	µg/kg	1	MCERTS	< 1.0	-	< 1.0
1,3,5-Trimethylbenzene	µg/kg	1	ISO 17025	< 1.0	-	< 1.0
tert-Butylbenzene	µg/kg	1	MCERTS	< 1.0	-	< 1.0
1,2,4-Trimethylbenzene	µg/kg	1	ISO 17025	< 1.0	-	< 1.0
sec-Butylbenzene	µg/kg	1	MCERTS	< 1.0	-	< 1.0
1,3-Dichlorobenzene	µg/kg	1	ISO 17025	< 1.0	-	< 1.0
p-Isopropyltoluene	µg/kg	1	ISO 17025	< 1.0	-	< 1.0
1,2-Dichlorobenzene	µg/kg	1	MCERTS	< 1.0	-	< 1.0
1,4-Dichlorobenzene	µg/kg	1	MCERTS	< 1.0	-	< 1.0
Butylbenzene	µg/kg	1	MCERTS	< 1.0	-	< 1.0



Analytical Report Number: 21-55819
Project / Site name: Belmont Street

Lab Sample Number				1764768	1764769	1764770
Sample Reference				BH102	BH102	BH102
Sample Number				None Supplied	None Supplied	None Supplied
Depth (m)				0.25	2.80	5.80
Date Sampled				05/02/2021	08/02/2021	08/02/2021
Time Taken				None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status			
1,2-Dibromo-3-chloropropane	µg/kg	1	ISO 17025	< 1.0	-	< 1.0
1,2,4-Trichlorobenzene	µg/kg	1	MCERTS	< 1.0	-	< 1.0
Hexachlorobutadiene	µg/kg	1	MCERTS	< 1.0	-	< 1.0
1,2,3-Trichlorobenzene	µg/kg	1	ISO 17025	< 1.0	-	< 1.0



Analytical Report Number: 21-55819
Project / Site name: Belmont Street

Lab Sample Number				1764768	1764769	1764770
Sample Reference				BH102	BH102	BH102
Sample Number				None Supplied	None Supplied	None Supplied
Depth (m)				0.25	2.80	5.80
Date Sampled				05/02/2021	08/02/2021	08/02/2021
Time Taken				None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)				Units	Limit of detection	Accreditation Status

SVOCs

Aniline	mg/kg	0.1	NONE	< 0.1	-	< 0.1
Phenol	mg/kg	0.2	ISO 17025	< 0.2	-	< 0.2
2-Chlorophenol	mg/kg	0.1	MCERTS	< 0.1	-	< 0.1
Bis(2-chloroethyl)ether	mg/kg	0.2	MCERTS	< 0.2	-	< 0.2
1,3-Dichlorobenzene	mg/kg	0.2	MCERTS	< 0.2	-	< 0.2
1,2-Dichlorobenzene	mg/kg	0.1	MCERTS	< 0.1	-	< 0.1
1,4-Dichlorobenzene	mg/kg	0.2	MCERTS	< 0.2	-	< 0.2
Bis(2-chloroisopropyl)ether	mg/kg	0.1	MCERTS	< 0.1	-	< 0.1
2-Methylphenol	mg/kg	0.3	MCERTS	< 0.3	-	< 0.3
Hexachloroethane	mg/kg	0.05	MCERTS	< 0.05	-	< 0.05
Nitrobenzene	mg/kg	0.3	MCERTS	< 0.3	-	< 0.3
4-Methylphenol	mg/kg	0.2	NONE	< 0.2	-	< 0.2
Isophorone	mg/kg	0.2	MCERTS	< 0.2	-	< 0.2
2-Nitrophenol	mg/kg	0.3	MCERTS	< 0.3	-	< 0.3
2,4-Dimethylphenol	mg/kg	0.3	MCERTS	< 0.3	-	< 0.3
Bis(2-chloroethoxy)methane	mg/kg	0.3	MCERTS	< 0.3	-	< 0.3
1,2,4-Trichlorobenzene	mg/kg	0.3	MCERTS	< 0.3	-	< 0.3
Naphthalene	mg/kg	0.05	MCERTS	< 0.05	-	< 0.05
2,4-Dichlorophenol	mg/kg	0.3	MCERTS	< 0.3	-	< 0.3
4-Chloroaniline	mg/kg	0.1	NONE	< 0.1	-	< 0.1
Hexachlorobutadiene	mg/kg	0.1	MCERTS	< 0.1	-	< 0.1
4-Chloro-3-methylphenol	mg/kg	0.1	NONE	< 0.1	-	< 0.1
2,4,6-Trichlorophenol	mg/kg	0.1	MCERTS	< 0.1	-	< 0.1
2,4,5-Trichlorophenol	mg/kg	0.2	MCERTS	< 0.2	-	< 0.2
2-Methylnaphthalene	mg/kg	0.1	NONE	< 0.1	-	< 0.1
2-Chloronaphthalene	mg/kg	0.1	MCERTS	< 0.1	-	< 0.1
Dimethylphthalate	mg/kg	0.1	MCERTS	< 0.1	-	< 0.1
2,6-Dinitrotoluene	mg/kg	0.1	MCERTS	< 0.1	-	< 0.1
Acenaphthylene	mg/kg	0.05	MCERTS	< 0.05	-	< 0.05
Acenaphthene	mg/kg	0.05	MCERTS	< 0.05	-	< 0.05
2,4-Dinitrotoluene	mg/kg	0.2	MCERTS	< 0.2	-	< 0.2
Dibenzofuran	mg/kg	0.2	MCERTS	< 0.2	-	< 0.2
4-Chlorophenyl phenyl ether	mg/kg	0.3	ISO 17025	< 0.3	-	< 0.3
Diethyl phthalate	mg/kg	0.2	MCERTS	< 0.2	-	< 0.2
4-Nitroaniline	mg/kg	0.2	MCERTS	< 0.2	-	< 0.2
Fluorene	mg/kg	0.05	MCERTS	< 0.05	-	< 0.05
Azobenzene	mg/kg	0.3	MCERTS	< 0.3	-	< 0.3
Bromophenyl phenyl ether	mg/kg	0.2	MCERTS	< 0.2	-	< 0.2
Hexachlorobenzene	mg/kg	0.3	MCERTS	< 0.3	-	< 0.3
Phenanthrene	mg/kg	0.05	MCERTS	0.29	-	< 0.05
Anthracene	mg/kg	0.05	MCERTS	< 0.05	-	< 0.05
Carbazole	mg/kg	0.3	MCERTS	< 0.3	-	< 0.3
Dibutyl phthalate	mg/kg	0.2	MCERTS	< 0.2	-	< 0.2
Anthraquinone	mg/kg	0.3	MCERTS	< 0.3	-	< 0.3
Fluoranthene	mg/kg	0.05	MCERTS	0.71	-	< 0.05
Pyrene	mg/kg	0.05	MCERTS	0.74	-	< 0.05
Butyl benzyl phthalate	mg/kg	0.3	ISO 17025	< 0.3	-	< 0.3
Benzo(a)anthracene	mg/kg	0.05	MCERTS	0.41	-	< 0.05
Chrysene	mg/kg	0.05	MCERTS	0.33	-	< 0.05
Benzo(b)fluoranthene	mg/kg	0.05	MCERTS	0.43	-	< 0.05
Benzo(k)fluoranthene	mg/kg	0.05	MCERTS	0.18	-	< 0.05
Benzo(a)pyrene	mg/kg	0.05	MCERTS	0.34	-	< 0.05



Analytical Report Number: 21-55819

Project / Site name: Belmont Street

Lab Sample Number				1764768	1764769	1764770
Sample Reference				BH102	BH102	BH102
Sample Number				None Supplied	None Supplied	None Supplied
Depth (m)				0.25	2.80	5.80
Date Sampled				05/02/2021	08/02/2021	08/02/2021
Time Taken				None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status			
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	0.24	-	< 0.05
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	< 0.05	-	< 0.05
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	0.29	-	< 0.05

U/S = Unsuitable Sample I/S = Insufficient Sample



Analytical Report Number : 21-55819
Project / Site name: Belmont Street

* These descriptions are only intended to act as a cross check if sample identities are questioned. The major constituent of the sample is intended to act with respect to MCERTS validation. The laboratory is accredited for sand, clay and loam (MCERTS) soil types. Data for unaccredited types of solid should be interpreted with care.

Stone content of a sample is calculated as the % weight of the stones not passing a 10 mm sieve. Results are not corrected for stone content.

Lab Sample Number	Sample Reference	Sample Number	Depth (m)	Sample Description *
1764768	BH102	None Supplied	0.25	Brown sandy clay with gravel.
1764769	BH102	None Supplied	2.8	Brown clay.
1764770	BH102	None Supplied	5.8	Brown clay.

Analytical Report Number : 21-55819

Project / Site name: Belmont Street

Water matrix abbreviations: Surface Water (SW) Potable Water (PW) Ground Water (GW)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Sulphate, water soluble, in soil (16hr extraction)	Determination of water soluble sulphate by ICP-OES. Results reported directly (leachate equivalent) and corrected for extraction ratio (soil equivalent).	In house method.	L038-PL	D	MCERTS
Metals in soil by ICP-OES	Determination of metals in soil by aqua-regia digestion followed by ICP-OES.	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil.	L038-PL	D	MCERTS
Asbestos identification in soil	Asbestos Identification with the use of polarised light microscopy in conjunction with disperion staining techniques.	In house method based on HSG 248	A001-PL	D	ISO 17025
Boron, water soluble, in soil	Determination of water soluble boron in soil by hot water extract followed by ICP-OES.	In-house method based on Second Site Properties version 3	L038-PL	D	MCERTS
Magnesium, water soluble, in soil	Determination of water soluble magnesium by extraction with water followed by ICP-OES.	In-house method based on TRL 447	L038-PL	D	NONE
Moisture Content	Moisture content, determined gravimetrically. (30 oC)	In house method.	L019-UK/PL	W	NONE
Speciated EPA-16 PAHs in soil	Determination of PAH compounds in soil by extraction in dichloromethane and hexane followed by GC-MS with the use of surrogate and internal standards.	In-house method based on USEPA 8270	L064-PL	D	MCERTS
pH in soil (automated)	Determination of pH in soil by addition of water followed by automated electrometric measurement.	In house method.	L099-PL	D	MCERTS
Stones content of soil	Standard preparation for all samples unless otherwise detailed. Gravimetric determination of stone > 10 mm as % dry weight.	In-house method based on British Standard Methods and MCERTS requirements.	L019-UK/PL	D	NONE
Semi-volatile organic compounds in soil	Determination of semi-volatile organic compounds in soil by extraction in dichloromethane and hexane followed by GC-MS.	In-house method based on USEPA 8270	L064-PL	D	MCERTS
Volatile organic compounds in soil	Determination of volatile organic compounds in soil by headspace GC-MS.	In-house method based on USEPA8260	L073B-PL	W	MCERTS
BTEX and MTBE in soil (Monoaromatics)	Determination of BTEX in soil by headspace GC-MS.	In-house method based on USEPA8260	L073B-PL	W	MCERTS
Ammonium as NH4 in soil	Determination of Ammonium/Ammonia/ Ammoniacal Nitrogen by the colorimetric salicylate/nitroprusside method, 10:1 water extraction.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L082-PL	W	MCERTS
TPHCWG (Soil)	Determination of hexane extractable hydrocarbons in soil by GC-MS/GC-FID.	In-house method with silica gel split/clean up.	L088/76-PL	W	MCERTS
Total Sulphate in soil as %	Determination of total sulphate in soil by extraction with 10% HCl followed by ICP-OES.	In house method.	L038-PL	D	MCERTS
Total Sulphur in soil as %	Determination of total sulphur in soil by extraction with aqua-regia, potassium bromide/bromate followed by ICP-OES.	In house method.	L038-PL	D	MCERTS
D.O. for Gravimetric Quant if Screen/ID positive	Dependent option for Gravimetric Quant if Screen/ID positive scheduled.	In house asbestos methods A001 & A006.	A006-PL	D	NONE



Analytical Report Number : 21-55819

Project / Site name: Belmont Street

Water matrix abbreviations: Surface Water (SW) Potable Water (PW) Ground Water (GW)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Water Soluble Nitrate (2:1) as N in soil	Determination of nitrate by reaction with sodium salicylate and colorimetry.	In-house method based on Examination of Water and Wastewater & Polish Standard Method PN-82/C-04579.08, 2:1 extraction.	L078-PL	W	NONE
Chloride, water soluble, in soil	Determination of Chloride colorimetrically by discrete analyser.	In house method.	L082-PL	D	MCERTS
Sulphate, water soluble, in soil	Determination of water soluble sulphate by ICP-OES. Results reported directly (leachate equivalent) and corrected for extraction ratio (soil equivalent).	In house method.	L038-PL	D	MCERTS

For method numbers ending in 'UK' analysis have been carried out in our laboratory in the United Kingdom.

For method numbers ending in 'PL' analysis have been carried out in our laboratory in Poland.

Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC.

**Matthew Handley**

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Analytical Report Number : 21-56594

Project / Site name:	Belmont Street	Samples received on:	12/02/2021
Your job number:	VIST3619	Samples instructed on/ Analysis started on:	12/02/2021
Your order number:	M-VIST003619/0002	Analysis completed by:	19/02/2021
Report Issue Number:	1	Report issued on:	19/02/2021
Samples Analysed:	3 soil samples		

Signed:

Rachel Bradley
Deputy Quality Manager
For & on behalf of i2 Analytical Ltd.

Standard Geotechnical, Asbestos and Chemical Testing Laboratory located at: ul. Pionierów 39, 41 -711 Ruda Śląska, Poland.

Accredited tests are defined within the report, opinions and interpretations expressed herein are outside the scope of accreditation.

Standard sample disposal times, unless otherwise agreed with the laboratory, are :

soils - 4 weeks from reporting
leachates - 2 weeks from reporting
waters - 2 weeks from reporting
asbestos - 6 months from reporting

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Any assessments of compliance with specifications are based on actual analytical results with no contribution from uncertainty of measurement.
Application of uncertainty of measurement would provide a range within which the true result lies.
An estimate of measurement uncertainty can be provided on request.



Analytical Report Number: 21-56594
Project / Site name: Belmont Street

Lab Sample Number				1768957	1768958	1768959
Sample Reference				BH103	BH103	BH103
Sample Number				None Supplied	None Supplied	None Supplied
Depth (m)				0.60	0.35	1.80
Date Sampled				10/02/2021	10/02/2021	11/02/2021
Time Taken				None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status			
Stone Content	%	0.1	NONE	< 0.1	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	18	20	21
Total mass of sample received	kg	0.001	NONE	1	0.5	0.5

Asbestos in Soil	Type	N/A	ISO 17025	Not-detected	-	-
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Speciated PAHs

Naphthalene	mg/kg	0.05	MCERTS	2.8	0.73	< 0.05
Acenaphthylene	mg/kg	0.05	MCERTS	7	< 0.05	< 0.05
Acenaphthene	mg/kg	0.05	MCERTS	4	< 0.05	< 0.05
Fluorene	mg/kg	0.05	MCERTS	8.6	< 0.05	< 0.05
Phenanthrene	mg/kg	0.05	MCERTS	65	0.58	< 0.05
Anthracene	mg/kg	0.05	MCERTS	9.7	0.1	< 0.05
Fluoranthene	mg/kg	0.05	MCERTS	70	0.7	< 0.05
Pyrene	mg/kg	0.05	MCERTS	55	0.69	< 0.05
Benzo(a)anthracene	mg/kg	0.05	MCERTS	22	0.44	< 0.05
Chrysene	mg/kg	0.05	MCERTS	18	0.38	< 0.05
Benzo(b)fluoranthene	mg/kg	0.05	MCERTS	26	0.54	< 0.05
Benzo(k)fluoranthene	mg/kg	0.05	MCERTS	7.5	0.22	< 0.05
Benzo(a)pyrene	mg/kg	0.05	MCERTS	21	0.5	< 0.05
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	9.2	0.29	< 0.05
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	2.3	< 0.05	< 0.05
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	11	0.41	< 0.05

Total PAH

Speciated Total EPA-16 PAHs	mg/kg	0.8	MCERTS	339	5.58	< 0.80
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Heavy Metals / Metalloids

Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	22	21	12
Boron (water soluble)	mg/kg	0.2	MCERTS	0.7	1.8	3.5
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	< 0.2	< 0.2	< 0.2
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	29	29	60
Copper (aqua regia extractable)	mg/kg	1	MCERTS	74	72	42
Lead (aqua regia extractable)	mg/kg	1	MCERTS	510	610	19
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	1.3	1.1	< 0.3
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	18	20	51
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	150	150	96



Analytical Report Number: 21-56594
Project / Site name: Belmont Street

Lab Sample Number				1768957	1768958	1768959
Sample Reference				BH103	BH103	BH103
Sample Number				None Supplied	None Supplied	None Supplied
Depth (m)				0.60	0.35	1.80
Date Sampled				10/02/2021	10/02/2021	11/02/2021
Time Taken				None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status			

Monoaromatics & Oxygenates

Benzene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0
Toluene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0
Ethylbenzene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0
p & m-xylene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0
o-xylene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0

Petroleum Hydrocarbons

TPH-CWG - Aliphatic >EC5 - EC6	mg/kg	0.001	MCERTS	< 0.001	< 0.001	< 0.001
TPH-CWG - Aliphatic >EC6 - EC8	mg/kg	0.001	MCERTS	< 0.001	< 0.001	< 0.001
TPH-CWG - Aliphatic >EC8 - EC10	mg/kg	0.001	MCERTS	< 0.001	< 0.001	< 0.001
TPH-CWG - Aliphatic >EC10 - EC12	mg/kg	1	MCERTS	7	< 1.0	< 1.0
TPH-CWG - Aliphatic >EC12 - EC16	mg/kg	2	MCERTS	17	< 2.0	< 2.0
TPH-CWG - Aliphatic >EC16 - EC21	mg/kg	8	MCERTS	27	< 8.0	< 8.0
TPH-CWG - Aliphatic >EC21 - EC35	mg/kg	8	MCERTS	54	< 8.0	< 8.0
TPH-CWG - Aliphatic (EC5 - EC35)	mg/kg	10	MCERTS	100	< 10	< 10

TPH-CWG - Aromatic >EC5 - EC7	mg/kg	0.001	MCERTS	< 0.001	< 0.001	< 0.001
TPH-CWG - Aromatic >EC7 - EC8	mg/kg	0.001	MCERTS	< 0.001	< 0.001	< 0.001
TPH-CWG - Aromatic >EC8 - EC10	mg/kg	0.001	MCERTS	< 0.001	< 0.001	< 0.001
TPH-CWG - Aromatic >EC10 - EC12	mg/kg	1	MCERTS	8	< 1.0	< 1.0
TPH-CWG - Aromatic >EC12 - EC16	mg/kg	2	MCERTS	67	< 2.0	< 2.0
TPH-CWG - Aromatic >EC16 - EC21	mg/kg	10	MCERTS	290	< 10	< 10
TPH-CWG - Aromatic >EC21 - EC35	mg/kg	10	MCERTS	270	< 10	< 10
TPH-CWG - Aromatic (EC5 - EC35)	mg/kg	10	MCERTS	640	< 10	< 10

VOCs

Chloromethane	µg/kg	1	ISO 17025	< 1.0	< 1.0	< 1.0
Chloroethane	µg/kg	1	NONE	< 1.0	< 1.0	< 1.0
Bromomethane	µg/kg	1	ISO 17025	< 1.0	< 1.0	< 1.0
Vinyl Chloride	µg/kg	1	NONE	< 1.0	< 1.0	< 1.0
Trichlorofluoromethane	µg/kg	1	NONE	< 1.0	< 1.0	< 1.0
1,1-Dichloroethene	µg/kg	1	NONE	< 1.0	< 1.0	< 1.0
1,1,2-Trichloro 1,2,2-Trifluoroethane	µg/kg	1	ISO 17025	< 1.0	< 1.0	< 1.0
Cis-1,2-dichloroethene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0
1,1-Dichloroethane	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0
2,2-Dichloropropane	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0
Trichloromethane	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0
1,1,1-Trichloroethane	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0
1,2-Dichloroethane	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0
1,1-Dichloropropene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0
Trans-1,2-dichloroethene	µg/kg	1	NONE	< 1.0	< 1.0	< 1.0
Benzene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0
Tetrachloromethane	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0
1,2-Dichloropropane	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0
Trichloroethene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0
Dibromomethane	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0
Bromodichloromethane	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0
Cis-1,3-dichloropropene	µg/kg	1	ISO 17025	< 1.0	< 1.0	< 1.0
Trans-1,3-dichloropropene	µg/kg	1	ISO 17025	< 1.0	< 1.0	< 1.0
Toluene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0



Analytical Report Number: 21-56594
Project / Site name: Belmont Street

Lab Sample Number				1768957	1768958	1768959
Sample Reference				BH103	BH103	BH103
Sample Number				None Supplied	None Supplied	None Supplied
Depth (m)				0.60	0.35	1.80
Date Sampled				10/02/2021	10/02/2021	11/02/2021
Time Taken				None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status			
1,1,2-Trichloroethane	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0
1,3-Dichloropropane	µg/kg	1	ISO 17025	< 1.0	< 1.0	< 1.0
Dibromochloromethane	µg/kg	1	ISO 17025	< 1.0	< 1.0	< 1.0
Tetrachloroethene	µg/kg	1	NONE	< 1.0	< 1.0	< 1.0
1,2-Dibromoethane	µg/kg	1	ISO 17025	< 1.0	< 1.0	< 1.0
Chlorobenzene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0
1,1,1,2-Tetrachloroethane	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0
Ethylbenzene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0
p & m-Xylene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0
Styrene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0
Tribromomethane	µg/kg	1	NONE	< 1.0	< 1.0	< 1.0
o-Xylene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0
1,1,2,2-Tetrachloroethane	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0
Isopropylbenzene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0
Bromobenzene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0
n-Propylbenzene	µg/kg	1	ISO 17025	< 1.0	< 1.0	< 1.0
2-Chlorotoluene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0
4-Chlorotoluene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0
1,3,5-Trimethylbenzene	µg/kg	1	ISO 17025	< 1.0	< 1.0	< 1.0
tert-Butylbenzene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0
1,2,4-Trimethylbenzene	µg/kg	1	ISO 17025	< 1.0	< 1.0	< 1.0
sec-Butylbenzene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0
1,3-Dichlorobenzene	µg/kg	1	ISO 17025	< 1.0	< 1.0	< 1.0
p-Isopropyltoluene	µg/kg	1	ISO 17025	< 1.0	< 1.0	< 1.0
1,2-Dichlorobenzene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0
1,4-Dichlorobenzene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0
Butylbenzene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0
1,2-Dibromo-3-chloropropane	µg/kg	1	ISO 17025	< 1.0	< 1.0	< 1.0
1,2,4-Trichlorobenzene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0
Hexachlorobutadiene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0
1,2,3-Trichlorobenzene	µg/kg	1	ISO 17025	< 1.0	< 1.0	< 1.0

SVOCs

Aniline	mg/kg	0.1	NONE	< 0.1	< 0.1	< 0.1
Phenol	mg/kg	0.2	ISO 17025	< 0.2	< 0.2	< 0.2
2-Chlorophenol	mg/kg	0.1	MCERTS	< 0.1	< 0.1	< 0.1
Bis(2-chloroethyl)ether	mg/kg	0.2	MCERTS	< 0.2	< 0.2	< 0.2
1,3-Dichlorobenzene	mg/kg	0.2	MCERTS	< 0.2	< 0.2	< 0.2
1,2-Dichlorobenzene	mg/kg	0.1	MCERTS	< 0.1	< 0.1	< 0.1
1,4-Dichlorobenzene	mg/kg	0.2	MCERTS	< 0.2	< 0.2	< 0.2
Bis(2-chloroisopropyl)ether	mg/kg	0.1	MCERTS	< 0.1	< 0.1	< 0.1
2-Methylphenol	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3
Hexachloroethane	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05
Nitrobenzene	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3
4-Methylphenol	mg/kg	0.2	NONE	< 0.2	< 0.2	< 0.2
Isophorone	mg/kg	0.2	MCERTS	< 0.2	< 0.2	< 0.2
2-Nitrophenol	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3
2,4-Dimethylphenol	mg/kg	0.3	MCERTS	0.5	< 0.3	< 0.3
Bis(2-chloroethoxy)methane	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3
1,2,4-Trichlorobenzene	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3
Naphthalene	mg/kg	0.05	MCERTS	2.8	0.73	< 0.05
2,4-Dichlorophenol	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3
4-Chloroaniline	mg/kg	0.1	NONE	< 0.1	< 0.1	< 0.1



Analytical Report Number: 21-56594
Project / Site name: Belmont Street

Lab Sample Number				1768957	1768958	1768959
Sample Reference				BH103	BH103	BH103
Sample Number				None Supplied	None Supplied	None Supplied
Depth (m)				0.60	0.35	1.80
Date Sampled				10/02/2021	10/02/2021	11/02/2021
Time Taken				None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status			
Hexachlorobutadiene	mg/kg	0.1	MCERTS	< 0.1	< 0.1	< 0.1
4-Chloro-3-methylphenol	mg/kg	0.1	NONE	< 0.1	< 0.1	< 0.1
2,4,6-Trichlorophenol	mg/kg	0.1	MCERTS	< 0.1	< 0.1	< 0.1
2,4,5-Trichlorophenol	mg/kg	0.2	MCERTS	< 0.2	< 0.2	< 0.2
2-Methylnaphthalene	mg/kg	0.1	NONE	3.3	1.2	< 0.1
2-Chloronaphthalene	mg/kg	0.1	MCERTS	< 0.1	< 0.1	< 0.1
Dimethylphthalate	mg/kg	0.1	MCERTS	< 0.1	< 0.1	< 0.1
2,6-Dinitrotoluene	mg/kg	0.1	MCERTS	< 0.1	< 0.1	< 0.1
Acenaphthylene	mg/kg	0.05	MCERTS	7	< 0.05	< 0.05
Acenaphthene	mg/kg	0.05	MCERTS	4	< 0.05	< 0.05
2,4-Dinitrotoluene	mg/kg	0.2	MCERTS	< 0.2	< 0.2	< 0.2
Dibenzofuran	mg/kg	0.2	MCERTS	5	< 0.2	< 0.2
4-Chlorophenyl phenyl ether	mg/kg	0.3	ISO 17025	< 0.3	< 0.3	< 0.3
Diethyl phthalate	mg/kg	0.2	MCERTS	< 0.2	< 0.2	< 0.2
4-Nitroaniline	mg/kg	0.2	MCERTS	< 0.2	< 0.2	< 0.2
Fluorene	mg/kg	0.05	MCERTS	8.6	< 0.05	< 0.05
Azobenzene	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3
Bromophenyl phenyl ether	mg/kg	0.2	MCERTS	< 0.2	< 0.2	< 0.2
Hexachlorobenzene	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3
Phenanthrene	mg/kg	0.05	MCERTS	65	0.58	< 0.05
Anthracene	mg/kg	0.05	MCERTS	9.7	0.1	< 0.05
Carbazole	mg/kg	0.3	MCERTS	5.3	< 0.3	< 0.3
Dibutyl phthalate	mg/kg	0.2	MCERTS	< 0.2	< 0.2	< 0.2
Anthraquinone	mg/kg	0.3	MCERTS	11	< 0.3	< 0.3
Fluoranthene	mg/kg	0.05	MCERTS	70	0.7	< 0.05
Pyrene	mg/kg	0.05	MCERTS	55	0.69	< 0.05
Butyl benzyl phthalate	mg/kg	0.3	ISO 17025	< 0.3	< 0.3	< 0.3
Benzo(a)anthracene	mg/kg	0.05	MCERTS	22	0.44	< 0.05
Chrysene	mg/kg	0.05	MCERTS	18	0.38	< 0.05
Benzo(b)fluoranthene	mg/kg	0.05	MCERTS	26	0.54	< 0.05
Benzo(k)fluoranthene	mg/kg	0.05	MCERTS	7.5	0.22	< 0.05
Benzo(a)pyrene	mg/kg	0.05	MCERTS	21	0.5	< 0.05
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	9.2	0.29	< 0.05
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	2.3	< 0.05	< 0.05
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	11	0.41	< 0.05

U/S = Unsuitable Sample I/S = Insufficient Sample



Analytical Report Number : 21-56594
Project / Site name: Belmont Street

* These descriptions are only intended to act as a cross check if sample identities are questioned. The major constituent of the sample is intended to act with respect to MCERTS validation. The laboratory is accredited for sand, clay and loam (MCERTS) soil types. Data for unaccredited types of solid should be interpreted with care.

Stone content of a sample is calculated as the % weight of the stones not passing a 10 mm sieve. Results are not corrected for stone content.

Lab Sample Number	Sample Reference	Sample Number	Depth (m)	Sample Description *
1768957	BH103	None Supplied	0.6	Brown clay and sand with brick and gravel
1768958	BH103	None Supplied	0.35	Brown clay and sand with gravel and vegetation.
1768959	BH103	None Supplied	1.8	Brown clay with gravel.

Analytical Report Number : 21-56594

Project / Site name: Belmont Street

Water matrix abbreviations: Surface Water (SW) Potable Water (PW) Ground Water (GW)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Metals in soil by ICP-OES	Determination of metals in soil by aqua-regia digestion followed by ICP-OES.	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil.	L038-PL	D	MCERTS
Asbestos identification in soil	Asbestos Identification with the use of polarised light microscopy in conjunction with disperion staining techniques.	In house method based on HSG 248	A001-PL	D	ISO 17025
Boron, water soluble, in soil	Determination of water soluble boron in soil by hot water extract followed by ICP-OES.	In-house method based on Second Site Properties version 3	L038-PL	D	MCERTS
Moisture Content	Moisture content, determined gravimetrically. (30 oC)	In house method.	L019-UK/PL	W	NONE
Speciated EPA-16 PAHs in soil	Determination of PAH compounds in soil by extraction in dichloromethane and hexane followed by GC-MS with the use of surrogate and internal standards.	In-house method based on USEPA 8270	L064-PL	D	MCERTS
Stones content of soil	Standard preparation for all samples unless otherwise detailed. Gravimetric determination of stone > 10 mm as % dry weight.	In-house method based on British Standard Methods and MCERTS requirements.	L019-UK/PL	D	NONE
Semi-volatile organic compounds in soil	Determination of semi-volatile organic compounds in soil by extraction in dichloromethane and hexane followed by GC-MS.	In-house method based on USEPA 8270	L064-PL	D	MCERTS
Volatile organic compounds in soil	Determination of volatile organic compounds in soil by headspace GC-MS.	In-house method based on USEPA8260	L073B-PL	W	MCERTS
BTEX and MTBE in soil (Monoaromatics)	Determination of BTEX in soil by headspace GC-MS.	In-house method based on USEPA8260	L073B-PL	W	MCERTS
TPHCWG (Soil)	Determination of hexane extractable hydrocarbons in soil by GC-MS/GC-FID.	In-house method with silica gel split/clean up.	L088/76-PL	W	MCERTS
D.O. for Gravimetric Quant if Screen/ID positive	Dependent option for Gravimetric Quant if Screen/ID positive scheduled.	In house asbestos methods A001 & A006.	A006-PL	D	NONE

For method numbers ending in 'UK' analysis have been carried out in our laboratory in the United Kingdom.

For method numbers ending in 'PL' analysis have been carried out in our laboratory in Poland.

Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC.

**Matthew Handley**

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Analytical Report Number : 21-56799

Project / Site name:	Belmont Street	Samples received on:	05/02/2021
Your job number:		Samples instructed on/ Analysis started on:	05/02/2021
Your order number:	M-VIST003619/0002	Analysis completed by:	19/02/2021
Report Issue Number:	1	Report issued on:	19/02/2021
Samples Analysed:	1 soil sample		

Signed:

Agnieszka Czerwińska
Technical Reviewer (Reporting Team)
For & on behalf of i2 Analytical Ltd.

Standard Geotechnical, Asbestos and Chemical Testing Laboratory located at: ul. Pionierów 39, 41 -711 Ruda Śląska, Poland.

Accredited tests are defined within the report, opinions and interpretations expressed herein are outside the scope of accreditation.

Standard sample disposal times, unless otherwise agreed with the laboratory, are :

soils - 4 weeks from reporting
leachates - 2 weeks from reporting
waters - 2 weeks from reporting
asbestos - 6 months from reporting

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Any assessments of compliance with specifications are based on actual analytical results with no contribution from uncertainty of measurement.
Application of uncertainty of measurement would provide a range within which the true result lies.
An estimate of measurement uncertainty can be provided on request.



Analytical Report Number: 21-56799

Project / Site name: Belmont Street

Lab Sample Number				1770054
Sample Reference				BH101
Sample Number				None Supplied
Depth (m)				20.80
Date Sampled				04/02/2021
Time Taken				None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status	
Stone Content	%	0.1	NONE	< 0.1
Moisture Content	%	0.01	NONE	11
Total mass of sample received	kg	0.001	NONE	0.5

General Inorganics

pH - Automated	pH Units	N/A	MCERTS	9.6
Total Sulphate as SO ₄	%	0.005	MCERTS	0.054
Water Soluble SO ₄ 16hr extraction (2:1 Leachate Equivale	g/l	0.00125	MCERTS	0.25
Water Soluble Chloride (2:1) (leachate equivalent)	mg/l	0.5	MCERTS	23
Total Sulphur	%	0.005	MCERTS	0.402
Water Soluble Nitrate (2:1) as N (leachate equivalent)	mg/l	2	NONE	< 2.0

Heavy Metals / Metalloids

Magnesium (water soluble)	mg/kg	5	NONE	< 5.0
Magnesium (leachate equivalent)	mg/l	2.5	NONE	< 2.5

U/S = Unsuitable Sample I/S = Insufficient Sample



Analytical Report Number : 21-56799
Project / Site name: Belmont Street

* These descriptions are only intended to act as a cross check if sample identities are questioned. The major constituent of the sample is intended to act with respect to MCERTS validation. The laboratory is accredited for sand, clay and loam (MCERTS) soil types. Data for unaccredited types of solid should be interpreted with care.

Stone content of a sample is calculated as the % weight of the stones not passing a 10 mm sieve. Results are not corrected for stone content.

Lab Sample Number	Sample Reference	Sample Number	Depth (m)	Sample Description *
1770054	BH101	None Supplied	20.8	Grey clay with vegetation and gravel.



Analytical Report Number : 21-56799

Project / Site name: Belmont Street

Water matrix abbreviations: Surface Water (SW) Potable Water (PW) Ground Water (GW)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Sulphate, water soluble, in soil (16hr extraction)	Determination of water soluble sulphate by ICP-OES. Results reported directly (leachate equivalent) and corrected for extraction ratio (soil equivalent).	In house method.	L038-PL	D	MCERTS
Magnesium, water soluble, in soil	Determination of water soluble magnesium by extraction with water followed by ICP-OES.	In-house method based on TRL 447	L038-PL	D	NONE
Moisture Content	Moisture content, determined gravimetrically. (30 oC)	In house method.	L019-UK/PL	W	NONE
pH in soil (automated)	Determination of pH in soil by addition of water followed by automated electrometric measurement.	In house method.	L099-PL	D	MCERTS
Stones content of soil	Standard preparation for all samples unless otherwise detailed. Gravimetric determination of stone > 10 mm as % dry weight.	In-house method based on British Standard Methods and MCERTS requirements.	L019-UK/PL	D	NONE
Total Sulphate in soil as %	Determination of total sulphate in soil by extraction with 10% HCl followed by ICP-OES.	In house method.	L038-PL	D	MCERTS
Total Sulphur in soil as %	Determination of total sulphur in soil by extraction with aqua-regia, potassium bromide/bromate followed by ICP-OES.	In house method.	L038-PL	D	MCERTS
Water Soluble Nitrate (2:1) as N in soil	Determination of nitrate by reaction with sodium salicylate and colorimetry.	In-house method based on Examination of Water and Wastewater & Polish Standard Method PN-82/C-04579.08, 2:1 extraction.	L078-PL	W	NONE
Chloride, water soluble, in soil	Determination of Chloride colorimetrically by discrete analyser.	In house method.	L082-PL	D	MCERTS

For method numbers ending in 'UK' analysis have been carried out in our laboratory in the United Kingdom.

For method numbers ending in 'PL' analysis have been carried out in our laboratory in Poland.

Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC.



Matthew Handley

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Analytical Report Number : 21-57198

Project / Site name:	Belmont Street	Samples received on:	12/02/2021
Your job number:	VISIT3619	Samples instructed on/ Analysis started on:	12/02/2021
Your order number:	M-VIST003619/0002	Analysis completed by:	26/02/2021
Report Issue Number:	1	Report issued on:	26/02/2021
Samples Analysed:	2 soil samples		

Signed:

Karolina Marek
PL Head of Reporting Team
For & on behalf of i2 Analytical Ltd.

Standard Geotechnical, Asbestos and Chemical Testing Laboratory located at: ul. Pionierów 39, 41 -711 Ruda Śląska, Poland.

Accredited tests are defined within the report, opinions and interpretations expressed herein are outside the scope of accreditation.

Standard sample disposal times, unless otherwise agreed with the laboratory, are :

soils	- 4 weeks from reporting
leachates	- 2 weeks from reporting
waters	- 2 weeks from reporting
asbestos	- 6 months from reporting

Excel copies of reports are only valid when accompanied by this PDF certificate.

Any assessments of compliance with specifications are based on actual analytical results with no contribution from uncertainty of measurement.
Application of uncertainty of measurement would provide a range within which the true result lies.
An estimate of measurement uncertainty can be provided on request.



Analytical Report Number: 21-57198
Project / Site name: Belmont Street

Lab Sample Number				1772425	1772426
Sample Reference				BH103	BH103
Sample Number				None Supplied	None Supplied
Depth (m)				1.70	10.00
Date Sampled				11/02/2021	11/02/2021
Time Taken				None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status		
Stone Content	%	0.1	NONE	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	21	20
Total mass of sample received	kg	0.001	NONE	0.7	0.7

General Inorganics

pH - Automated	pH Units	N/A	MCERTS	8.6	7.8
Water Soluble SO ₄ 16hr extraction (2:1 Leachate Equivalent)	g/l	0.00125	MCERTS	0.37	3.3
Water Soluble SO ₄ 16hr extraction (2:1 Leachate Equivalent)	mg/l	1.25	MCERTS	366	3270

U/S = Unsuitable Sample I/S = Insufficient Sample



Analytical Report Number : 21-57198

Project / Site name: Belmont Street

* These descriptions are only intended to act as a cross check if sample identities are questioned. The major constituent of the sample is intended to act with respect to MCERTS validation. The laboratory is accredited for sand, clay and loam (MCERTS) soil types. Data for unaccredited types of solid should be interpreted with care.

Stone content of a sample is calculated as the % weight of the stones not passing a 10 mm sieve. Results are not corrected for stone content.

Lab Sample Number	Sample Reference	Sample Number	Depth (m)	Sample Description *
1772425	BH103	None Supplied	1.7	Brown clay with gravel.
1772426	BH103	None Supplied	10	Brown clay.



Analytical Report Number : 21-57198
Project / Site name: Belmont Street

Water matrix abbreviations: Surface Water (SW) Potable Water (PW) Ground Water (GW)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Moisture Content	Moisture content, determined gravimetrically. (30 oC)	In house method.	L019-UK/PL	W	NONE
pH in soil (automated)	Determination of pH in soil by addition of water followed by automated electrometric measurement.	In house method.	L099-PL	D	MCERTS
Stones content of soil	Standard preparation for all samples unless otherwise detailed. Gravimetric determination of stone > 10 mm as % dry weight.	In-house method based on British Standard Methods and MCERTS requirements.	L019-UK/PL	D	NONE
Sulphate, water soluble, in soil (16hr extraction)	Determination of water soluble sulphate by ICP-OES. Results reported directly (leachate equivalent) and corrected for extraction ratio (soil equivalent).	In house method.	L038-PL	D	MCERTS
Sulphate, water soluble, in soil	Determination of water soluble sulphate by ICP-OES. Results reported directly (leachate equivalent) and corrected for extraction ratio (soil equivalent).	In house method.	L038-PL	D	MCERTS

For method numbers ending in 'UK' analysis have been carried out in our laboratory in the United Kingdom.

For method numbers ending in 'PL' analysis have been carried out in our laboratory in Poland.

Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC.

APPENDIX C

LABORATORY GEOTECHNICAL DATA



TEST CERTIFICATE

Liquid and Plastic Limits

i2 Analytical Ltd
Unit 6 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB



Tested in Accordance with: BS 1377-2: 1990: Clause 4.3 and 5

Client: McAuliffe Group
Client Address: McAuliffe House, Northcott Road,
WV14 0TP

Contact: Matthew Handley
Site Address: Belmont Street

Client Reference: MC-VIST3619

Job Number: 21-55602

Date Sampled: 03/02/2021

Date Received: 03/02/2021

Date Tested: 18/02/2021

Sampled By: Client - MH

Testing carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland

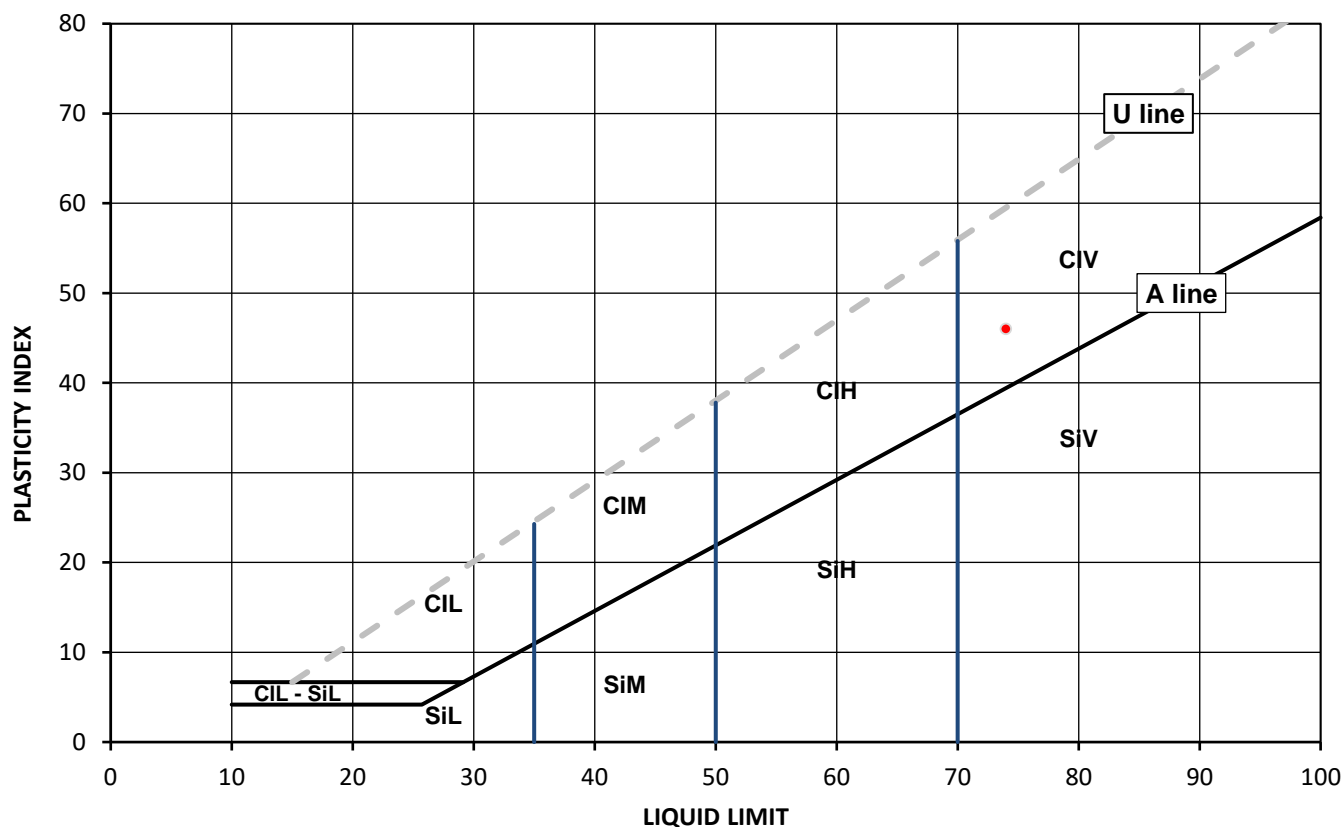
Test Results:

Laboratory Reference: 1763573
Hole No.: BH101
Sample Reference: Not Given
Soil Description: Brown CLAY

Depth Top [m]: 1.80
Depth Base [m]: Not Given
Sample Type: B

Sample Preparation: Tested in natural condition

As Received Moisture Content [W] %	Liquid Limit [WL] %	Plastic Limit [Wp] %	Plasticity Index [Ip] %	% Passing 425µm BS Test Sieve
33	74	28	46	100



Legend, based on BS EN ISO 14688 2:2018 Geotechnical investigation and testing – Identification and classification of soil

	Plasticity	Liquid Limit
Cl	Clay	L Low below 35
Si	Silt	M Medium 35 to 50
		H High 50 to 70
		V Very high exceeding 70
	O Organic	append to classification for organic material (eg CIHO)

Note: Moisture Content by BS 1377-2: 1990: Clause 3.2

Remarks:

Signed:

Monika Janoszek
PL Deputy Head of Geotechnical Section
for and on behalf of i2 Analytical Ltd

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TEST CERTIFICATE

Liquid and Plastic Limits

i2 Analytical Ltd
Unit 6 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB



Tested in Accordance with: BS 1377-2: 1990: Clause 4.3 and 5

Client: McAuliffe Group
Client Address: McAuliffe House, Northcott Road,
WV14 0TP

Contact: Matthew Handley
Site Address: Belmont Street

Client Reference: MC-VIST3619
Job Number: 21-55602
Date Sampled: 03/02/2021
Date Received: 03/02/2021
Date Tested: 18/02/2021
Sampled By: Client - MH

Testing carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland

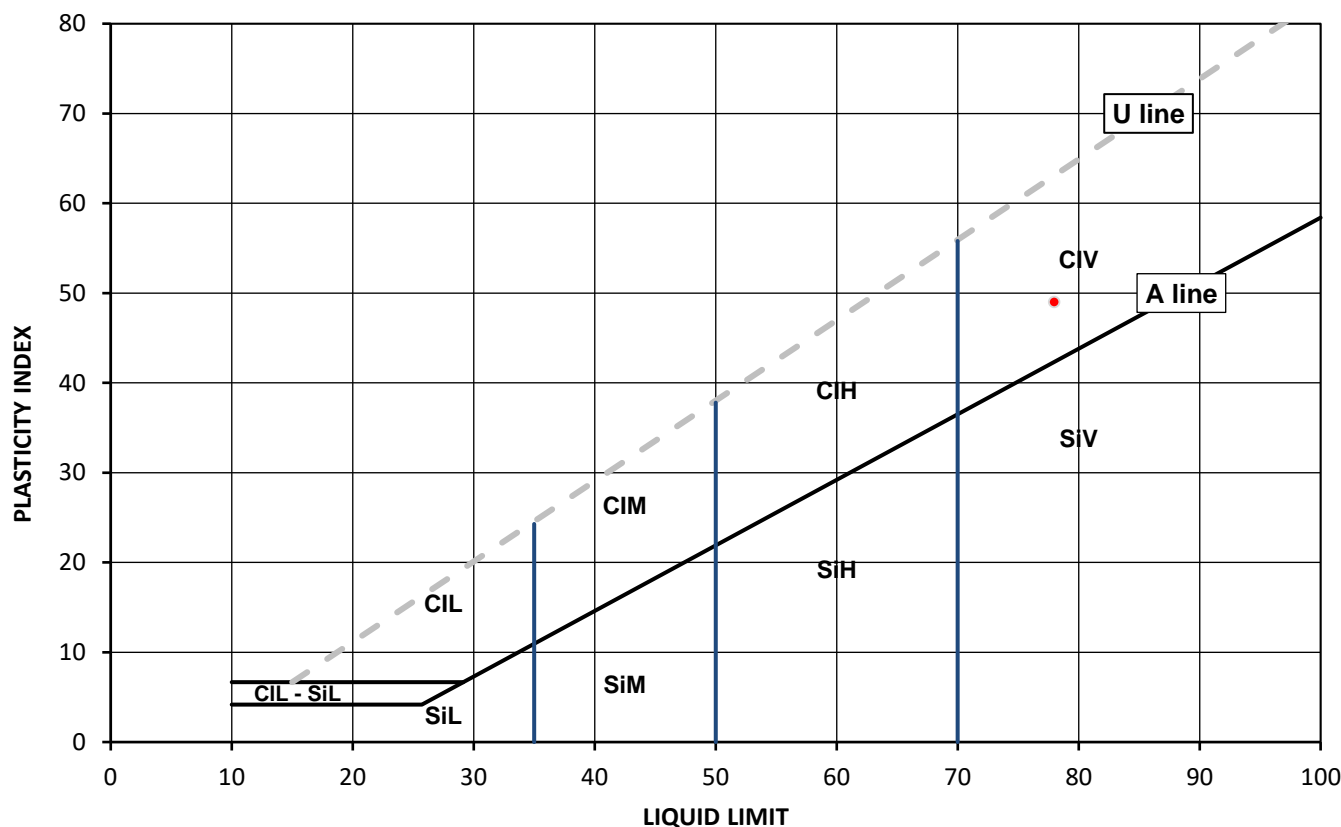
Test Results:

Laboratory Reference: 1763574
Hole No.: BH101
Sample Reference: Not Given
Soil Description: Brown CLAY

Depth Top [m]: 2.80
Depth Base [m]: Not Given
Sample Type: B

Sample Preparation: Tested in natural condition

As Received Moisture Content [W] %	Liquid Limit [WL] %	Plastic Limit [Wp] %	Plasticity Index [Ip] %	% Passing 425µm BS Test Sieve
36	78	29	49	100



Legend, based on BS EN ISO 14688 2:2018 Geotechnical investigation and testing – Identification and classification of soil

	Plasticity	Liquid Limit
Cl Clay	L Low	below 35
Si Silt	M Medium	35 to 50
	H High	50 to 70
	V Very high	exceeding 70
	O Organic	append to classification for organic material (eg CIHO)

Note: Moisture Content by BS 1377-2: 1990: Clause 3.2

Remarks:

Signed:

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PL Deputy Head of Geotechnical Section
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Brackmills Industrial Estate
Northampton NN4 7EB



Tested in Accordance with: BS 1377-2: 1990: Clause 4.3 and 5

Client: McAuliffe Group
Client Address: McAuliffe House, Northcott Road,
WV14 0TP

Contact: Matthew Handley
Site Address: Belmont Street

Client Reference: MC-VIST3619
Job Number: 21-55602
Date Sampled: 03/02/2021
Date Received: 03/02/2021
Date Tested: 18/02/2021
Sampled By: Client - MH

Testing carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland

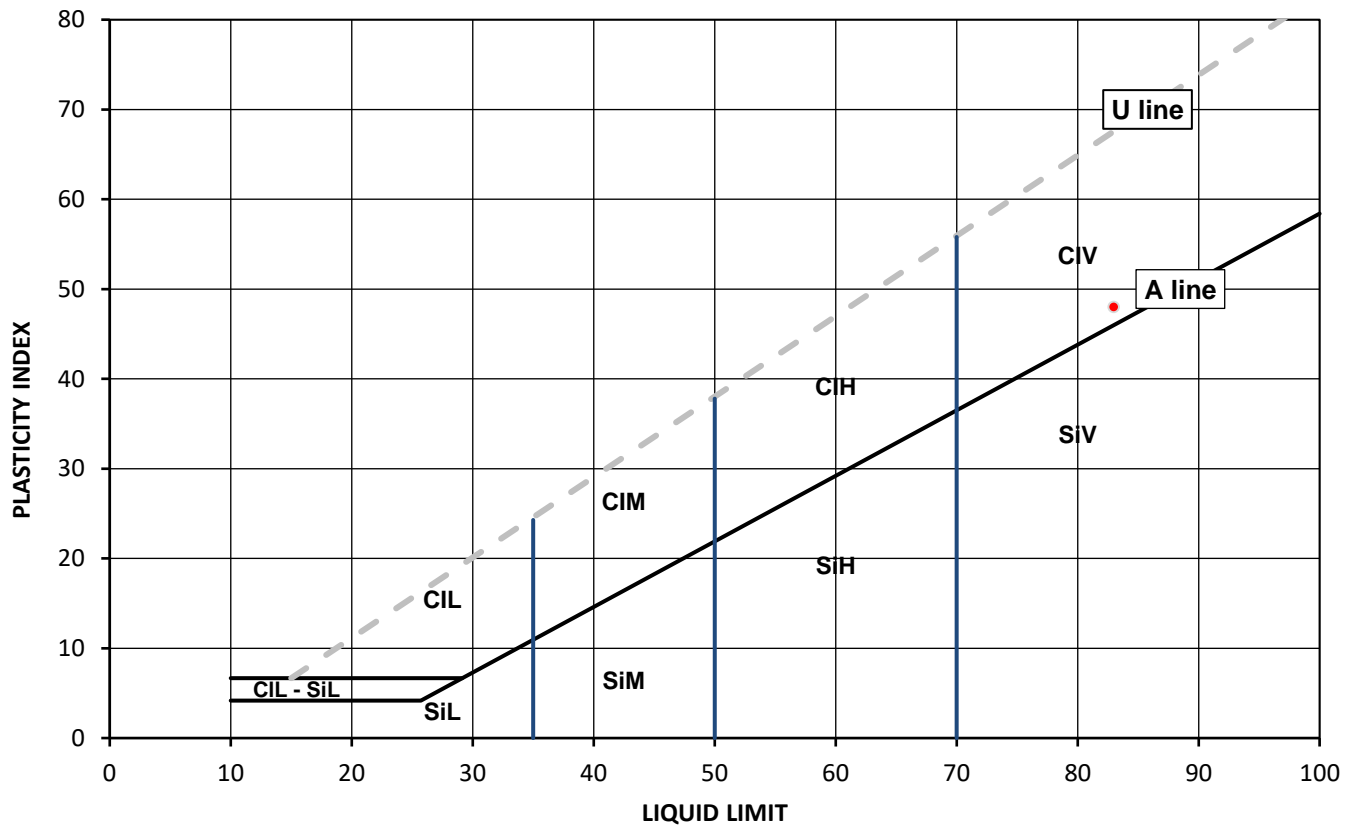
Test Results:

Laboratory Reference: 1763576
Hole No.: BH101
Sample Reference: Not Given
Soil Description: Brown CLAY

Depth Top [m]: 3.80
Depth Base [m]: Not Given
Sample Type: B

Sample Preparation: Tested in natural condition

As Received Moisture Content [W] %	Liquid Limit [WL] %	Plastic Limit [Wp] %	Plasticity Index [Ip] %	% Passing 425µm BS Test Sieve
35	83	35	48	100



Legend, based on BS EN ISO 14688 2:2018 Geotechnical investigation and testing – Identification and classification of soil

	Plasticity	Liquid Limit
Cl	Clay	L Low below 35
Si	Silt	M Medium 35 to 50
		H High 50 to 70
		V Very high exceeding 70
	O Organic	append to classification for organic material (eg CIHO)

Note: Moisture Content by BS 1377-2: 1990: Clause 3.2

Remarks:

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Brackmills Industrial Estate
Northampton NN4 7EB



Tested in Accordance with: BS 1377-2: 1990: Clause 4.3 and 5

Client: McAuliffe Group
Client Address: McAuliffe House, Northcott Road,
WV14 0TP

Contact: Matthew Handley
Site Address: Belmont Street

Client Reference: MC-VIST3619
Job Number: 21-55602
Date Sampled: 03/02/2021
Date Received: 03/02/2021
Date Tested: 18/02/2021
Sampled By: Client - MH

Testing carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland

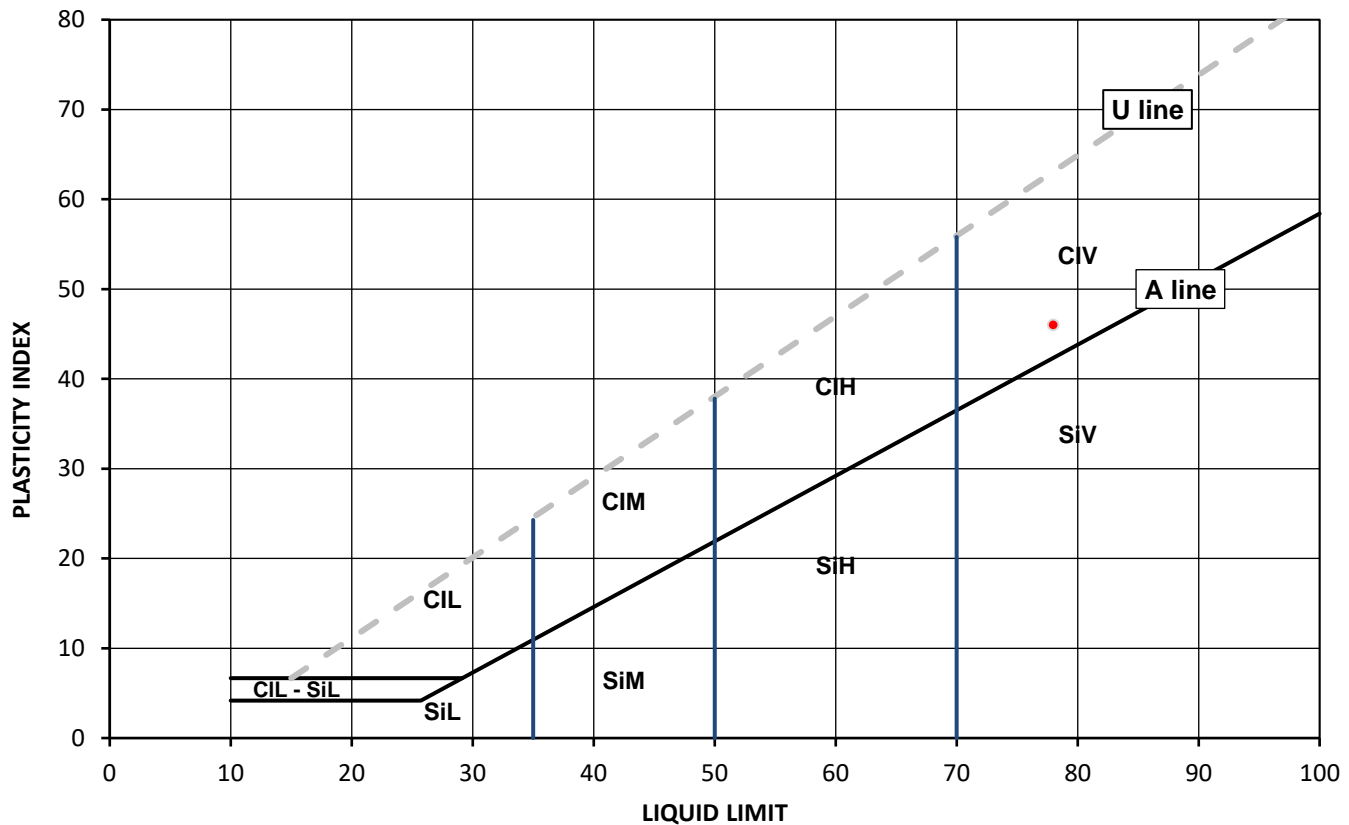
Test Results:

Laboratory Reference: 1763577
Hole No.: BH101
Sample Reference: Not Given
Soil Description: Brown slightly sandy CLAY

Depth Top [m]: 4.80
Depth Base [m]: Not Given
Sample Type: B

Sample Preparation: Tested in natural condition

As Received Moisture Content [W] %	Liquid Limit [WL] %	Plastic Limit [Wp] %	Plasticity Index [Ip] %	% Passing 425µm BS Test Sieve
33	78	32	46	100



Legend, based on BS EN ISO 14688 2:2018 Geotechnical investigation and testing – Identification and classification of soil

	Plasticity	Liquid Limit
Cl Clay	L Low	below 35
Si Silt	M Medium	35 to 50
	H High	50 to 70
	V Very high	exceeding 70
	O Organic	append to classification for organic material (eg CIHO)

Note: Moisture Content by BS 1377-2: 1990: Clause 3.2

Remarks:

Signed:

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Brackmills Industrial Estate
Northampton NN4 7EB



Tested in Accordance with: BS 1377-2: 1990: Clause 4.3 and 5

Client: McAuliffe Group
Client Address: McAuliffe House, Northcott Road,
WV14 0TP

Contact: Matthew Handley
Site Address: Belmont Street

Client Reference: MC-VIST3619
Job Number: 21-55602
Date Sampled: 03/02/2021
Date Received: 03/02/2021
Date Tested: 18/02/2021
Sampled By: Client - MH

Testing carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland

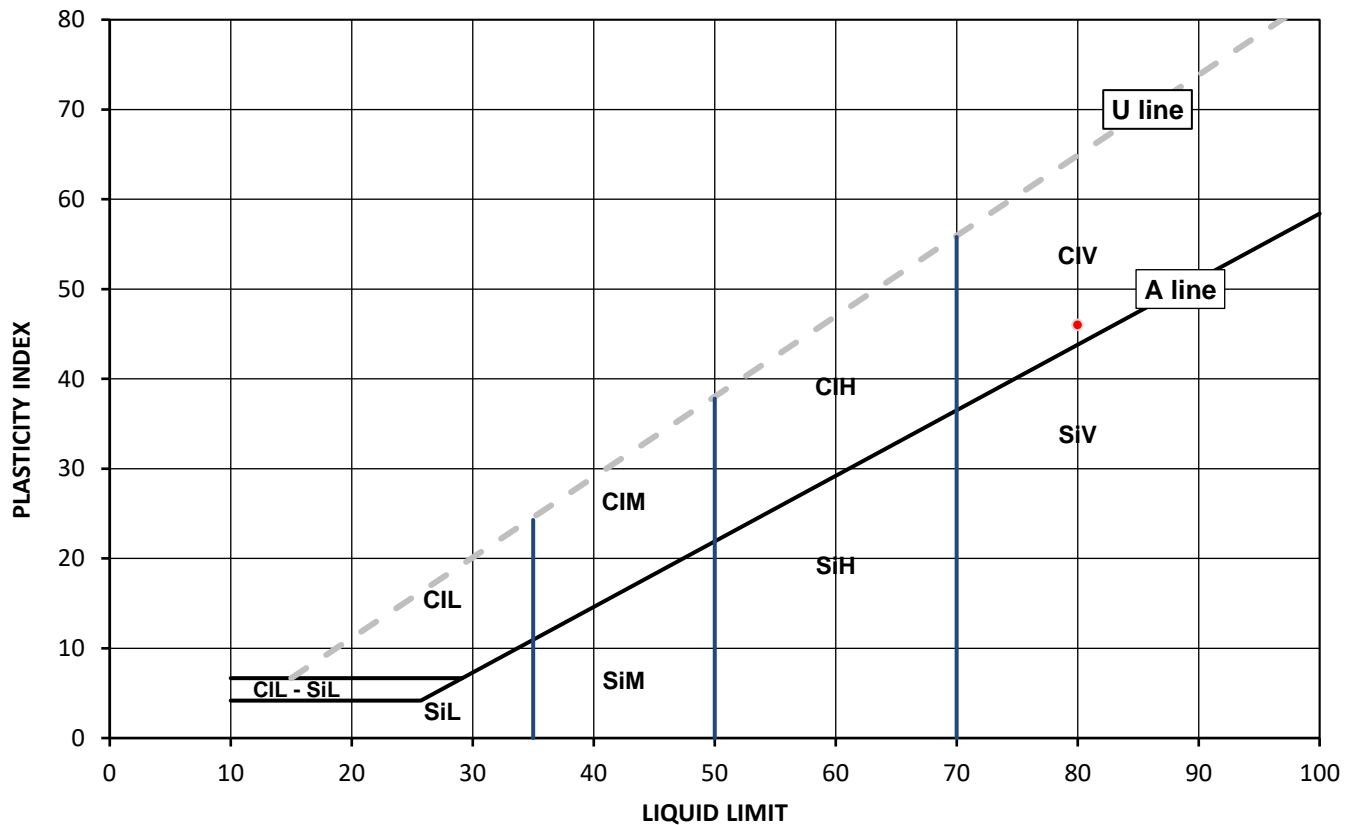
Test Results:

Laboratory Reference: 1763579
Hole No.: BH101
Sample Reference: Not Given
Soil Description: Brown CLAY

Depth Top [m]: 6.00
Depth Base [m]: Not Given
Sample Type: B

Sample Preparation: Tested in natural condition

As Received Moisture Content [W] %	Liquid Limit [WL] %	Plastic Limit [Wp] %	Plasticity Index [Ip] %	% Passing 425µm BS Test Sieve
34	80	34	46	100



Legend, based on BS EN ISO 14688 2:2018 Geotechnical investigation and testing – Identification and classification of soil

	Plasticity	Liquid Limit
Cl Clay	L Low	below 35
Si Silt	M Medium	35 to 50
	H High	50 to 70
	V Very high	exceeding 70
	O Organic	append to classification for organic material (eg CIHO)

Note: Moisture Content by BS 1377-2: 1990: Clause 3.2

Remarks:

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SUMMARY REPORT

Summary of Classification Test Results

i2 Analytical Ltd
Unit 8 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB



Tested in Accordance with:

Client: McAuliffe Group
Client Address: McAuliffe House, Northcott Road,
WV14 0TP

Moisture Content by BS 1377-2: 1990: Clause 3.2; Water Content by BS EN
17892-1: 2014; Atterberg by BS 1377-2: 1990: Clause 4.3 (4 Point Test),
Clause 4.4 (1 Point Test) and 5; PD by BS 1377-2: 1990: Clause 8.2

Client Reference: MC-VIST3619

Job Number: 21-55602

Date Sampled: 03/02/2021

Date Received: 03/02/2021

Date Tested: 18/02/2021

Sampled By: Client - MH

Contact: Matthew Handley

Site Address: Belmont Street

Testing carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland

Test results

Laboratory Reference	Hole No.	Sample				Description	Remarks	Moisture Content [W]	Water Content [W]	Atterberg				Density			Total Porosity#		
		Reference	Depth Top	Depth Base	Type					% Passing 425um	WL	Wp	Ip	bulk	dry	PD			
			m	m															
1763573	BH101	Not Given	1.80	Not Given	B	Brown CLAY	Atterberg 4 Point	33		100	74	28	46						
1763574	BH101	Not Given	2.80	Not Given	B	Brown CLAY	Atterberg 4 Point	36		100	78	29	49						
1763576	BH101	Not Given	3.80	Not Given	B	Brown CLAY	Atterberg 4 Point	35		100	83	35	48						
1763577	BH101	Not Given	4.80	Not Given	B	Brown slightly sandy CLAY	Atterberg 4 Point	33		100	78	32	46						
1763579	BH101	Not Given	6.00	Not Given	B	Brown CLAY	Atterberg 4 Point	34		100	80	34	46						

Note: # Non accredited; NP - Non plastic

Comments:

Signed:

Monika Janoszek
PL Deputy Head of Geotechnical Section
for and on behalf of i2 Analytical Ltd

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TEST CERTIFICATE

Particle Size Distribution

Tested in Accordance with: BS 1377-2: 1990

i2 Analytical Ltd
Unit 6 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB



Client: McAuliffe Group
Client Address: McAuliffe House, Northcott Road,
WV14 0TP

Contact: Matthew Handley
Site Address: Belmont Street

Client Reference: MC-VIST3619
Job Number: 21-55602
Date Sampled: 03/02/2021
Date Received: 03/02/2021
Date Tested: 18/02/2021
Sampled By: Client - MH

Testing carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland

Test Results:

Laboratory Reference: 1763573

Hole No.: BH101

Sample Reference: Not Given

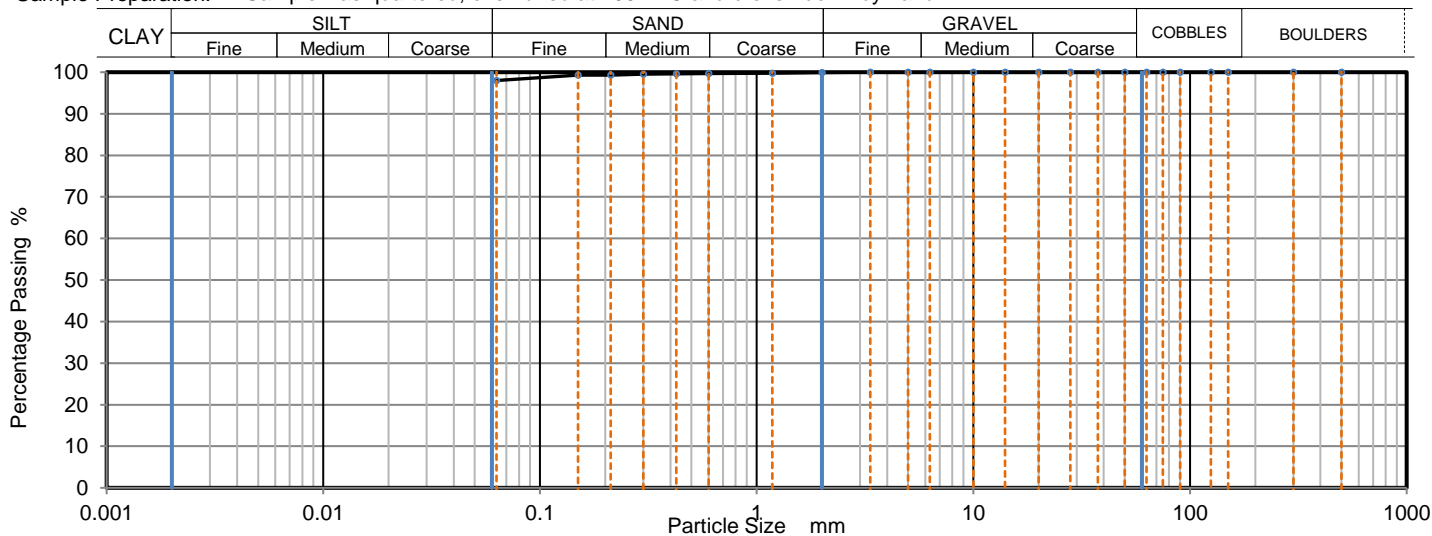
Sample Description: Brown CLAY

Sample Preparation: Sample was quartered, oven dried at 106.4 °C and broken down by hand.

Depth Top [m]: 1.80

Depth Base [m]: Not Given

Sample Type: B



Sieving		Sedimentation	
Particle Size mm	% Passing	Particle Size mm	% Passing
500	100		
300	100		
150	100		
125	100		
90	100		
75	100		
63	100		
50	100		
37.5	100		
28	100		
20	100		
14	100		
10	100		
6.3	100		
5	100		
3.35	100		
2	100		
1.18	100		
0.6	100		
0.425	100		
0.3	100		
0.212	99		
0.15	99		
0.063	99		

Sample Proportions	% dry mass
Very coarse	0.00
Gravel	0.10
Sand	1.20
Fines <0.063mm	98.80

Grading Analysis	
D100	mm
D60	mm
D30	mm
D10	mm
Uniformity Coefficient	N/A
Curvature Coefficient	

Uniformity Coefficient and Coefficient of Curvature calculated in accordance with BS EN ISO 14688-2: 2004 + A1: 2013

Note: Tested in Accordance with BS1377:Part 2:1990, clause 9.2

Remarks:

Signed:

Monika Janoszek
PL Deputy Head of Geotechnical Section
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TEST CERTIFICATE

Particle Size Distribution

i2 Analytical Ltd
Unit 6 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB



Tested in Accordance with: BS 1377-2: 1990

Client: McAuliffe Group
Client Address: McAuliffe House, Northcott Road,
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Contact: Matthew Handley
Site Address: Belmont Street

Client Reference: MC-VIST3619
Job Number: 21-55602
Date Sampled: 03/02/2021
Date Received: 03/02/2021
Date Tested: 18/02/2021
Sampled By: Client - MH

Testing carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland

Test Results:

Laboratory Reference: 1763574

Hole No.: BH101

Sample Reference: Not Given

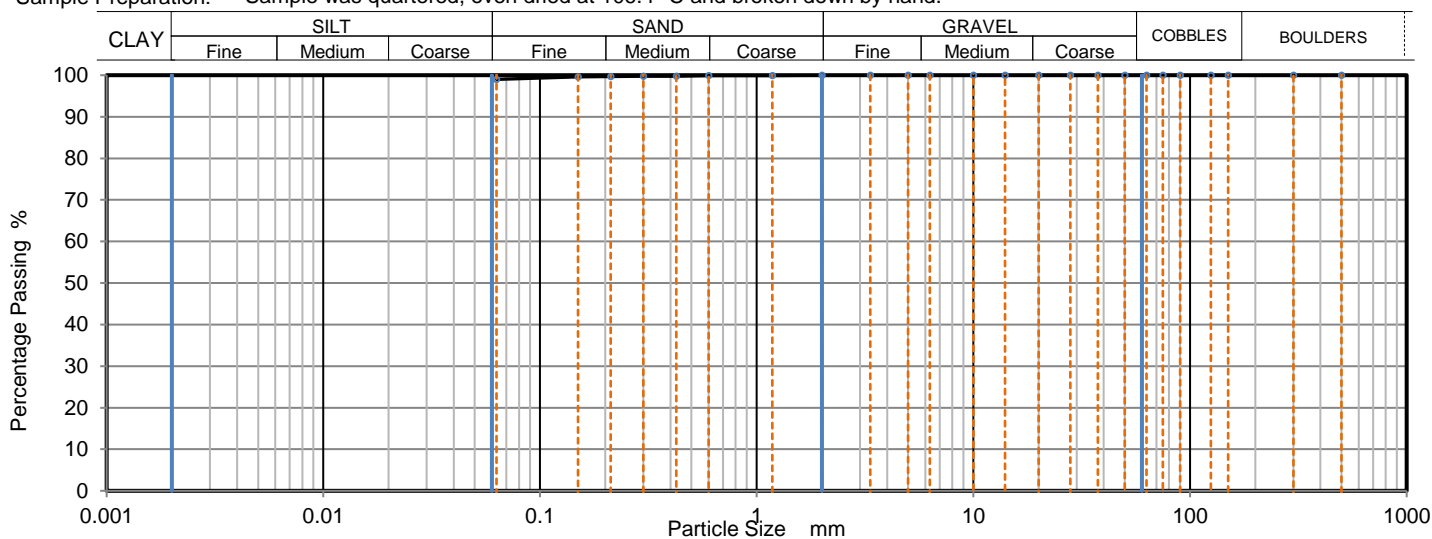
Sample Description: Brown CLAY

Sample Preparation: Sample was quartered, oven dried at 106.4 °C and broken down by hand.

Depth Top [m]: 2.80

Depth Base [m]: Not Given

Sample Type: B



Sieving		Sedimentation	
Particle Size mm	% Passing	Particle Size mm	% Passing
500	100		
300	100		
150	100		
125	100		
90	100		
75	100		
63	100		
50	100		
37.5	100		
28	100		
20	100		
14	100		
10	100		
6.3	100		
5	100		
3.35	100		
2	100		
1.18	100		
0.6	100		
0.425	100		
0.3	100		
0.212	100		
0.15	100		
0.063	99		

Sample Proportions	% dry mass
Very coarse	0.00
Gravel	0.00
Sand	0.80
Fines <0.063mm	99.20

Grading Analysis	
D100	mm
D60	mm
D30	mm
D10	mm
Uniformity Coefficient	N/A
Curvature Coefficient	

Uniformity Coefficient and Coefficient of Curvature calculated in accordance with BS EN ISO 14688-2: 2004 + A1: 2013

Note: Tested in Accordance with BS1377:Part 2:1990, clause 9.2

Remarks:

Signed:

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TEST CERTIFICATE

Particle Size Distribution

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i2 Analytical Ltd
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Client: McAuliffe Group
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Date Received: 03/02/2021
Date Tested: 18/02/2021
Sampled By: Client - MH

Testing carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland

Test Results:

Laboratory Reference: 1763576

Hole No.: BH101

Sample Reference: Not Given

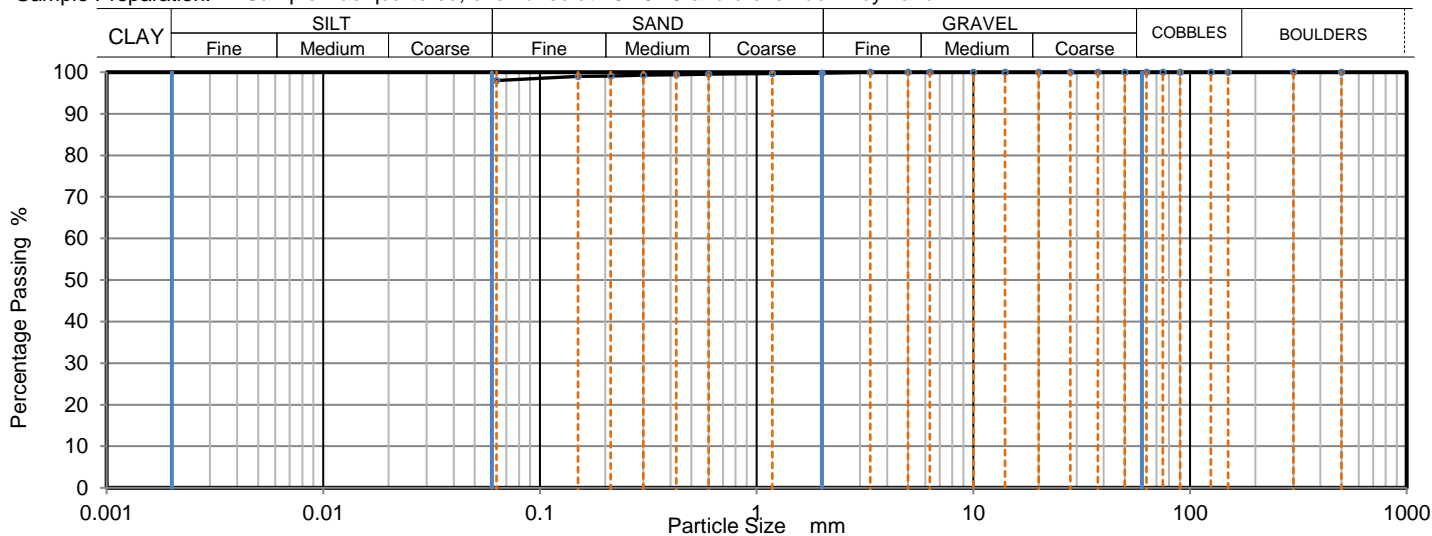
Sample Description: Brown CLAY

Sample Preparation: Sample was quartered, oven dried at 107.9 °C and broken down by hand.

Depth Top [m]: 3.80

Depth Base [m]: Not Given

Sample Type: B



Sieving		Sedimentation	
Particle Size mm	% Passing	Particle Size mm	% Passing
500	100		
300	100		
150	100		
125	100		
90	100		
75	100		
63	100		
50	100		
37.5	100		
28	100		
20	100		
14	100		
10	100		
6.3	100		
5	100		
3.35	100		
2	100		
1.18	100		
0.6	100		
0.425	99		
0.3	99		
0.212	99		
0.15	99		
0.063	98		

Sample Proportions	% dry mass
Very coarse	0.00
Gravel	0.20
Sand	1.60
Fines <0.063mm	98.30

Grading Analysis	
D100	mm
D60	mm
D30	mm
D10	mm
Uniformity Coefficient	N/A
Curvature Coefficient	

Uniformity Coefficient and Coefficient of Curvature calculated in accordance with BS EN ISO 14688-2: 2004 + A1: 2013

Note: Tested in Accordance with BS1377:Part 2:1990, clause 9.2

Remarks:

Signed:

Monika Janoszek
PL Deputy Head of Geotechnical Section
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TEST CERTIFICATE

Particle Size Distribution

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i2 Analytical Ltd
Unit 6 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB



Client: McAuliffe Group
Client Address: McAuliffe House, Northcott Road,
WV14 0TP

Contact: Matthew Handley
Site Address: Belmont Street

Client Reference: MC-VIST3619
Job Number: 21-55602
Date Sampled: 03/02/2021
Date Received: 03/02/2021
Date Tested: 18/02/2021
Sampled By: Client - MH

Testing carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland

Test Results:

Laboratory Reference: 1763577

Hole No.: BH101

Sample Reference: Not Given

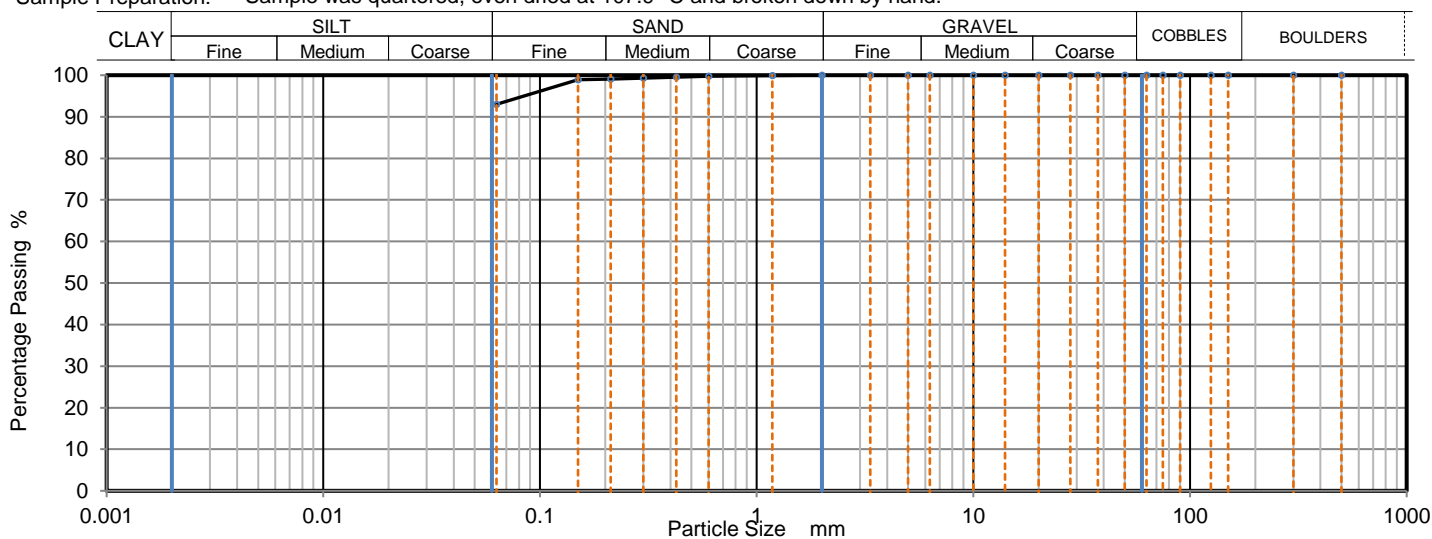
Sample Description: Brown slightly sandy CLAY

Sample Preparation: Sample was quartered, oven dried at 107.9 °C and broken down by hand.

Depth Top [m]: 4.80

Depth Base [m]: Not Given

Sample Type: B



Sieving		Sedimentation	
Particle Size mm	% Passing	Particle Size mm	% Passing
500	100		
300	100		
150	100		
125	100		
90	100		
75	100		
63	100		
50	100		
37.5	100		
28	100		
20	100		
14	100		
10	100		
6.3	100		
5	100		
3.35	100		
2	100		
1.18	100		
0.6	100		
0.425	100		
0.3	99		
0.212	99		
0.15	99		
0.063	93		

Sample Proportions	% dry mass
Very coarse	0.00
Gravel	0.00
Sand	7.00
Fines <0.063mm	93.00

Grading Analysis	
D100	mm
D60	mm
D30	mm
D10	mm
Uniformity Coefficient	N/A
Curvature Coefficient	

Uniformity Coefficient and Coefficient of Curvature calculated in accordance with BS EN ISO 14688-2: 2004 + A1: 2013

Note: Tested in Accordance with BS1377:Part 2:1990, clause 9.2

Remarks:

Signed:

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PL Deputy Head of Geotechnical Section
for and on behalf of i2 Analytical Ltd

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TEST CERTIFICATE

Particle Size Distribution

i2 Analytical Ltd
Unit 6 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB



Tested in Accordance with: BS 1377-2: 1990

Client: McAuliffe Group
Client Address: McAuliffe House, Northcott Road,
WV14 0TP

Contact: Matthew Handley
Site Address: Belmont Street

Client Reference: MC-VIST3619

Job Number: 21-55602

Date Sampled: 03/02/2021

Date Received: 03/02/2021

Date Tested: 18/02/2021

Sampled By: Client - MH

Testing carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland

Test Results:

Laboratory Reference: 1763579

Hole No.: BH101

Sample Reference: Not Given

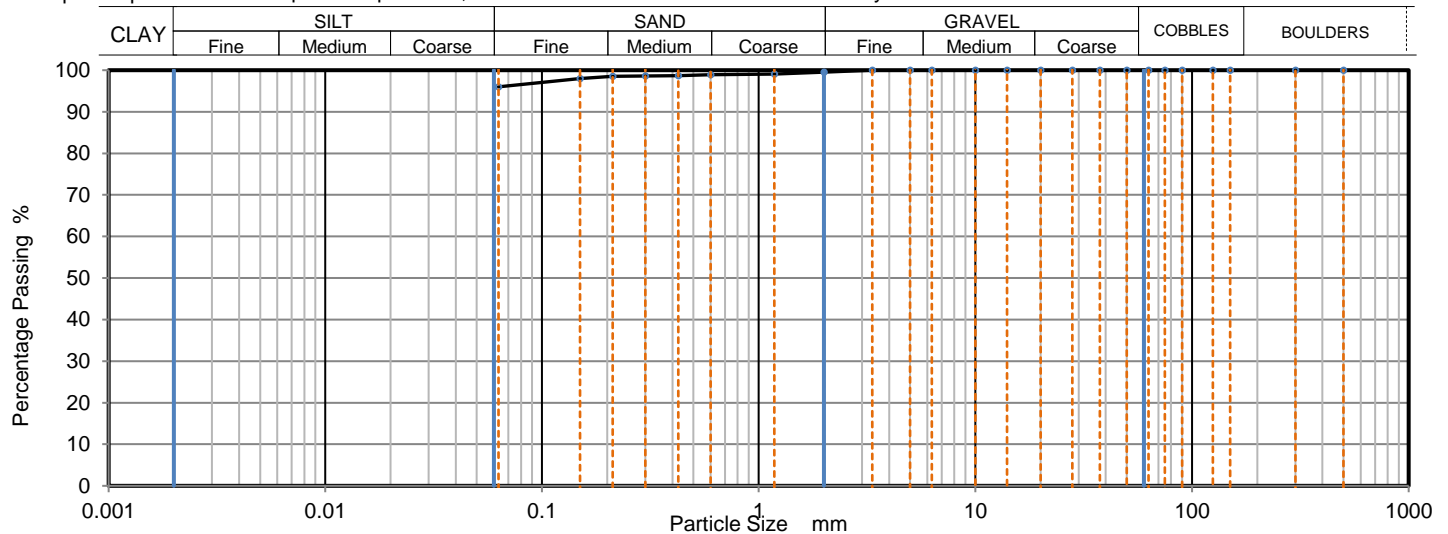
Sample Description: Brown CLAY

Sample Preparation: Sample was quartered, oven dried at 106.4 °C and broken down by hand.

Depth Top [m]: 6.00

Depth Base [m]: Not Given

Sample Type: B



Sieving		Sedimentation	
Particle Size mm	% Passing	Particle Size mm	% Passing
500	100		
300	100		
150	100		
125	100		
90	100		
75	100		
63	100		
50	100		
37.5	100		
28	100		
20	100		
14	100		
10	100		
6.3	100		
5	100		
3.35	100		
2	100		
1.18	99		
0.6	99		
0.425	99		
0.3	99		
0.212	99		
0.15	98		
0.063	97		

Sample Proportions	% dry mass
Very coarse	0.00
Gravel	0.50
Sand	2.60
Fines <0.063mm	96.90

Grading Analysis	
D100	mm
D60	mm
D30	mm
D10	mm
Uniformity Coefficient	N/A
Curvature Coefficient	

Uniformity Coefficient and Coefficient of Curvature calculated in accordance with BS EN ISO 14688-2: 2004 + A1: 2013

Note: Tested in Accordance with BS1377:Part 2:1990, clause 9.2

Remarks:

Signed:

Monika Janoszek
PL Deputy Head of Geotechnical Section
for and on behalf of i2 Analytical Ltd

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TEST CERTIFICATE

Unconsolidated Undrained

Triaxial Compression

Tested in Accordance with:
BS 1377-7: 1990: Clause 8

i2 Analytical Ltd
Unit 6 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB



Client: McAuliffe Group
Client Address: McAuliffe House, Northcott Road,
WV14 0TP

Contact: Matthew Handley
Site Address: Belmont Street

Testing carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland

Client Reference: MC-VIST3619

Job Number: 21-55602

Date Sampled: 03/02/2021

Date Received: 03/02/2021

Date Tested: 17/02/2021

Sampled By: Client - MH

Test Results:

Laboratory Reference: 1763578

Hole No.: BH101

Sample Reference: Not Given

Sample Description: Brown CLAY

Depth Top [m]: 5.00

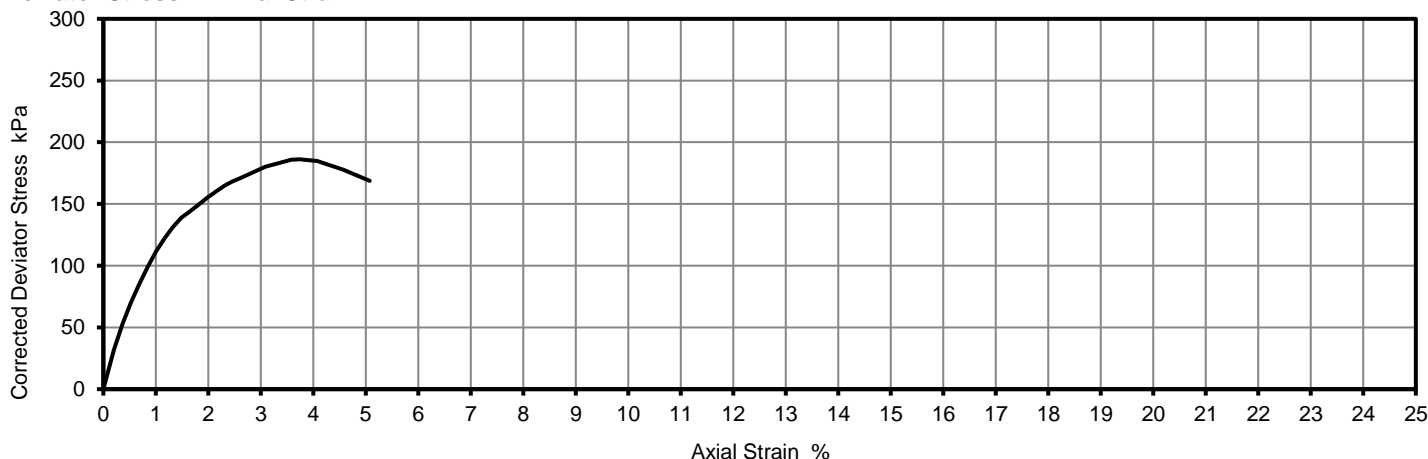
Depth Base [m]: 5.45

Sample Type: U

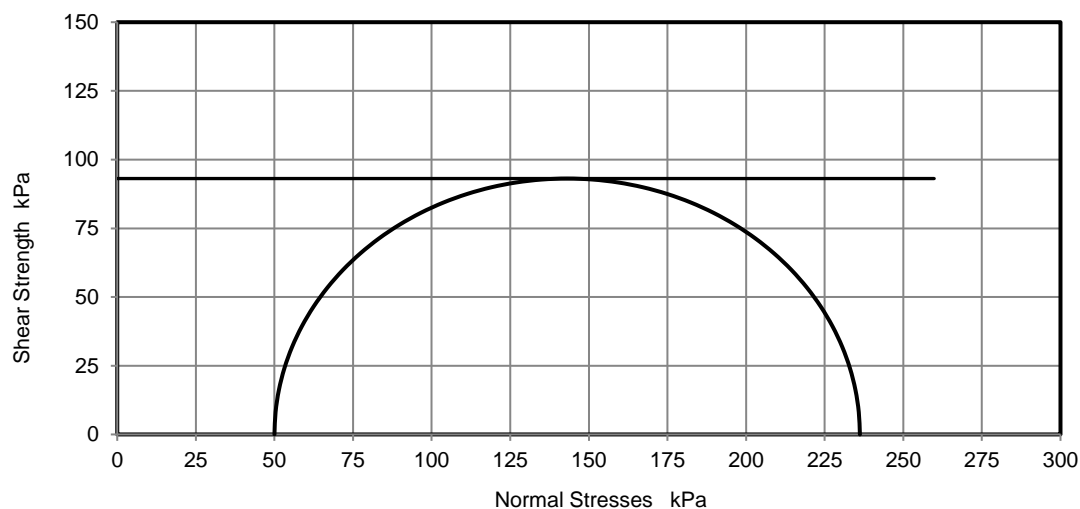
Test Number	1
Length	200.26 mm
Diameter	101.90 mm
Bulk Density	1.93 Mg/m ³
Moisture Content	32 %
Dry Density	1.46 Mg/m ³
Membrane Correction	0.29 kPa

Rate of Strain	2.00 %/min
Cell Pressure	50 kPa
Axial Strain at failure	3.7 %
Deviator Stress, ($\sigma_1 - \sigma_3$) _f	186 kPa
Undrained Shear Strength, c_u	93 kPa $\frac{1}{2}(\sigma_1 - \sigma_3)_f$
Mode of Failure	Brittle
Membrane thickness	0.29 mm

Deviator Stress v Axial Strain



Mohr Circles



Position within sample



Note: Deviator stress corrected for area change and membrane effects. Mohr circles and their interpretation is not covered by BS1377.
This is provided for information only.

Remarks: Sample failed at first stage. Unable to achieve multistage.
Reported as a single stage

Signed:

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Tested in Accordance with: BS 1377-7: 1990: Clause 9

Client: McAuliffe Group
Client Address: McAuliffe House, Northcott Road,
WV14 0TP

Contact: Matthew Handley
Site Address: Belmont Street

Client Reference: MC-VIST3619
Job Number: 21-55602
Date Sampled: 03/02/2021
Date Received: 03/02/2021
Date Tested: 17/02/2021
Sampled By: Client - MH

Testing carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland

Test Results:

Laboratory Reference: 1763572
Hole No.: BH101
Sample Reference: Not Given
Sample Description: Brown CLAY

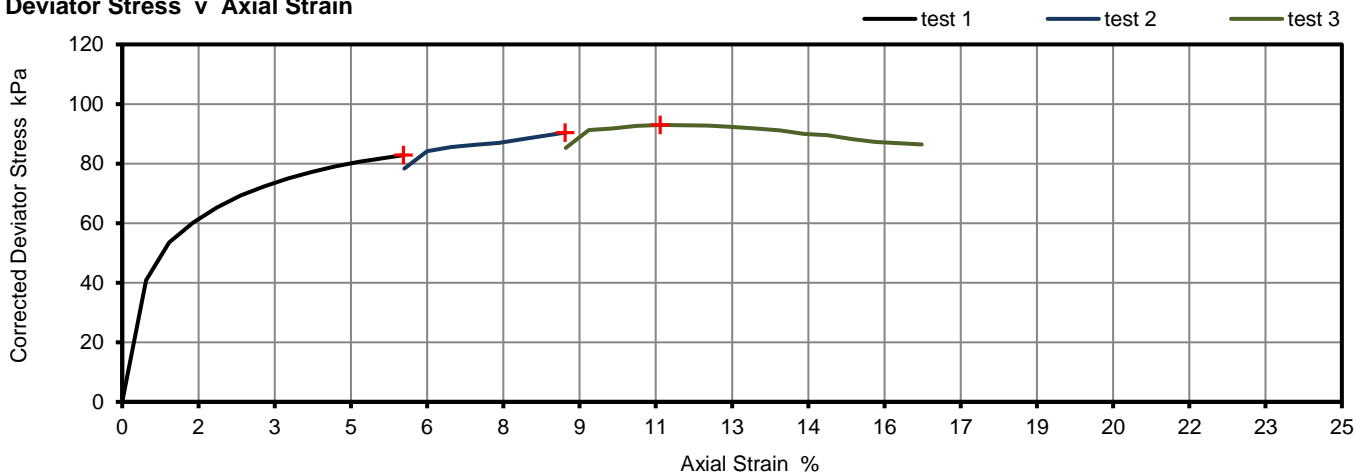
Depth Top [m]: 1.20
Depth Base [m]: 1.65
Sample Type: U

Length	201.29	mm
Diameter	100.57	mm
Bulk Density	1.93	Mg/m ³
Moisture Content	31	%
Dry Density	1.47	Mg/m ³
Membrane thickness	0.28	mm

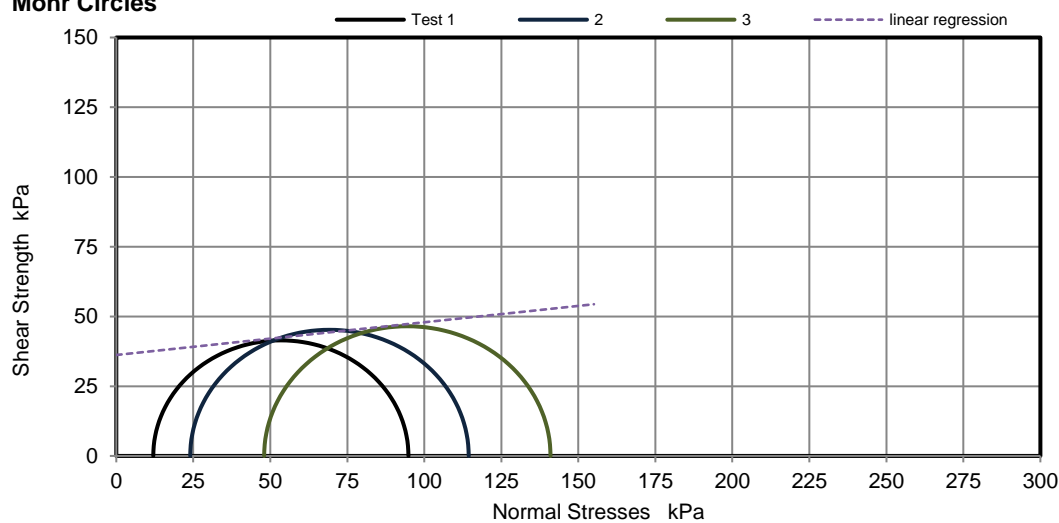
Rate of Strain
Stage Number
Cell Pressure
Axial Strain at failure
Deviator Stress, ($\sigma_1 - \sigma_3$) f
Shear strength, cu
Mode of failure
Membrane Correction

1.99			%/min
1	2	3	
12	24	48	kPa
5.8	9.1	11.0	%
83	90	93	kPa
41	45	46	kPa
Brittle			
0.43	0.58	0.67	kPa

Deviator Stress v Axial Strain



Mohr Circles



Position within sample



Linear Regression
 ϕ_u 6.7 °
cu 36 kPa

Note: Mohr circles and their interpretation is not covered by BS1377. These are provided for information only.

Remarks: Correction values: 12kPa=26N, 24kPa=33N, 48kPa=43N

Signed:

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Tested in Accordance with: BS 1377-7: 1990: Clause 9

Client: McAuliffe Group
Client Address: McAuliffe House, Northcott Road,
WV14 0TP

Contact: Matthew Handley
Site Address: Belmont Street

Client Reference: MC-VIST3619
Job Number: 21-55602
Date Sampled: 03/02/2021
Date Received: 03/02/2021
Date Tested: 17/02/2021
Sampled By: Client - MH

Testing carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland

Test Results:

Laboratory Reference: 1763575
Hole No.: BH101
Sample Reference: Not Given
Sample Description: Brown mottled light grey CLAY

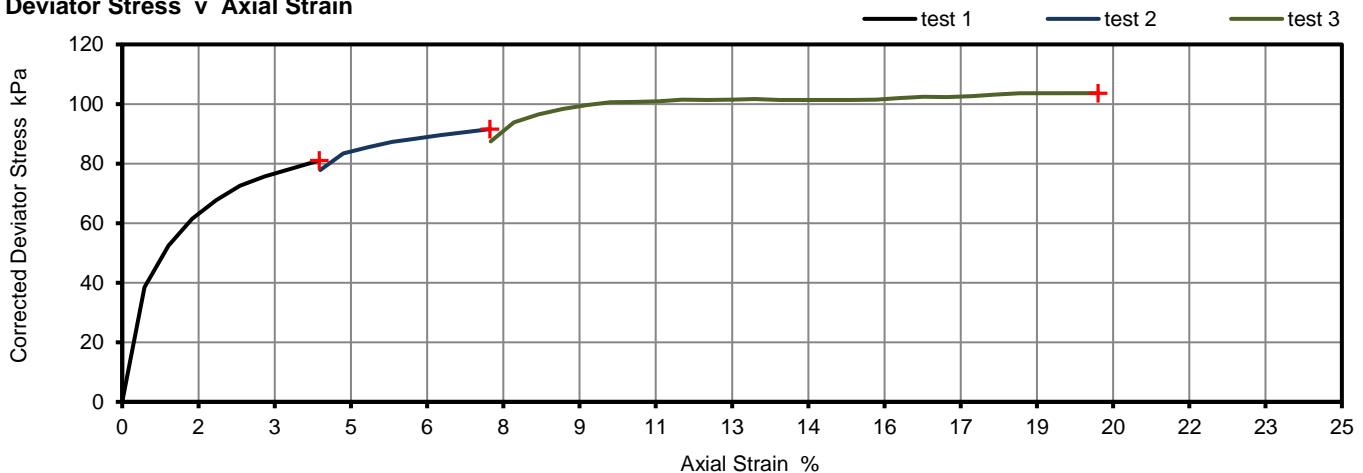
Depth Top [m]: 3.00
Depth Base [m]: 3.45
Sample Type: U

Length	200.04	mm
Diameter	101.67	mm
Bulk Density	1.89	Mg/m ³
Moisture Content	36	%
Dry Density	1.39	Mg/m ³
Membrane thickness	0.27	mm

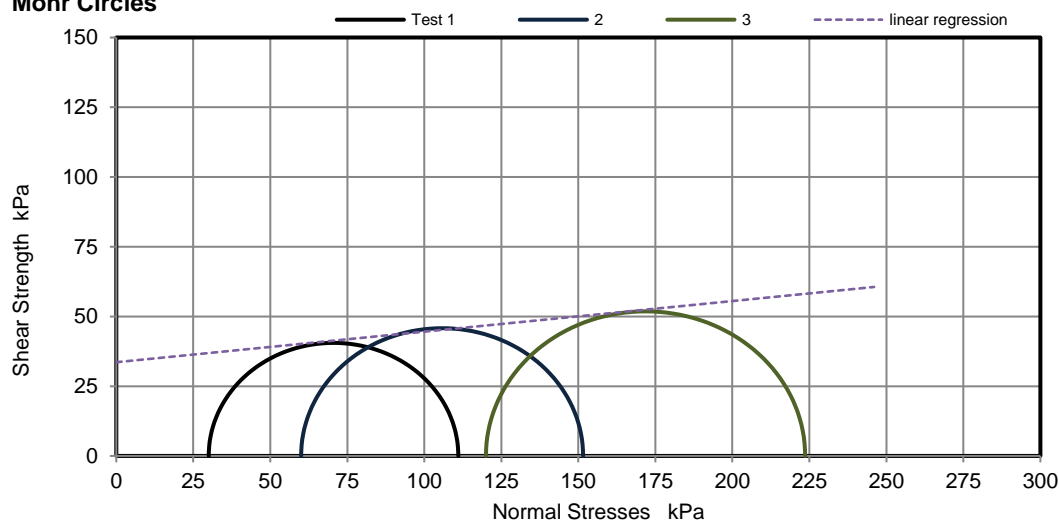
Rate of Strain
Stage Number
Cell Pressure
Axial Strain at failure
Deviator Stress, ($\sigma_1 - \sigma_3$) f
Shear strength, cu
Mode of failure
Membrane Correction

2.00			%/min
1	2	3	
30	60	120	kPa
4.0	7.5	20.0	%
81	92	104	kPa
41	46	52	kPa
Brittle			
0.29	0.49	1.02	kPa

Deviator Stress v Axial Strain



Mohr Circles



Position within sample



Linear Regression
 ϕ_u 6.3 °
cu 34 kPa

Note: Mohr circles and their interpretation is not covered by BS1377. These are provided for information only.

Remarks: Correction values: 30kPa=41N, 60kPa=51N, 120kPa=74N

Signed:

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Tested in Accordance with: BS 1377-2: 1990: Clause 4.3 and 5

Client: McAuliffe Group
Client Address: McAuliffe House, Northcott Road,
WV14 0TP

Contact: Matthew Handley
Site Address: Belmont Street

Client Reference: 21-56790
Job Number: 21-56790
Date Sampled: 03/02/2021
Date Received: 05/02/2021
Date Tested: 22/02/2021
Sampled By: Client - MH

Testing carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland

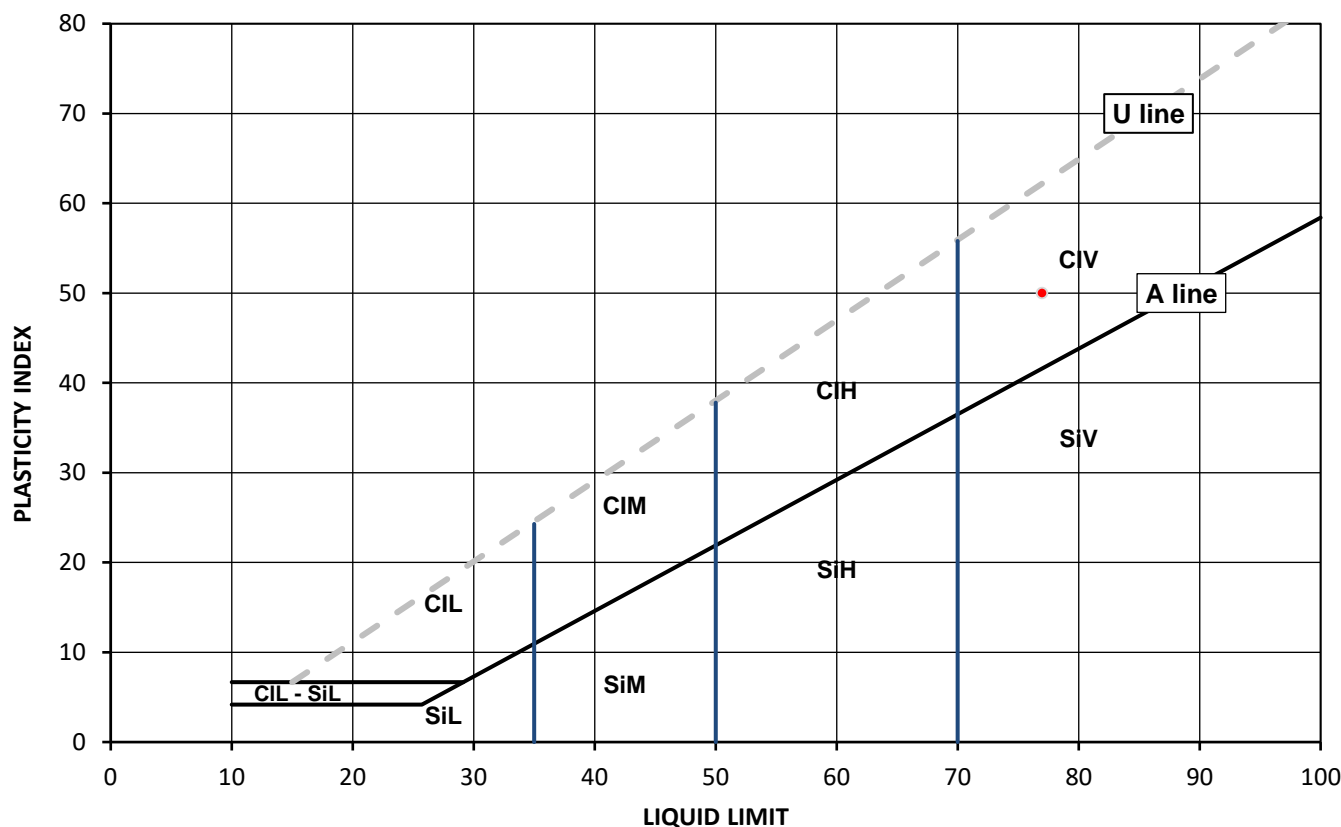
Test Results:

Laboratory Reference: 1769970
Hole No.: BH101
Sample Reference: Not Given
Soil Description: Brown slightly sandy CLAY

Depth Top [m]: 7.50
Depth Base [m]: Not Given
Sample Type: B

Sample Preparation: Tested in natural condition

As Received Moisture Content [W] %	Liquid Limit [WL] %	Plastic Limit [Wp] %	Plasticity Index [Ip] %	% Passing 425µm BS Test Sieve
32	77	27	50	100



Legend, based on BS EN ISO 14688 2:2018 Geotechnical investigation and testing – Identification and classification of soil

	Plasticity	Liquid Limit
Cl	Clay	below 35
Si	Silt	35 to 50
		50 to 70
		exceeding 70
		append to classification for organic material (eg CIHO)

Note: Moisture Content by BS 1377-2: 1990: Clause 3.2

Remarks:

Signed:

Szczepan Bielatowicz
PL Deputy of Head of Geotechnical Section
for and on behalf of i2 Analytical Ltd

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TEST CERTIFICATE

Liquid and Plastic Limits

i2 Analytical Ltd
Unit 6 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB



Tested in Accordance with: BS 1377-2: 1990: Clause 4.3 and 5

Client: McAuliffe Group
Client Address: McAuliffe House, Northcott Road,
WV14 0TP

Contact: Matthew Handley
Site Address: Belmont Street

Client Reference: 21-56790
Job Number: 21-56790
Date Sampled: 03/02/2021
Date Received: 05/02/2021
Date Tested: 22/02/2021
Sampled By: Client - MH

Testing carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland

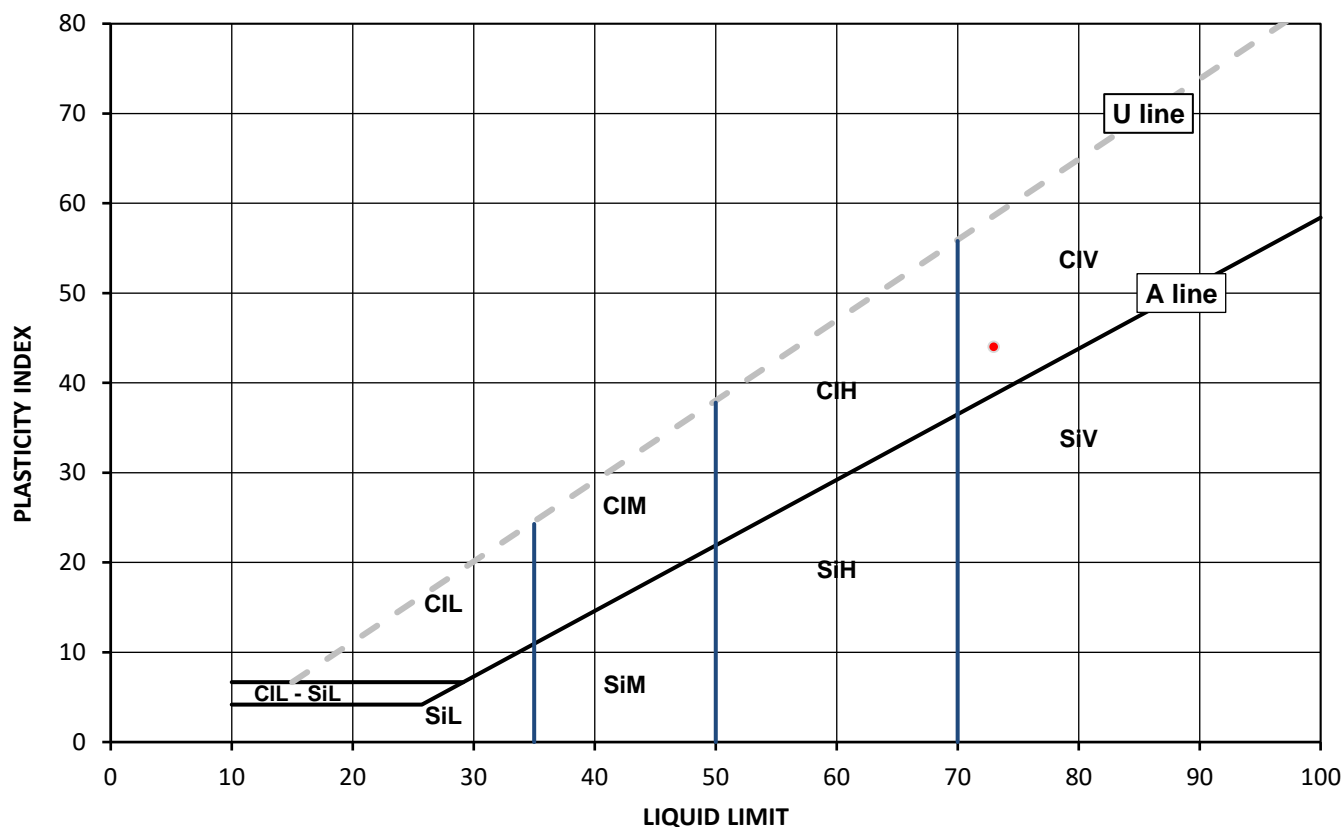
Test Results:

Laboratory Reference: 1769972
Hole No.: BH101
Sample Reference: Not Given
Soil Description: Brown slightly sandy CLAY

Depth Top [m]: 9.00
Depth Base [m]: Not Given
Sample Type: B

Sample Preparation: Tested in natural condition

As Received Moisture Content [W] %	Liquid Limit [WL] %	Plastic Limit [Wp] %	Plasticity Index [Ip] %	% Passing 425µm BS Test Sieve
33	73	29	44	100



Legend, based on BS EN ISO 14688 2:2018 Geotechnical investigation and testing – Identification and classification of soil

		Plasticity	Liquid Limit
Cl	Clay	L Low	below 35
Si	Silt	M Medium	35 to 50
		H High	50 to 70
		V Very high	exceeding 70
		O Organic	append to classification for organic material (eg CIHO)

Note: Moisture Content by BS 1377-2: 1990: Clause 3.2

Remarks:

Signed:

Szczepan Bielatowicz
PL Deputy of Head of Geotechnical Section
for and on behalf of i2 Analytical Ltd

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TEST CERTIFICATE

Liquid and Plastic Limits

i2 Analytical Ltd
Unit 6 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB



Tested in Accordance with: BS 1377-2: 1990: Clause 4.3 and 5

Client: McAuliffe Group
Client Address: McAuliffe House, Northcott Road,
WV14 0TP

Contact: Matthew Handley
Site Address: Belmont Street

Client Reference: 21-56790
Job Number: 21-56790
Date Sampled: 03/02/2021
Date Received: 05/02/2021
Date Tested: 22/02/2021
Sampled By: Client - MH

Testing carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland

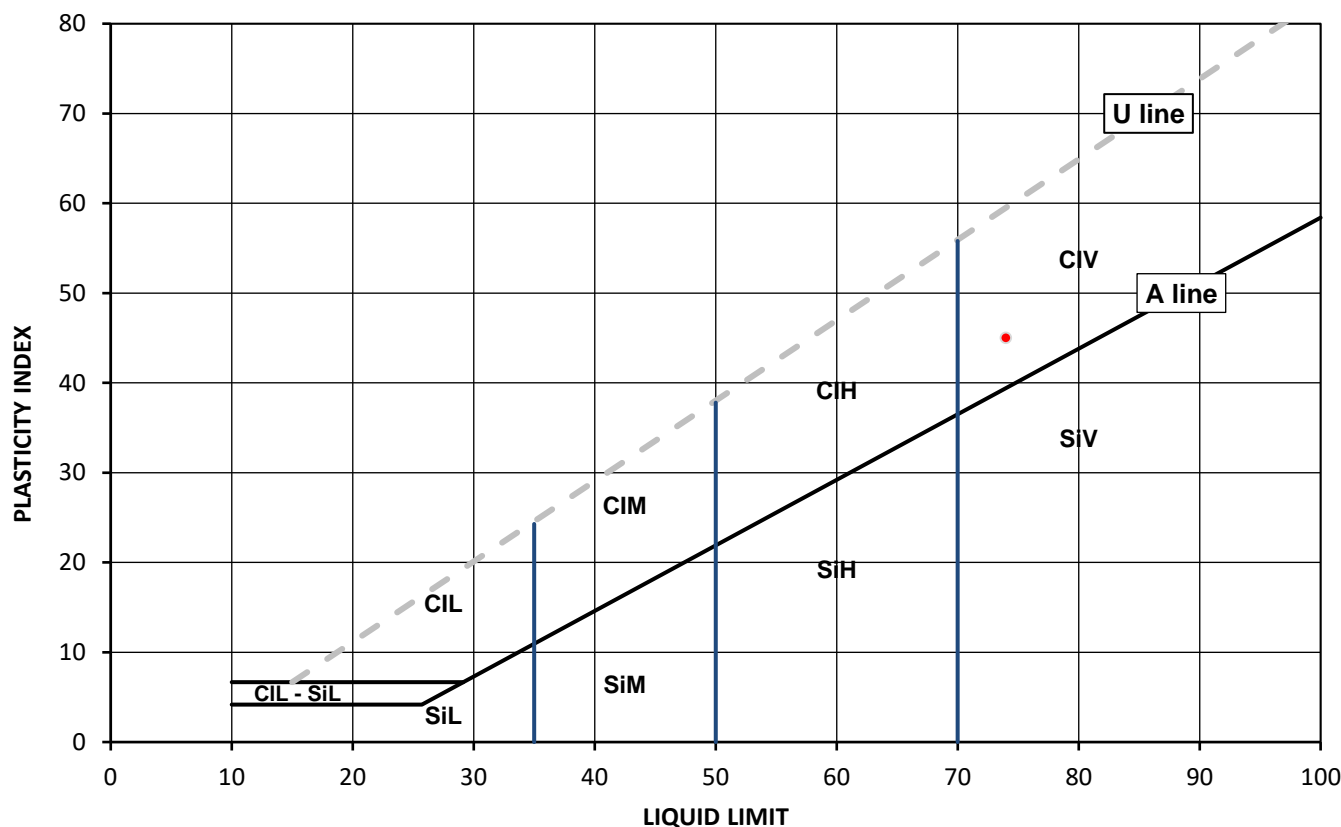
Test Results:

Laboratory Reference: 1769973
Hole No.: BH101
Sample Reference: Not Given
Soil Description: Brown slightly sandy CLAY

Depth Top [m]: 10.50
Depth Base [m]: Not Given
Sample Type: B

Sample Preparation: Tested in natural condition

As Received Moisture Content [W] %	Liquid Limit [WL] %	Plastic Limit [Wp] %	Plasticity Index [Ip] %	% Passing 425µm BS Test Sieve
30	74	29	45	100



Legend, based on BS EN ISO 14688 2:2018 Geotechnical investigation and testing – Identification and classification of soil

	Plasticity	Liquid Limit
Cl	Clay	L Low below 35
Si	Silt	M Medium 35 to 50
		H High 50 to 70
		V Very high exceeding 70
	O Organic	append to classification for organic material (eg CIHO)

Note: Moisture Content by BS 1377-2: 1990: Clause 3.2

Remarks:

Signed:

Szczepan Bielatowicz
PL Deputy of Head of Geotechnical Section
for and on behalf of i2 Analytical Ltd

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TEST CERTIFICATE

Liquid and Plastic Limits

i2 Analytical Ltd
Unit 6 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB



Tested in Accordance with: BS 1377-2: 1990: Clause 4.3 and 5

Client: McAuliffe Group
Client Address: McAuliffe House, Northcott Road,
WV14 0TP

Contact: Matthew Handley
Site Address: Belmont Street

Client Reference: 21-56790
Job Number: 21-56790
Date Sampled: 03/02/2021
Date Received: 05/02/2021
Date Tested: 22/02/2021
Sampled By: Client - MH

Testing carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland

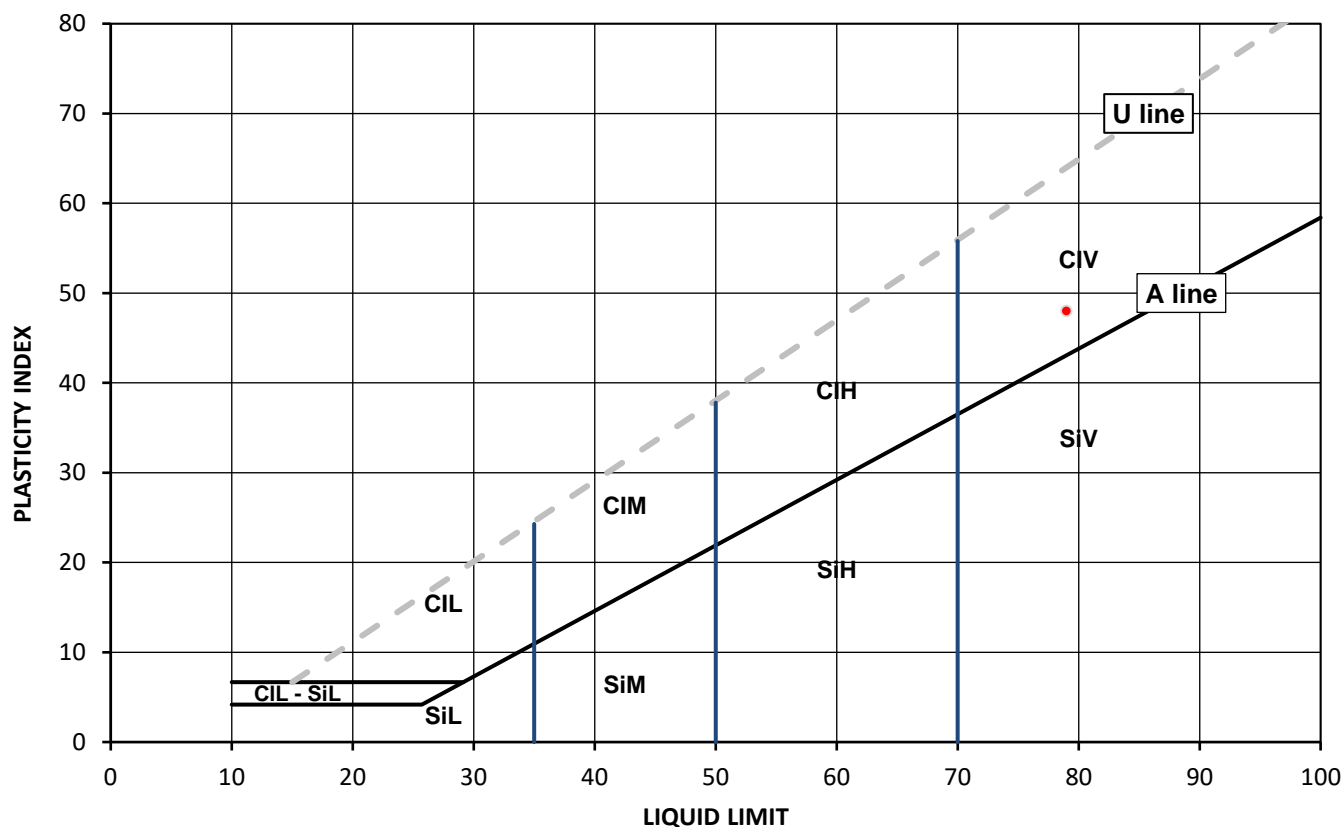
Test Results:

Laboratory Reference: 1769974
Hole No.: BH101
Sample Reference: Not Given
Soil Description: Brown CLAY

Depth Top [m]: 12.00
Depth Base [m]: Not Given
Sample Type: B

Sample Preparation: Tested in natural condition

As Received Moisture Content [W] %	Liquid Limit [WL] %	Plastic Limit [Wp] %	Plasticity Index [Ip] %	% Passing 425µm BS Test Sieve
32	79	31	48	100



Legend, based on BS EN ISO 14688 2:2018 Geotechnical investigation and testing – Identification and classification of soil

	Plasticity	Liquid Limit
Cl	Clay	below 35
Si	Silt	35 to 50
	L Low	50 to 70
	M Medium	exceeding 70
	H High	
	V Very high	
	O Organic	append to classification for organic material (eg CIHO)

Note: Moisture Content by BS 1377-2: 1990: Clause 3.2

Remarks:

Signed:

Szczepan Bielatowicz
PL Deputy of Head of Geotechnical Section
for and on behalf of i2 Analytical Ltd

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Tested in Accordance with: BS 1377-2: 1990: Clause 4.3 and 5

Client: McAuliffe Group
Client Address: McAuliffe House, Northcott Road,
WV14 0TP

Contact: Matthew Handley
Site Address: Belmont Street

Client Reference: 21-56790
Job Number: 21-56790
Date Sampled: 04/02/2021
Date Received: 05/02/2021
Date Tested: 22/02/2021
Sampled By: Client - MH

Testing carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland

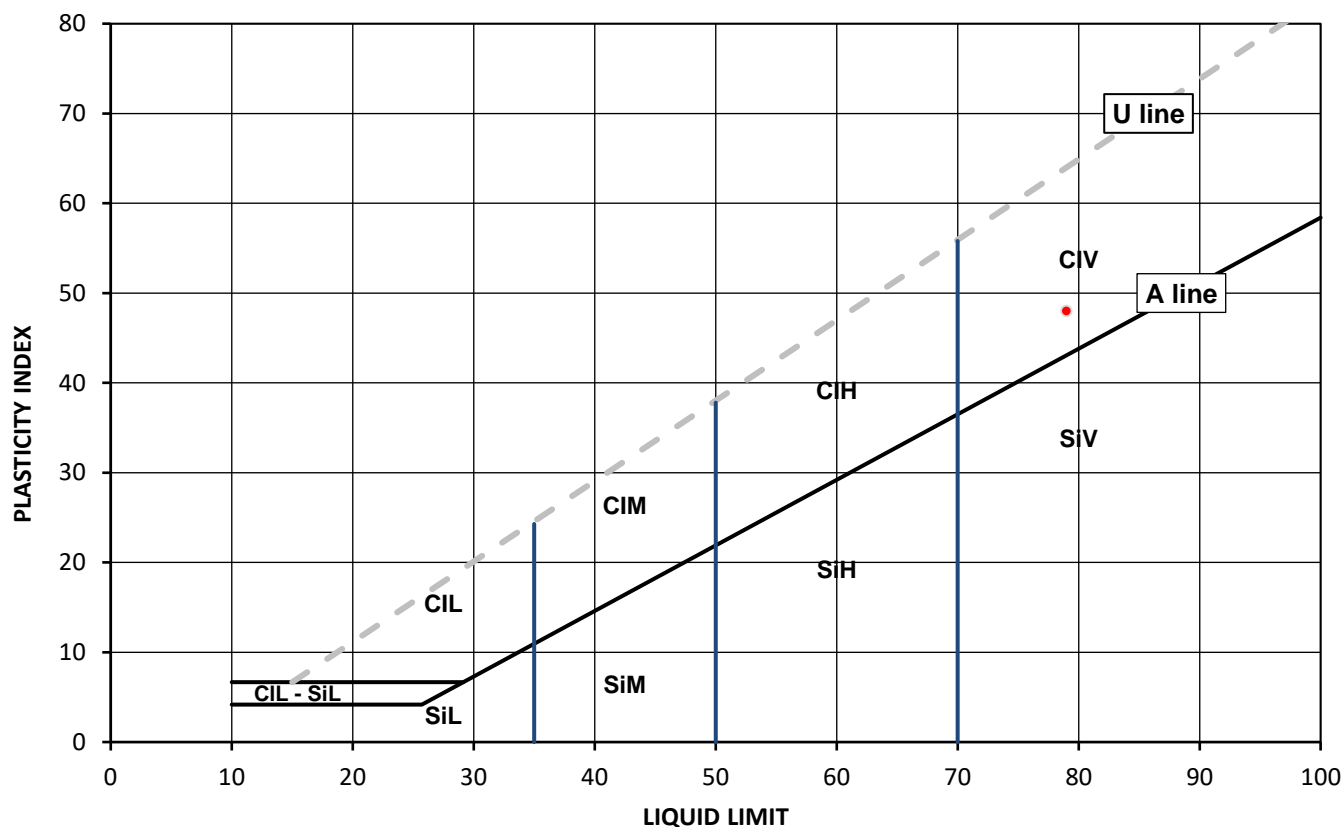
Test Results:

Laboratory Reference: 1769976
Hole No.: BH101
Sample Reference: Not Given
Soil Description: Brown CLAY

Depth Top [m]: 13.50
Depth Base [m]: Not Given
Sample Type: B

Sample Preparation: Tested in natural condition

As Received Moisture Content [W] %	Liquid Limit [WL] %	Plastic Limit [Wp] %	Plasticity Index [Ip] %	% Passing 425µm BS Test Sieve
32	79	31	48	100



Legend, based on BS EN ISO 14688 2:2018 Geotechnical investigation and testing – Identification and classification of soil

	Plasticity	Liquid Limit
Cl	Clay	below 35
Si	Silt	35 to 50
	L Low	50 to 70
	M Medium	exceeding 70
	H High	append to classification for organic material (eg CIHO)
	V Very high	
	O Organic	

Note: Moisture Content by BS 1377-2: 1990: Clause 3.2

Remarks:

Signed:

Szczepan Bielatowicz
PL Deputy of Head of Geotechnical Section
for and on behalf of i2 Analytical Ltd

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Tested in Accordance with: BS 1377-2: 1990: Clause 4.3 and 5

Client: McAuliffe Group
Client Address: McAuliffe House, Northcott Road,
WV14 0TP

Contact: Matthew Handley
Site Address: Belmont Street

Client Reference: 21-56790
Job Number: 21-56790
Date Sampled: 04/02/2021
Date Received: 05/02/2021
Date Tested: 22/02/2021
Sampled By: Client - MH

Testing carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland

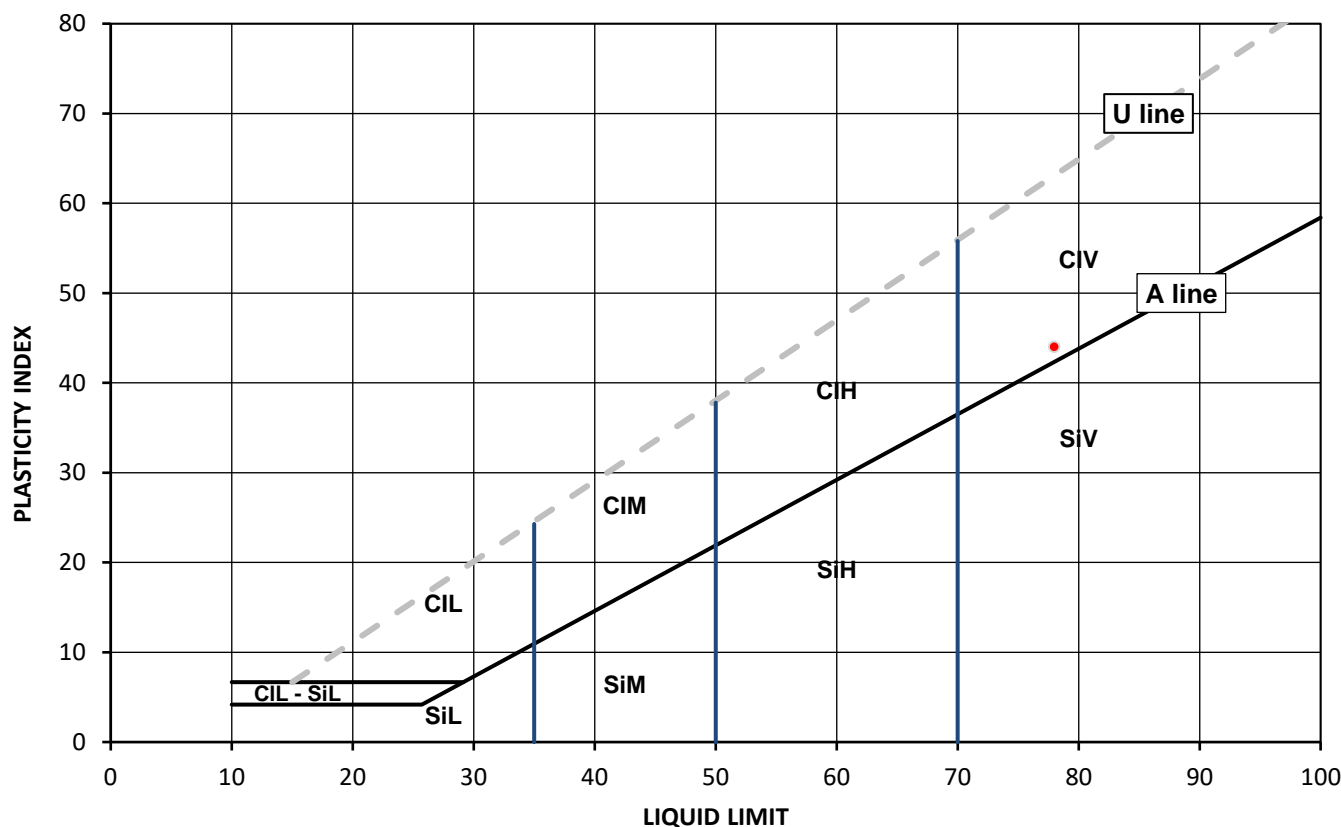
Test Results:

Laboratory Reference: 1769978
Hole No.: BH101
Sample Reference: Not Given
Soil Description: Brown CLAY

Depth Top [m]: 15.00
Depth Base [m]: Not Given
Sample Type: B

Sample Preparation: Tested in natural condition

As Received Moisture Content [W] %	Liquid Limit [WL] %	Plastic Limit [Wp] %	Plasticity Index [Ip] %	% Passing 425µm BS Test Sieve
31	78	34	44	100



Legend, based on BS EN ISO 14688 2:2018 Geotechnical investigation and testing – Identification and classification of soil

	Plasticity	Liquid Limit
Cl Clay	L Low	below 35
Si Silt	M Medium	35 to 50
	H High	50 to 70
	V Very high	exceeding 70
	O Organic	append to classification for organic material (eg CIHO)

Note: Moisture Content by BS 1377-2: 1990: Clause 3.2

Remarks:

Signed:

Szczepan Bielatowicz
PL Deputy of Head of Geotechnical Section
for and on behalf of i2 Analytical Ltd

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Tested in Accordance with: BS 1377-2: 1990: Clause 4.3 and 5

Client: McAuliffe Group
Client Address: McAuliffe House, Northcott Road,
WV14 0TP

Contact: Matthew Handley
Site Address: Belmont Street

Client Reference: 21-56790
Job Number: 21-56790
Date Sampled: 04/02/2021
Date Received: 05/02/2021
Date Tested: 22/02/2021
Sampled By: Client - MH

Testing carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland

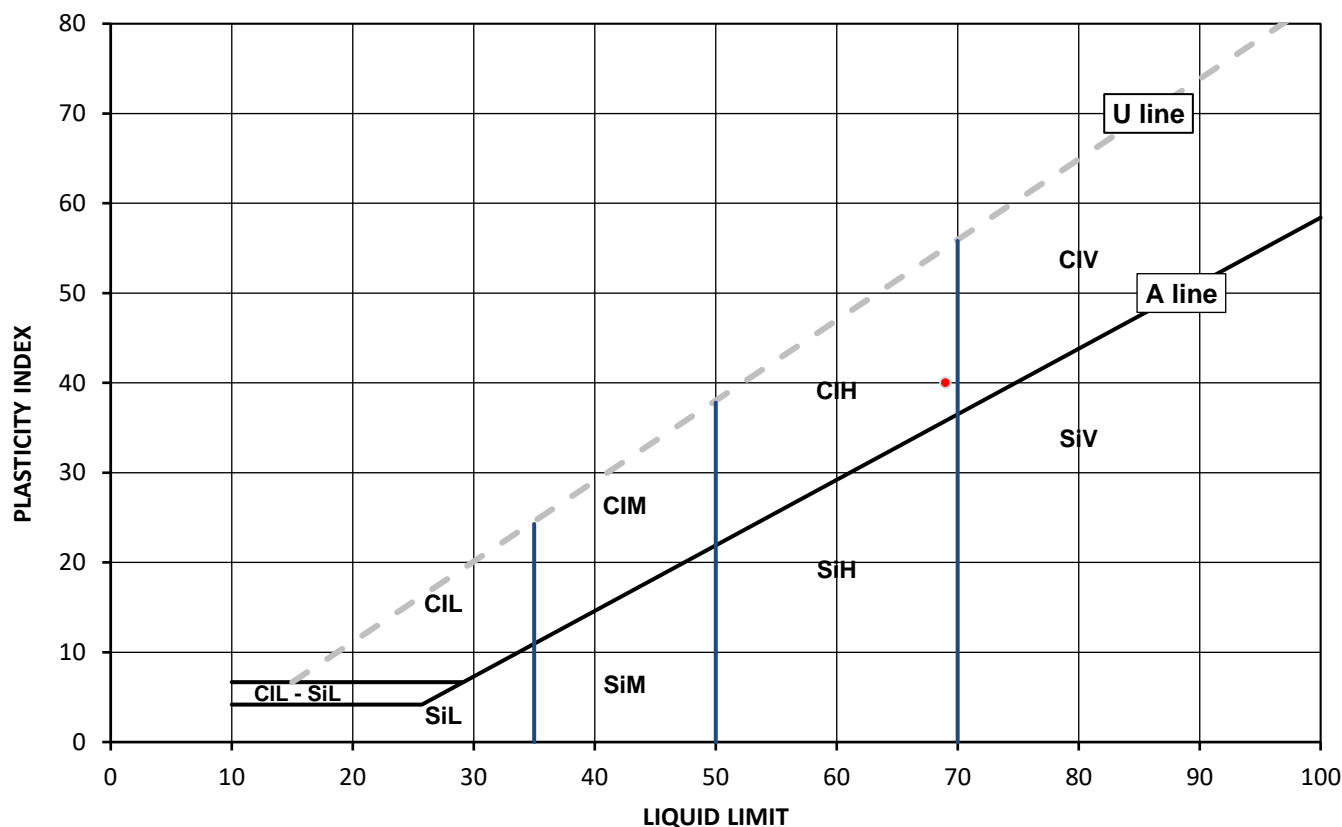
Test Results:

Laboratory Reference: 1769979
Hole No.: BH101
Sample Reference: Not Given
Soil Description: Brown CLAY

Depth Top [m]: 16.50
Depth Base [m]: Not Given
Sample Type: B

Sample Preparation: Tested in natural condition

As Received Moisture Content [W] %	Liquid Limit [WL] %	Plastic Limit [Wp] %	Plasticity Index [Ip] %	% Passing 425µm BS Test Sieve
29	69	29	40	100



Legend, based on BS EN ISO 14688 2:2018 Geotechnical investigation and testing – Identification and classification of soil

	Clay	Silt	Plasticity	Liquid Limit
Cl	Clay		L Low	below 35
Si		Silt	M Medium	35 to 50
			H High	50 to 70
			V Very high	exceeding 70
			O Organic	append to classification for organic material (eg CIHO)

Note: Moisture Content by BS 1377-2: 1990: Clause 3.2

Remarks:

Signed:

Szczepan Bielatowicz
PL Deputy of Head of Geotechnical Section
for and on behalf of i2 Analytical Ltd

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TEST CERTIFICATE

Liquid and Plastic Limits

i2 Analytical Ltd
Unit 6 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB



Tested in Accordance with: BS 1377-2: 1990: Clause 4.3 and 5

Client: McAuliffe Group
Client Address: McAuliffe House, Northcott Road,
WV14 0TP

Contact: Matthew Handley
Site Address: Belmont Street

Client Reference: 21-56790
Job Number: 21-56790
Date Sampled: 04/02/2021
Date Received: 05/02/2021
Date Tested: 22/02/2021
Sampled By: Client - MH

Testing carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland

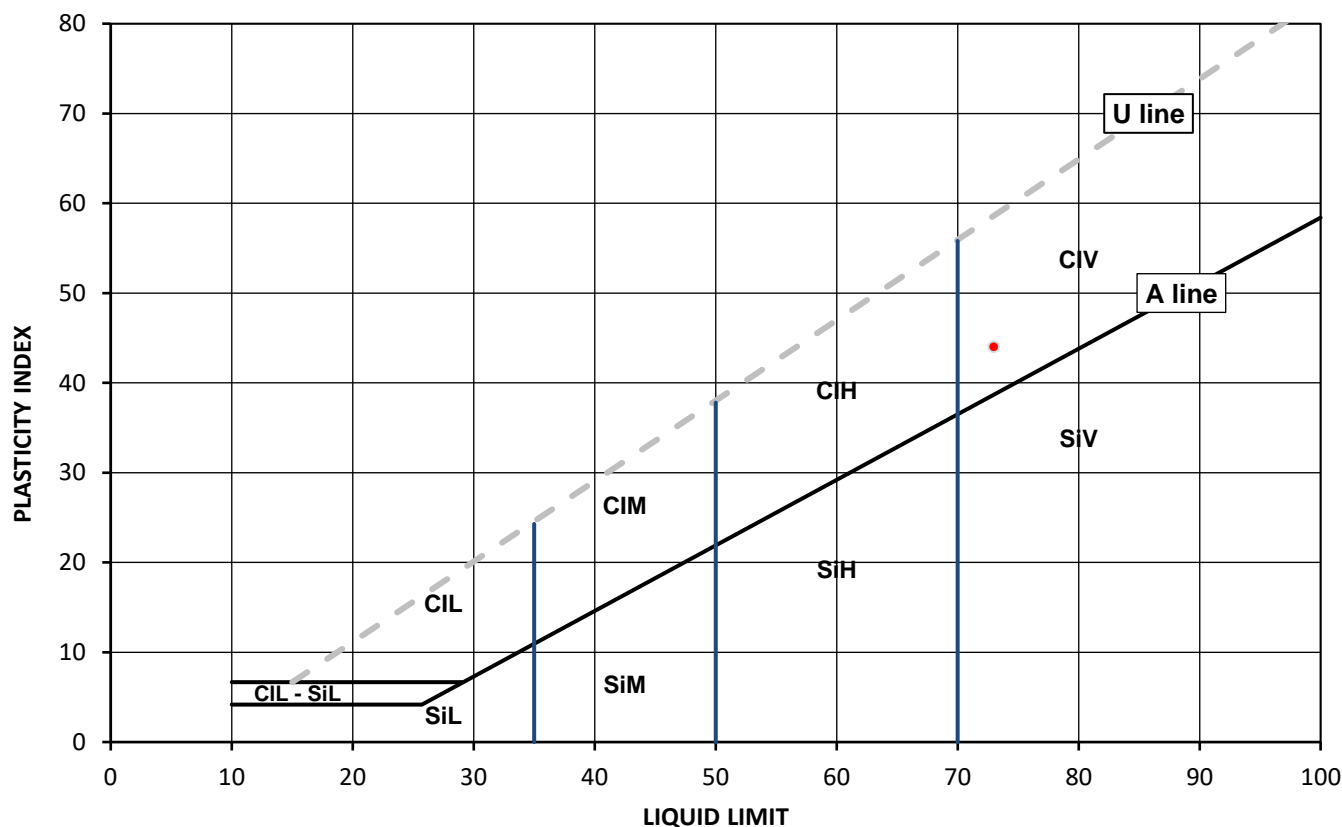
Test Results:

Laboratory Reference: 1769981
Hole No.: BH101
Sample Reference: Not Given
Soil Description: Brown CLAY

Depth Top [m]: 18.00
Depth Base [m]: Not Given
Sample Type: B

Sample Preparation: Tested in natural condition

As Received Moisture Content [W] %	Liquid Limit [WL] %	Plastic Limit [Wp] %	Plasticity Index [Ip] %	% Passing 425µm BS Test Sieve
33	73	29	44	100



Legend, based on BS EN ISO 14688 2:2018 Geotechnical investigation and testing – Identification and classification of soil

	Plasticity	Liquid Limit
Cl	Clay	below 35
Si	Silt	35 to 50
	L Low	50 to 70
	M Medium	exceeding 70
	H High	
	V Very high	
	O Organic	append to classification for organic material (eg CIHO)

Note: Moisture Content by BS 1377-2: 1990: Clause 3.2

Remarks:

Signed:

Szczepan Bielatowicz
PL Deputy of Head of Geotechnical Section
for and on behalf of i2 Analytical Ltd

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TEST CERTIFICATE

Liquid and Plastic Limits

i2 Analytical Ltd
Unit 6 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB



Tested in Accordance with: BS 1377-2: 1990: Clause 4.3 and 5

Client: McAuliffe Group
Client Address: McAuliffe House, Northcott Road,
WV14 0TP

Contact: Matthew Handley
Site Address: Belmont Street

Client Reference: 21-56790
Job Number: 21-56790
Date Sampled: 04/02/2021
Date Received: 05/02/2021
Date Tested: 22/02/2021
Sampled By: Client - MH

Testing carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland

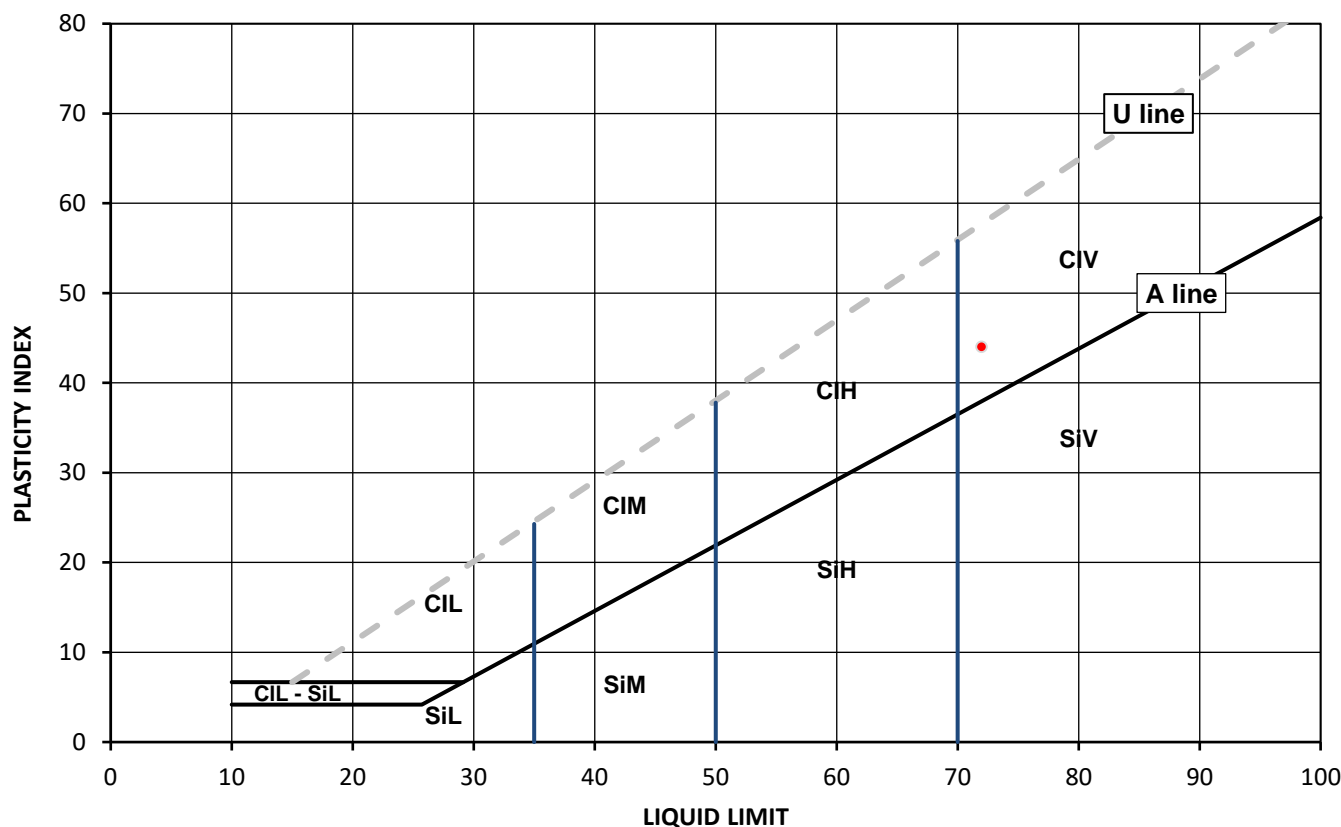
Test Results:

Laboratory Reference: 1769982
Hole No.: BH101
Sample Reference: Not Given
Soil Description: Brown slightly sandy CLAY

Depth Top [m]: 19.50
Depth Base [m]: Not Given
Sample Type: B

Sample Preparation: Tested in natural condition

As Received Moisture Content [W] %	Liquid Limit [WL] %	Plastic Limit [Wp] %	Plasticity Index [Ip] %	% Passing 425µm BS Test Sieve
27	72	28	44	100



Legend, based on BS EN ISO 14688 2:2018 Geotechnical investigation and testing – Identification and classification of soil

		Plasticity	Liquid Limit
Cl	Clay	L Low	below 35
Si	Silt	M Medium	35 to 50
		H High	50 to 70
		V Very high	exceeding 70
		O Organic	append to classification for organic material (eg CIHO)

Note: Moisture Content by BS 1377-2: 1990: Clause 3.2

Remarks:

Signed:

Szczepan Bielatowicz
PL Deputy of Head of Geotechnical Section
for and on behalf of i2 Analytical Ltd

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Tested in Accordance with: BS 1377-2: 1990: Clause 4.3 and 5

Client: McAuliffe Group
Client Address: McAuliffe House, Northcott Road,
WV14 0TP

Contact: Matthew Handley
Site Address: Belmont Street

Client Reference: 21-56790
Job Number: 21-56790
Date Sampled: 04/02/2021
Date Received: 05/02/2021
Date Tested: 22/02/2021
Sampled By: Client - MH

Testing carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland

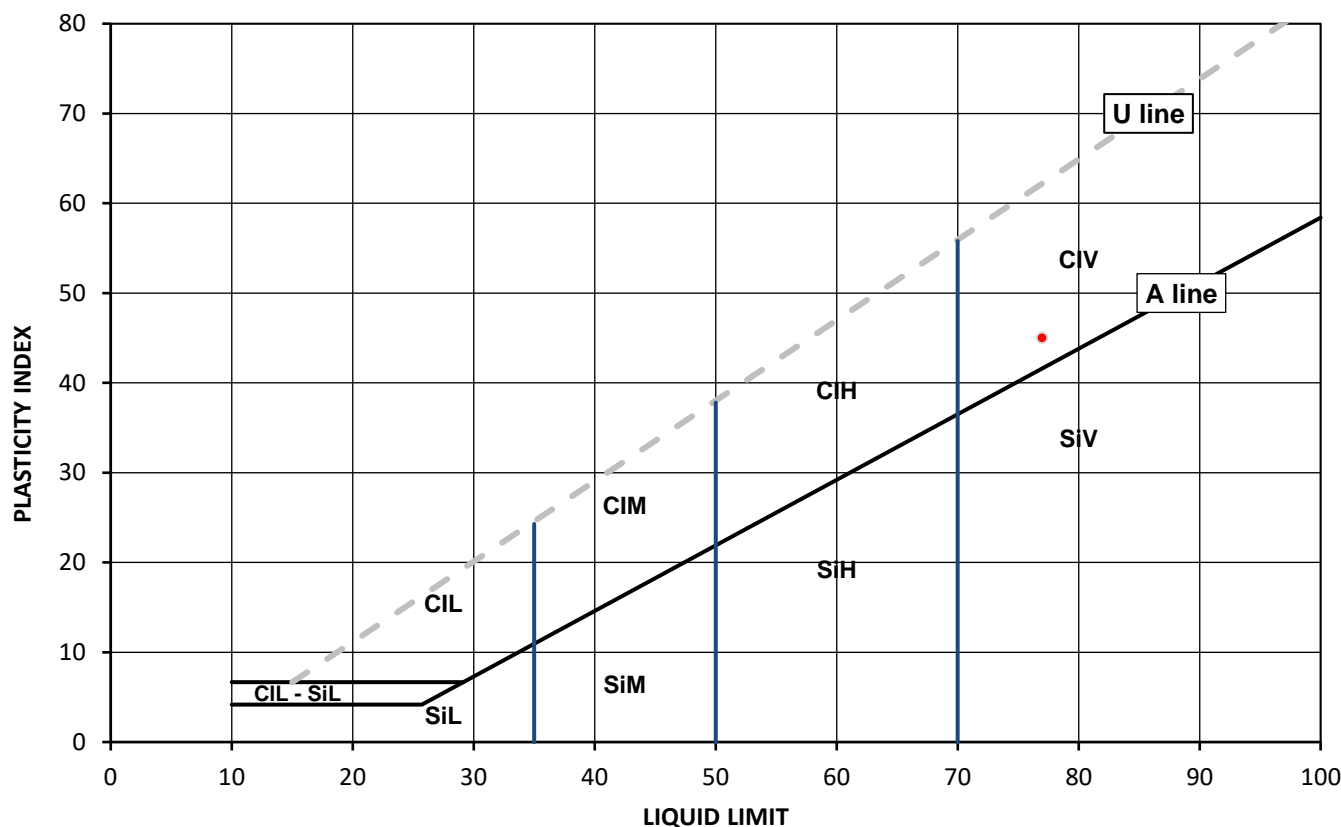
Test Results:

Laboratory Reference: 1769983
Hole No.: BH101
Sample Reference: Not Given
Soil Description: Brown slightly sandy CLAY

Depth Top [m]: 21.00
Depth Base [m]: Not Given
Sample Type: B

Sample Preparation: Tested in natural condition

As Received Moisture Content [W] %	Liquid Limit [WL] %	Plastic Limit [Wp] %	Plasticity Index [Ip] %	% Passing 425µm BS Test Sieve
27	77	32	45	100



Legend, based on BS EN ISO 14688 2:2018 Geotechnical investigation and testing – Identification and classification of soil

	Clay	Silt	Plasticity	Liquid Limit
Cl	Clay		L Low	below 35
Si		Silt	M Medium	35 to 50
			H High	50 to 70
			V Very high	exceeding 70
			O Organic	append to classification for organic material (eg CIHO)

Note: Moisture Content by BS 1377-2: 1990: Clause 3.2

Remarks:

Signed:

Szczepan Bielatowicz
PL Deputy of Head of Geotechnical Section
for and on behalf of i2 Analytical Ltd

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SUMMARY REPORT

Summary of Classification Test Results

i2 Analytical Ltd
Unit 8 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB



Tested in Accordance with:

Moisture Content by BS 1377-2: 1990: Clause 3.2; Water Content by BS EN 17892-1: 2014; Atterberg by BS 1377-2: 1990: Clause 4.3 (4 Point Test), Clause 4.4 (1 Point Test) and 5; PD by BS 1377-2: 1990: Clause 8.2

Client Reference: 21-56790
Job Number: 21-56790
Date Sampled: 03/02 - 04/02/2021
Date Received: 05/02/2021
Date Tested: 22/02/2021
Sampled By: Client - MH

Client: McAuliffe Group
Client Address: McAuliffe House, Northcott Road,
WV14 0TP

Contact: Matthew Handley
Site Address: Belmont Street

Testing carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland

Test results

Laboratory Reference	Hole No.	Sample				Description	Remarks	Moisture Content [W]	Water Content [W]	Atterberg				Density			Total Porosity#		
		Reference	Depth Top	Depth Base	Type					% Passing 425um	WL	Wp	Ip	bulk	dry	PD			
			m	m															
1769970	BH101	Not Given	7.50	Not Given	B	Brown slightly sandy CLAY	Atterberg 4 Point	32		100	77	27	50						
1769972	BH101	Not Given	9.00	Not Given	B	Brown slightly sandy CLAY	Atterberg 4 Point	33		100	73	29	44						
1769973	BH101	Not Given	10.50	Not Given	B	Brown slightly sandy CLAY	Atterberg 4 Point	30		100	74	29	45						
1769974	BH101	Not Given	12.00	Not Given	B	Brown CLAY	Atterberg 4 Point	32		100	79	31	48						
1769976	BH101	Not Given	13.50	Not Given	B	Brown CLAY	Atterberg 4 Point	32		100	79	31	48						
1769978	BH101	Not Given	15.00	Not Given	B	Brown CLAY	Atterberg 4 Point	31		100	78	34	44						
1769979	BH101	Not Given	16.50	Not Given	B	Brown CLAY	Atterberg 4 Point	29		100	69	29	40						
1769981	BH101	Not Given	18.00	Not Given	B	Brown CLAY	Atterberg 4 Point	33		100	73	29	44						
1769982	BH101	Not Given	19.50	Not Given	B	Brown slightly sandy CLAY	Atterberg 4 Point	27		100	72	28	44						
1769983	BH101	Not Given	21.00	Not Given	B	Brown slightly sandy CLAY	Atterberg 4 Point	27		100	77	32	45						

Note: # Non accredited; NP - Non plastic

Comments:

Signed:

Szczepan Bielatowicz
PL Deputy of Head of Geotechnical Section
for and on behalf of i2 Analytical Ltd

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TEST CERTIFICATE

Particle Size Distribution

i2 Analytical Ltd
Unit 6 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB



Tested in Accordance with: BS 1377-2: 1990

Client: McAuliffe Group
Client Address: McAuliffe House, Northcott Road,
WV14 0TP

Contact: Matthew Handley
Site Address: Belmont Street

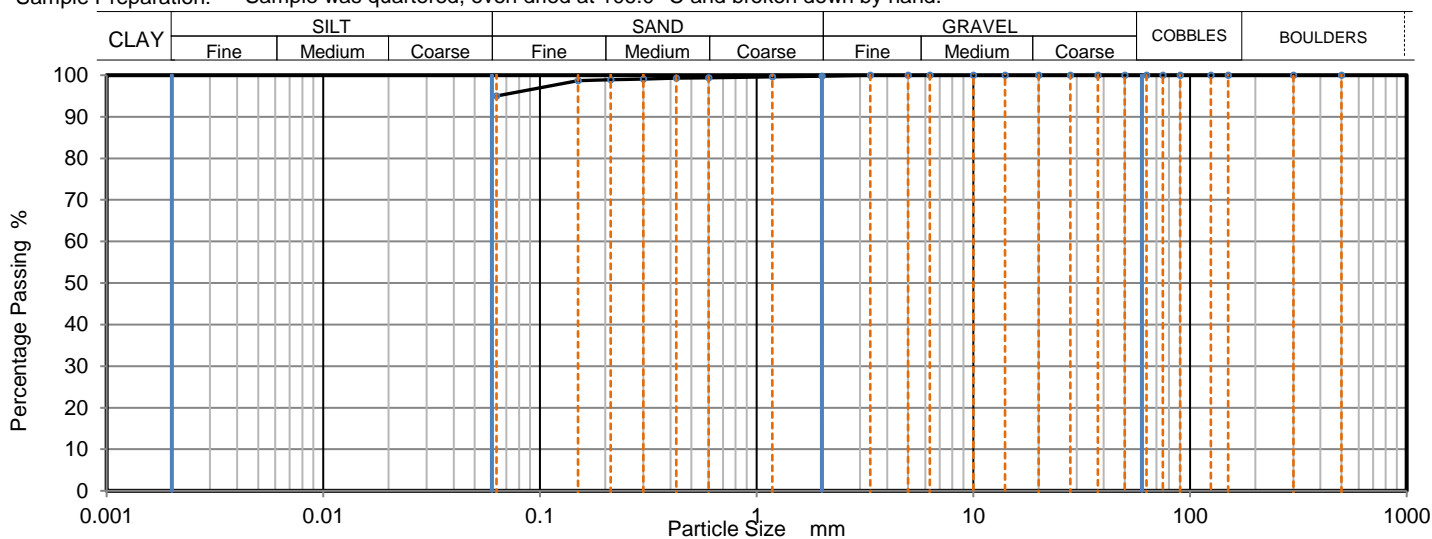
Client Reference: 21-56790
Job Number: 21-56790
Date Sampled: 03/02/2021
Date Received: 05/02/2021
Date Tested: 22/02/2021
Sampled By: Client - MH

Testing carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland

Test Results:

Laboratory Reference: 1769970
Hole No.: BH101
Sample Reference: Not Given
Sample Description: Brown slightly sandy CLAY
Sample Preparation: Sample was quartered, oven dried at 106.0 °C and broken down by hand.

Depth Top [m]: 7.50
Depth Base [m]: Not Given
Sample Type: B



Sieving		Sedimentation	
Particle Size mm	% Passing	Particle Size mm	% Passing
500	100		
300	100		
150	100		
125	100		
90	100		
75	100		
63	100		
50	100		
37.5	100		
28	100		
20	100		
14	100		
10	100		
6.3	100		
5	100		
3.35	100		
2	100		
1.18	100		
0.6	99		
0.425	99		
0.3	99		
0.212	99		
0.15	99		
0.063	95		

Sample Proportions	% dry mass
Very coarse	0
Gravel	0
Sand	4
Fines <0.063mm	95

Grading Analysis	
D100	mm
D60	mm
D30	mm
D10	mm
Uniformity Coefficient	N/A
Curvature Coefficient	

Uniformity Coefficient and Coefficient of Curvature calculated in accordance with BS EN ISO 14688-2: 2004 + A1: 2013

Note: Tested in Accordance with BS1377:Part 2:1990, clause 9.2

Remarks:

Signed:

Szczepan Bielatowicz
PL Deputy of Head of Geotechnical Section
for and on behalf of i2 Analytical Ltd

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TEST CERTIFICATE

Particle Size Distribution

Tested in Accordance with: BS 1377-2: 1990

i2 Analytical Ltd
Unit 6 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB



Client: McAuliffe Group
Client Address: McAuliffe House, Northcott Road,
WV14 0TP

Contact: Matthew Handley
Site Address: Belmont Street

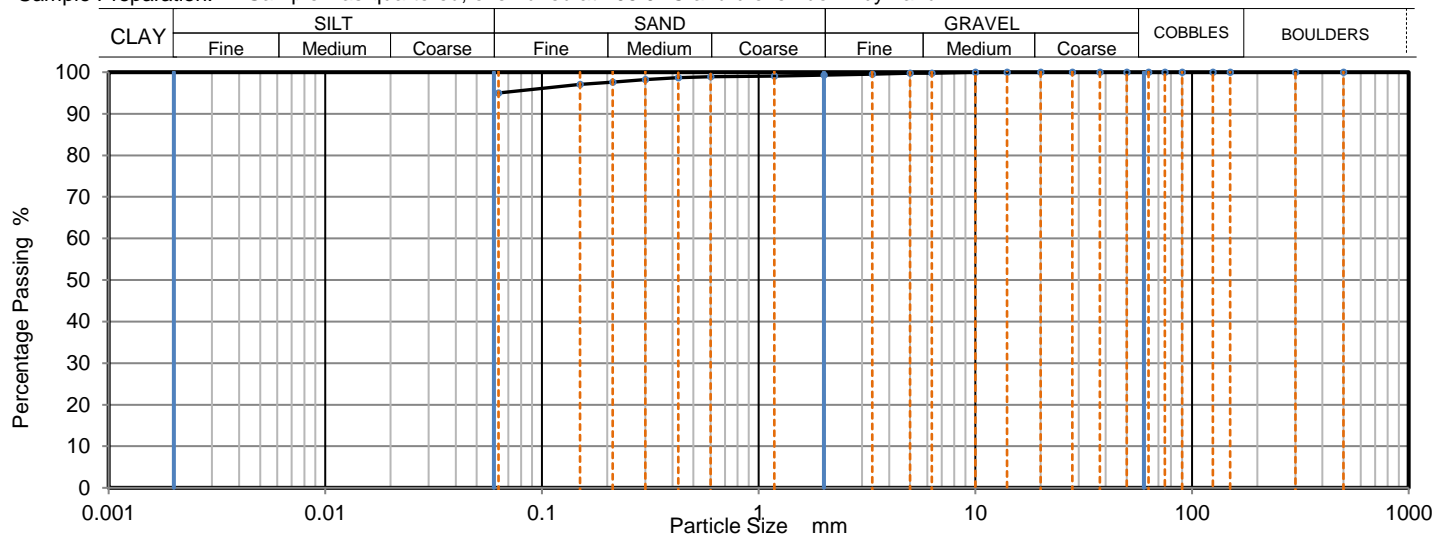
Client Reference: 21-56790
Job Number: 21-56790
Date Sampled: 03/02/2021
Date Received: 05/02/2021
Date Tested: 22/02/2021
Sampled By: Client - MH

Testing carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland

Test Results:

Laboratory Reference: 1769972
Hole No.: BH101
Sample Reference: Not Given
Sample Description: Brown slightly sandy CLAY
Sample Preparation: Sample was quartered, oven dried at 106.0 °C and broken down by hand.

Depth Top [m]: 9.00
Depth Base [m]: Not Given
Sample Type: B



Sieving		Sedimentation	
Particle Size mm	% Passing	Particle Size mm	% Passing
500	100		
300	100		
150	100		
125	100		
90	100		
75	100		
63	100		
50	100		
37.5	100		
28	100		
20	100		
14	100		
10	100		
6.3	100		
5	100		
3.35	100		
2	99		
1.18	99		
0.6	99		
0.425	99		
0.3	98		
0.212	98		
0.15	97		
0.063	95		

Sample Proportions	% dry mass
Very coarse	0
Gravel	1
Sand	4
Fines <0.063mm	95

Grading Analysis	
D100	mm
D60	mm
D30	mm
D10	mm
Uniformity Coefficient	N/A
Curvature Coefficient	

Uniformity Coefficient and Coefficient of Curvature calculated in accordance with BS EN ISO 14688-2: 2004 + A1: 2013

Note: Tested in Accordance with BS1377:Part 2:1990, clause 9.2

Remarks:

Signed:

Szczepan Bielatowicz
PL Deputy of Head of Geotechnical Section
for and on behalf of i2 Analytical Ltd

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TEST CERTIFICATE

Particle Size Distribution

i2 Analytical Ltd
Unit 6 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB



Tested in Accordance with: BS 1377-2: 1990

Client: McAuliffe Group
Client Address: McAuliffe House, Northcott Road,
WV14 0TP

Contact: Matthew Handley
Site Address: Belmont Street

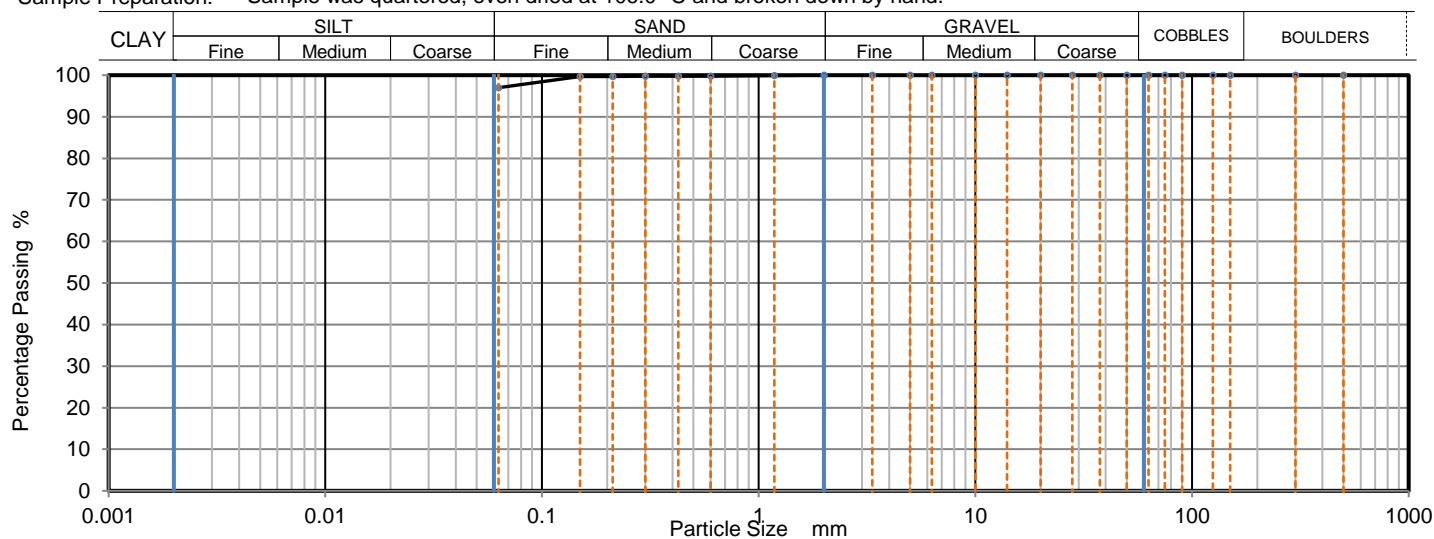
Client Reference: 21-56790
Job Number: 21-56790
Date Sampled: 03/02/2021
Date Received: 05/02/2021
Date Tested: 22/02/2021
Sampled By: Client - MH

Testing carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland

Test Results:

Laboratory Reference: 1769973
Hole No.: BH101
Sample Reference: Not Given
Sample Description: Brown slightly sandy CLAY
Sample Preparation: Sample was quartered, oven dried at 106.0 °C and broken down by hand.

Depth Top [m]: 10.50
Depth Base [m]: Not Given
Sample Type: B



Sieving		Sedimentation	
Particle Size mm	% Passing	Particle Size mm	% Passing
500	100		
300	100		
150	100		
125	100		
90	100		
75	100		
63	100		
50	100		
37.5	100		
28	100		
20	100		
14	100		
10	100		
6.3	100		
5	100		
3.35	100		
2	100		
1.18	100		
0.6	100		
0.425	100		
0.3	100		
0.212	100		
0.15	100		
0.063	98		

Sample Proportions	% dry mass
Very coarse	0
Gravel	0
Sand	2
Fines <0.063mm	98

Grading Analysis	
D100	mm
D60	mm
D30	mm
D10	mm
Uniformity Coefficient	N/A
Curvature Coefficient	

Uniformity Coefficient and Coefficient of Curvature calculated in accordance with BS EN ISO 14688-2: 2004 + A1: 2013

Note: Tested in Accordance with BS1377:Part 2:1990, clause 9.2

Remarks:

Signed:

Szczepan Bielatowicz
PL Deputy of Head of Geotechnical Section
for and on behalf of i2 Analytical Ltd

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TEST CERTIFICATE

Particle Size Distribution

Tested in Accordance with: BS 1377-2: 1990

i2 Analytical Ltd
Unit 6 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB



Client: McAuliffe Group
Client Address: McAuliffe House, Northcott Road,
WV14 0TP

Contact: Matthew Handley
Site Address: Belmont Street

Client Reference: 21-56790
Job Number: 21-56790
Date Sampled: 03/02/2021
Date Received: 05/02/2021
Date Tested: 22/02/2021
Sampled By: Client - MH

Testing carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland

Test Results:

Laboratory Reference: 1769974

Hole No.: BH101

Sample Reference: Not Given

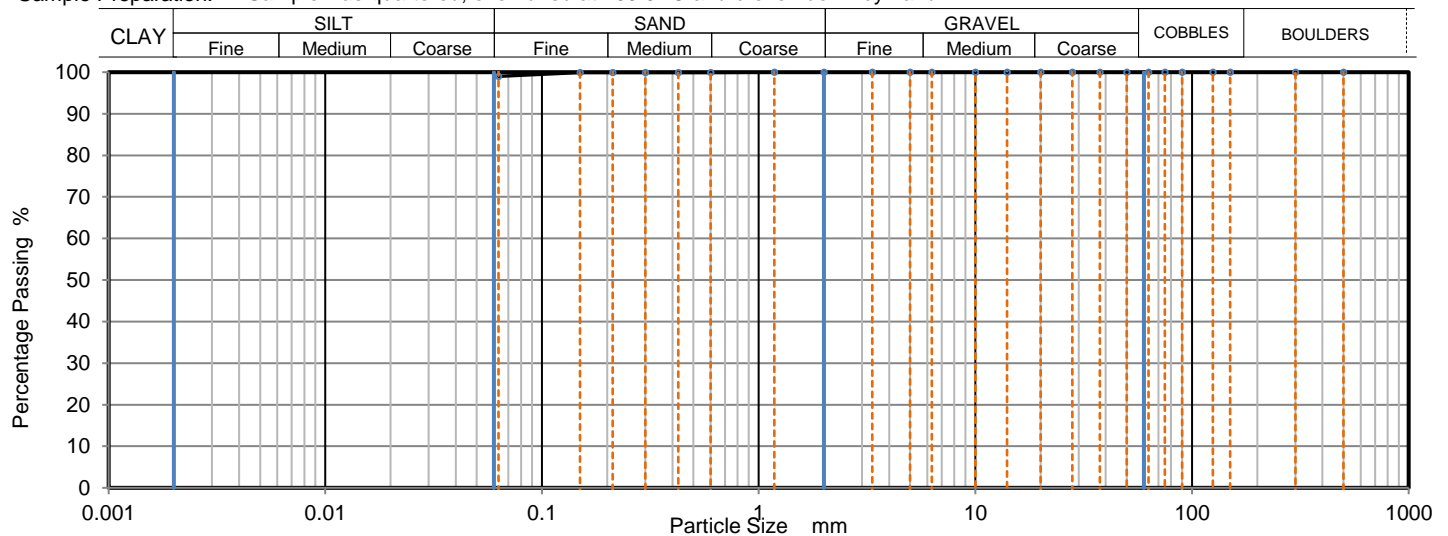
Sample Description: Brown CLAY

Sample Preparation: Sample was quartered, oven dried at 109.0 °C and broken down by hand.

Depth Top [m]: 12.00

Depth Base [m]: Not Given

Sample Type: B



Sieving		Sedimentation	
Particle Size mm	% Passing	Particle Size mm	% Passing
500	100		
300	100		
150	100		
125	100		
90	100		
75	100		
63	100		
50	100		
37.5	100		
28	100		
20	100		
14	100		
10	100		
6.3	100		
5	100		
3.35	100		
2	100		
1.18	100		
0.6	100		
0.425	100		
0.3	100		
0.212	100		
0.15	100		
0.063	100		

Sample Proportions	% dry mass
Very coarse	0
Gravel	0
Sand	0
Fines <0.063mm	100

Grading Analysis	
D100	mm
D60	mm
D30	mm
D10	mm
Uniformity Coefficient	N/A
Curvature Coefficient	

Uniformity Coefficient and Coefficient of Curvature calculated in accordance with BS EN ISO 14688-2: 2004 + A1: 2013

Note: Tested in Accordance with BS1377:Part 2:1990, clause 9.2

Remarks:

Signed:

Szczepan Bielatowicz
PL Deputy of Head of Geotechnical Section
for and on behalf of i2 Analytical Ltd

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TEST CERTIFICATE

Particle Size Distribution

i2 Analytical Ltd
Unit 6 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB



Tested in Accordance with: BS 1377-2: 1990

Client: McAuliffe Group
Client Address: McAuliffe House, Northcott Road,
WV14 0TP

Contact: Matthew Handley
Site Address: Belmont Street

Client Reference: 21-56790
Job Number: 21-56790
Date Sampled: 04/02/2021
Date Received: 05/02/2021
Date Tested: 22/02/2021
Sampled By: Client - MH

Testing carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland

Test Results:

Laboratory Reference: 1769976

Hole No.: BH101

Sample Reference: Not Given

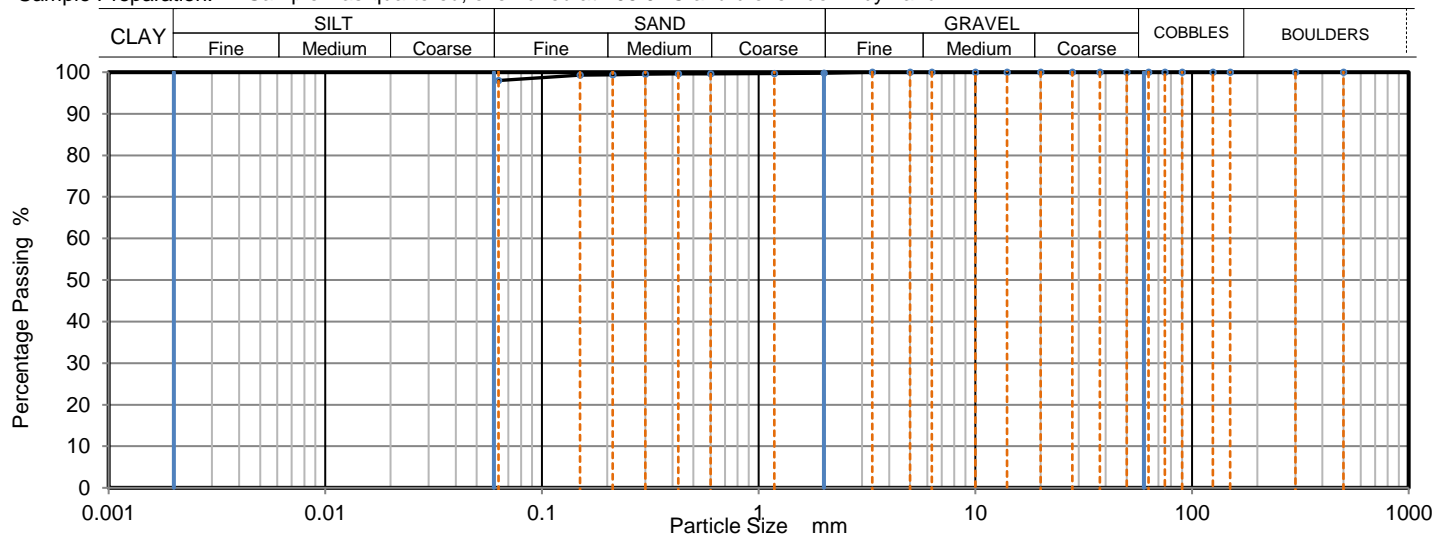
Sample Description: Brown CLAY

Sample Preparation: Sample was quartered, oven dried at 106.0 °C and broken down by hand.

Depth Top [m]: 13.50

Depth Base [m]: Not Given

Sample Type: B



Sieving		Sedimentation	
Particle Size mm	% Passing	Particle Size mm	% Passing
500	100		
300	100		
150	100		
125	100		
90	100		
75	100		
63	100		
50	100		
37.5	100		
28	100		
20	100		
14	100		
10	100		
6.3	100		
5	100		
3.35	100		
2	100		
1.18	100		
0.6	100		
0.425	100		
0.3	100		
0.212	99		
0.15	99		
0.063	98		

Sample Proportions	% dry mass
Very coarse	0
Gravel	0
Sand	2
Fines <0.063mm	98

Grading Analysis	
D100	mm
D60	mm
D30	mm
D10	mm
Uniformity Coefficient	N/A
Curvature Coefficient	

Uniformity Coefficient and Coefficient of Curvature calculated in accordance with BS EN ISO 14688-2: 2004 + A1: 2013

Note: Tested in Accordance with BS1377:Part 2:1990, clause 9.2

Remarks:

Signed:

Szczepan Bielatowicz
PL Deputy of Head of Geotechnical Section
for and on behalf of i2 Analytical Ltd

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TEST CERTIFICATE

Particle Size Distribution

i2 Analytical Ltd
Unit 6 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB



Tested in Accordance with: BS 1377-2: 1990

Client: McAuliffe Group
Client Address: McAuliffe House, Northcott Road,
WV14 0TP

Contact: Matthew Handley
Site Address: Belmont Street

Client Reference: 21-56790
Job Number: 21-56790
Date Sampled: 04/02/2021
Date Received: 05/02/2021
Date Tested: 22/02/2021
Sampled By: Client - MH

Testing carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland

Test Results:

Laboratory Reference: 1769978

Hole No.: BH101

Sample Reference: Not Given

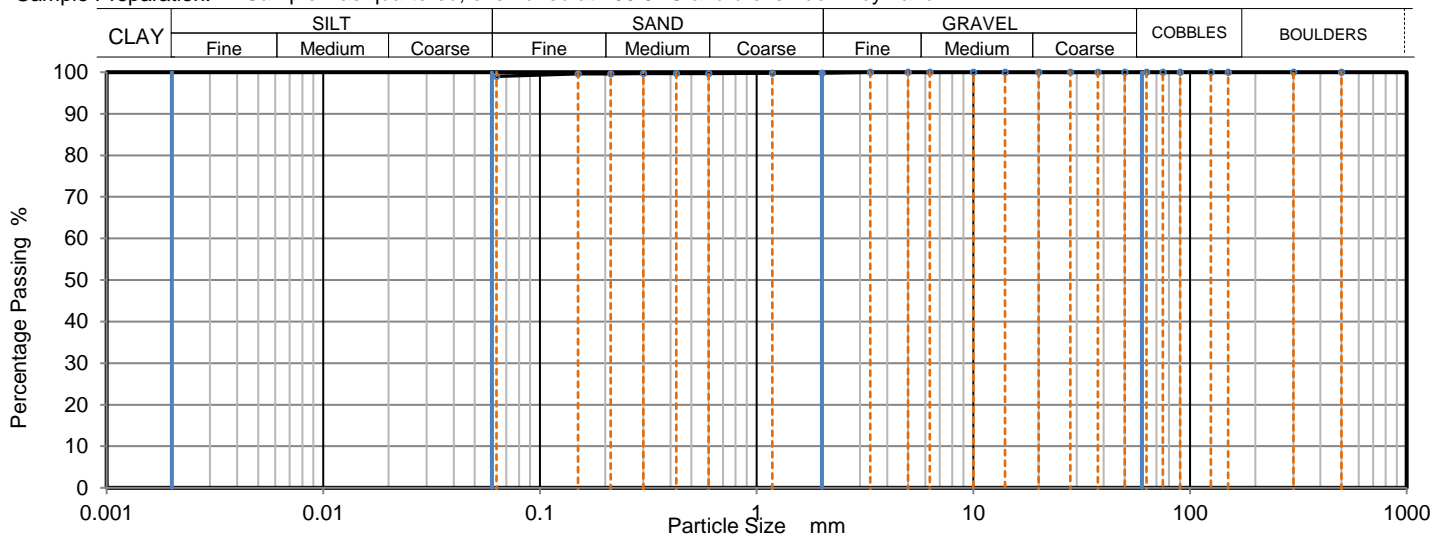
Sample Description: Brown CLAY

Sample Preparation: Sample was quartered, oven dried at 106.0 °C and broken down by hand.

Depth Top [m]: 15.00

Depth Base [m]: Not Given

Sample Type: B



Sieving		Sedimentation	
Particle Size mm	% Passing	Particle Size mm	% Passing
500	100		
300	100		
150	100		
125	100		
90	100		
75	100		
63	100		
50	100		
37.5	100		
28	100		
20	100		
14	100		
10	100		
6.3	100		
5	100		
3.35	100		
2	100		
1.18	100		
0.6	100		
0.425	100		
0.3	100		
0.212	100		
0.15	100		
0.063	99		

Sample Proportions	% dry mass
Very coarse	0
Gravel	0
Sand	1
Fines <0.063mm	99

Grading Analysis	
D100	mm
D60	mm
D30	mm
D10	mm
Uniformity Coefficient	N/A
Curvature Coefficient	

Uniformity Coefficient and Coefficient of Curvature calculated in accordance with BS EN ISO 14688-2: 2004 + A1: 2013

Note: Tested in Accordance with BS1377:Part 2:1990, clause 9.2

Remarks:

Signed:

Szczepan Bielatowicz
PL Deputy of Head of Geotechnical Section
for and on behalf of i2 Analytical Ltd

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TEST CERTIFICATE

Particle Size Distribution

i2 Analytical Ltd
Unit 6 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB



Tested in Accordance with: BS 1377-2: 1990

Client: McAuliffe Group
Client Address: McAuliffe House, Northcott Road,
WV14 0TP

Contact: Matthew Handley
Site Address: Belmont Street

Client Reference: 21-56790
Job Number: 21-56790
Date Sampled: 04/02/2021
Date Received: 05/02/2021
Date Tested: 22/02/2021
Sampled By: Client - MH

Testing carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland

Test Results:

Laboratory Reference: 1769979

Hole No.: BH101

Sample Reference: Not Given

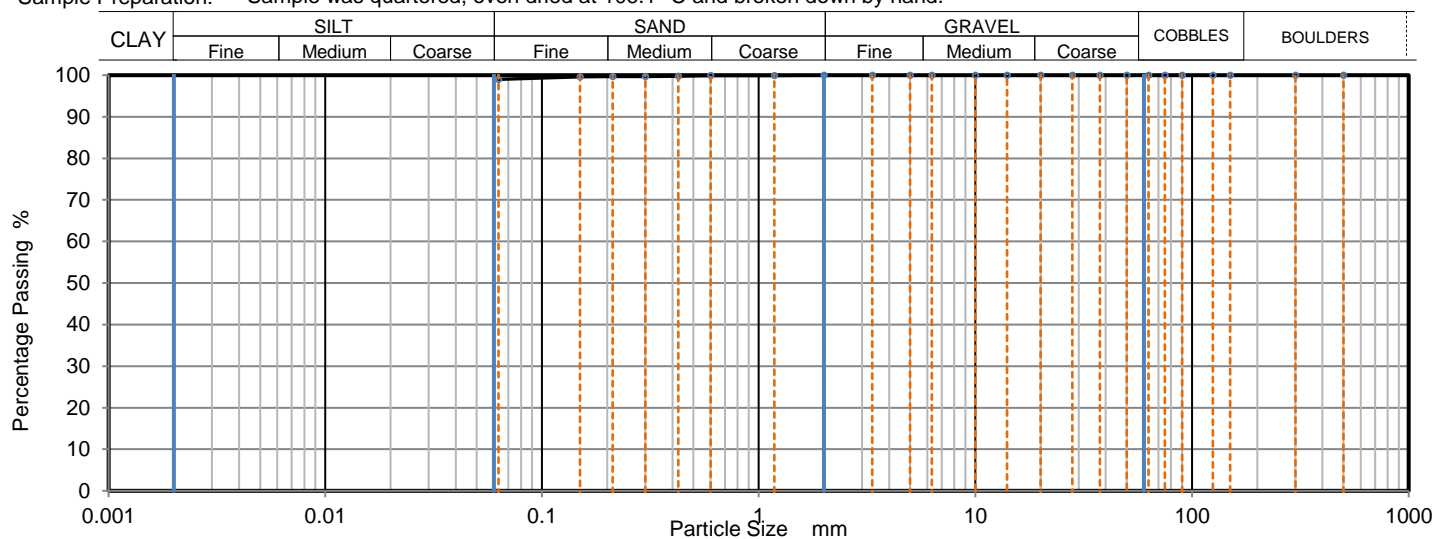
Sample Description: Brown CLAY

Sample Preparation: Sample was quartered, oven dried at 106.1 °C and broken down by hand.

Depth Top [m]: 16.50

Depth Base [m]: Not Given

Sample Type: B



Sieving		Sedimentation	
Particle Size mm	% Passing	Particle Size mm	% Passing
500	100		
300	100		
150	100		
125	100		
90	100		
75	100		
63	100		
50	100		
37.5	100		
28	100		
20	100		
14	100		
10	100		
6.3	100		
5	100		
3.35	100		
2	100		
1.18	100		
0.6	100		
0.425	100		
0.3	100		
0.212	100		
0.15	100		
0.063	99		

Sample Proportions	% dry mass
Very coarse	0
Gravel	0
Sand	1
Fines <0.063mm	99

Grading Analysis	
D100	mm
D60	mm
D30	mm
D10	mm
Uniformity Coefficient	N/A
Curvature Coefficient	

Uniformity Coefficient and Coefficient of Curvature calculated in accordance with BS EN ISO 14688-2: 2004 + A1: 2013

Note: Tested in Accordance with BS1377:Part 2:1990, clause 9.2

Remarks:

Signed:

Szczepan Bielatowicz
PL Deputy of Head of Geotechnical Section
for and on behalf of i2 Analytical Ltd

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TEST CERTIFICATE

Particle Size Distribution

i2 Analytical Ltd
Unit 6 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB



Tested in Accordance with: BS 1377-2: 1990

Client: McAuliffe Group
Client Address: McAuliffe House, Northcott Road,
WV14 0TP

Contact: Matthew Handley
Site Address: Belmont Street

Client Reference: 21-56790
Job Number: 21-56790
Date Sampled: 04/02/2021
Date Received: 05/02/2021
Date Tested: 22/02/2021
Sampled By: Client - MH

Testing carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland

Test Results:

Laboratory Reference: 1769981

Hole No.: BH101

Sample Reference: Not Given

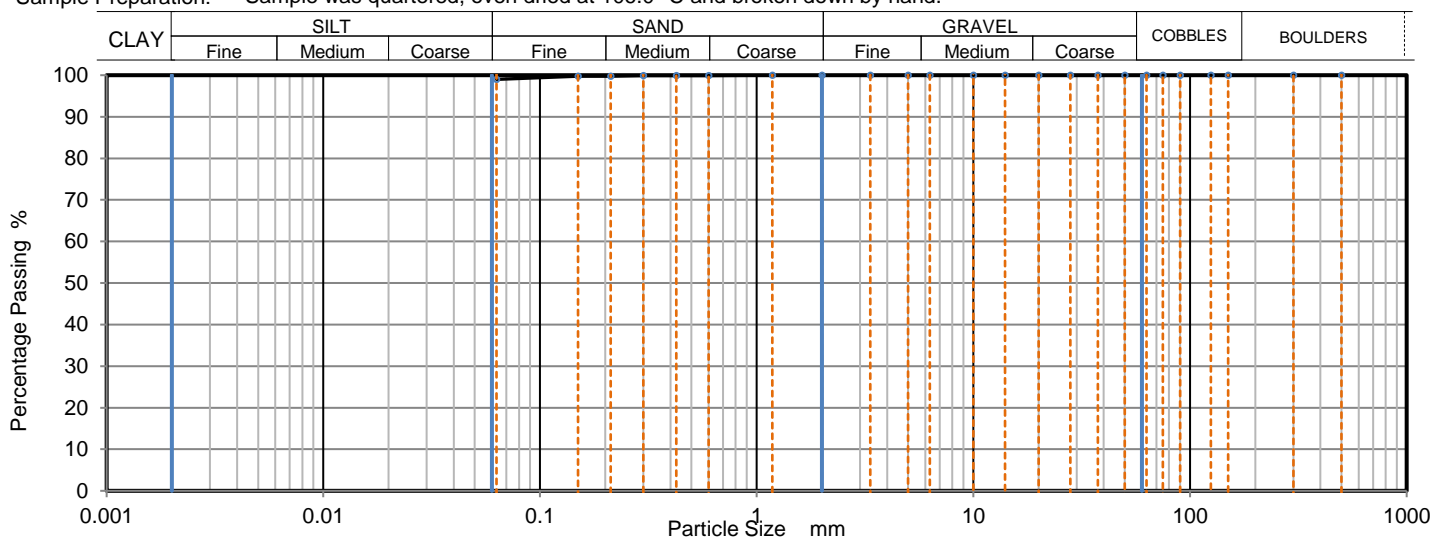
Sample Description: Brown CLAY

Sample Preparation: Sample was quartered, oven dried at 106.0 °C and broken down by hand.

Depth Top [m]: 18.00

Depth Base [m]: Not Given

Sample Type: B



Sieving		Sedimentation	
Particle Size mm	% Passing	Particle Size mm	% Passing
500	100		
300	100		
150	100		
125	100		
90	100		
75	100		
63	100		
50	100		
37.5	100		
28	100		
20	100		
14	100		
10	100		
6.3	100		
5	100		
3.35	100		
2	100		
1.18	100		
0.6	100		
0.425	100		
0.3	100		
0.212	100		
0.15	100		
0.063	99		

Sample Proportions	% dry mass
Very coarse	0
Gravel	0
Sand	1
Fines <0.063mm	99

Grading Analysis	
D100	mm
D60	mm
D30	mm
D10	mm
Uniformity Coefficient	N/A
Curvature Coefficient	

Uniformity Coefficient and Coefficient of Curvature calculated in accordance with BS EN ISO 14688-2: 2004 + A1: 2013

Note: Tested in Accordance with BS1377:Part 2:1990, clause 9.2

Remarks:

Signed:

Szczepan Bielatowicz
PL Deputy of Head of Geotechnical Section
for and on behalf of i2 Analytical Ltd

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TEST CERTIFICATE

Particle Size Distribution

i2 Analytical Ltd
Unit 6 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB



Tested in Accordance with: BS 1377-2: 1990

Client: McAuliffe Group
Client Address: McAuliffe House, Northcott Road,
WV14 0TP

Contact: Matthew Handley
Site Address: Belmont Street

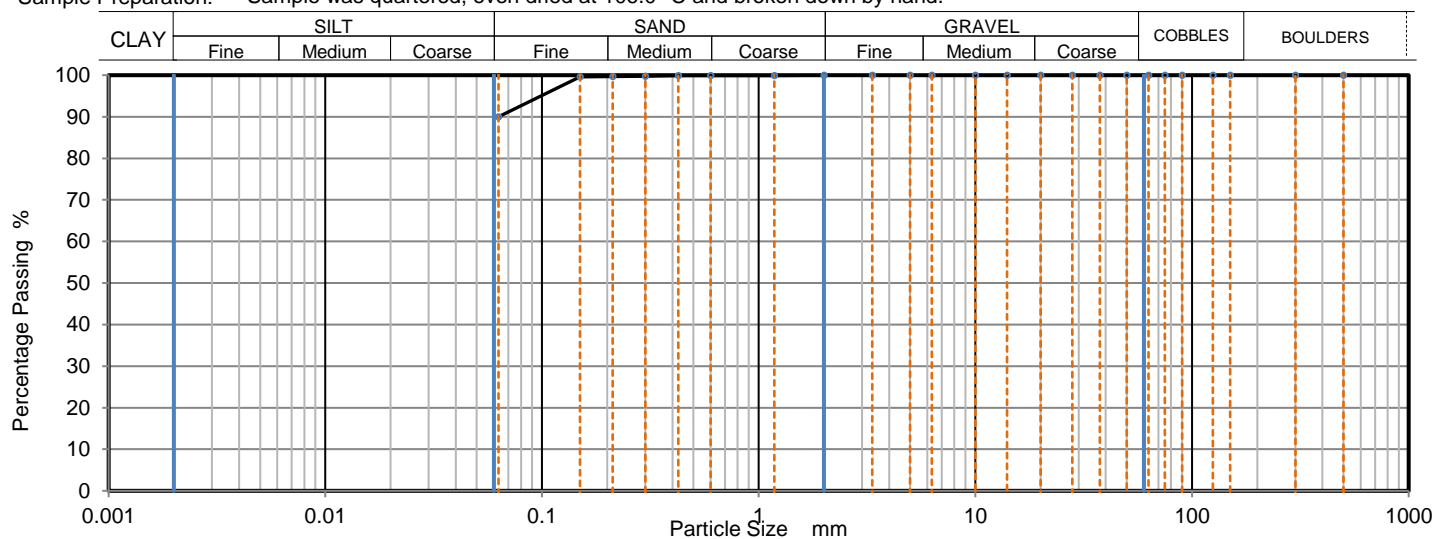
Client Reference: 21-56790
Job Number: 21-56790
Date Sampled: 04/02/2021
Date Received: 05/02/2021
Date Tested: 22/02/2021
Sampled By: Client - MH

Testing carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland

Test Results:

Laboratory Reference: 1769982
Hole No.: BH101
Sample Reference: Not Given
Sample Description: Brown slightly sandy CLAY
Sample Preparation: Sample was quartered, oven dried at 106.0 °C and broken down by hand.

Depth Top [m]: 19.50
Depth Base [m]: Not Given
Sample Type: B



Sieving		Sedimentation	
Particle Size mm	% Passing	Particle Size mm	% Passing
500	100		
300	100		
150	100		
125	100		
90	100		
75	100		
63	100		
50	100		
37.5	100		
28	100		
20	100		
14	100		
10	100		
6.3	100		
5	100		
3.35	100		
2	100		
1.18	100		
0.6	100		
0.425	100		
0.3	100		
0.212	100		
0.15	100		
0.063	91		

Sample Proportions	% dry mass
Very coarse	0
Gravel	0
Sand	9
Fines <0.063mm	91

Grading Analysis	
D100	mm
D60	mm
D30	mm
D10	mm
Uniformity Coefficient	N/A
Curvature Coefficient	

Uniformity Coefficient and Coefficient of Curvature calculated in accordance with BS EN ISO 14688-2: 2004 + A1: 2013

Note: Tested in Accordance with BS1377:Part 2:1990, clause 9.2

Remarks:

Signed:

Szczepan Bielatowicz
PL Deputy of Head of Geotechnical Section
for and on behalf of i2 Analytical Ltd

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TEST CERTIFICATE

Particle Size Distribution

i2 Analytical Ltd
Unit 6 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB



Tested in Accordance with: BS 1377-2: 1990

Client: McAuliffe Group
Client Address: McAuliffe House, Northcott Road,
WV14 0TP

Contact: Matthew Handley
Site Address: Belmont Street

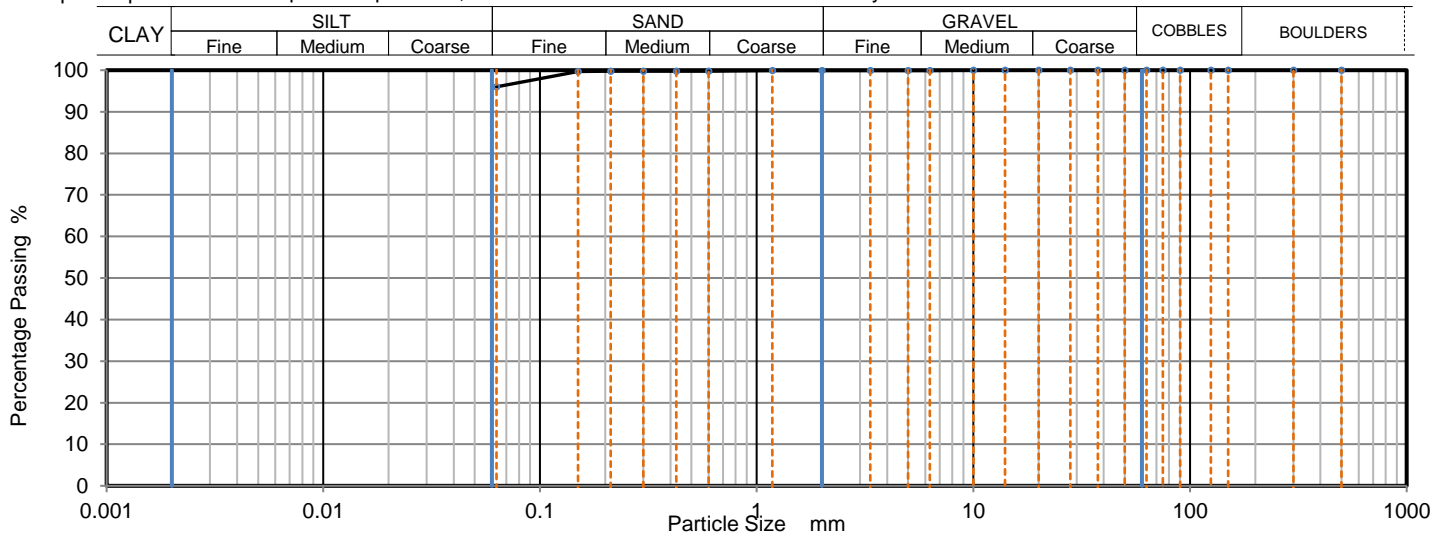
Client Reference: 21-56790
Job Number: 21-56790
Date Sampled: 04/02/2021
Date Received: 05/02/2021
Date Tested: 22/02/2021
Sampled By: Client - MH

Testing carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland

Test Results:

Laboratory Reference: 1769983
Hole No.: BH101
Sample Reference: Not Given
Sample Description: Brown slightly sandy CLAY
Sample Preparation: Sample was quartered, oven dried at 109.0 °C and broken down by hand.

Depth Top [m]: 21.00
Depth Base [m]: Not Given
Sample Type: B



Sieving		Sedimentation	
Particle Size mm	% Passing	Particle Size mm	% Passing
500	100		
300	100		
150	100		
125	100		
90	100		
75	100		
63	100		
50	100		
37.5	100		
28	100		
20	100		
14	100		
10	100		
6.3	100		
5	100		
3.35	100		
2	100		
1.18	100		
0.6	100		
0.425	100		
0.3	100		
0.212	100		
0.15	100		
0.063	97		

Sample Proportions	% dry mass
Very coarse	0
Gravel	0
Sand	3
Fines <0.063mm	97

Grading Analysis	
D100	mm
D60	mm
D30	mm
D10	mm
Uniformity Coefficient	N/A
Curvature Coefficient	

Uniformity Coefficient and Coefficient of Curvature calculated in accordance with BS EN ISO 14688-2: 2004 + A1: 2013

Note: Tested in Accordance with BS1377:Part 2:1990, clause 9.2

Remarks:

Signed:

Szczepan Bielatowicz
PL Deputy of Head of Geotechnical Section
for and on behalf of i2 Analytical Ltd

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TEST CERTIFICATE

Unconsolidated Undrained

Triaxial Compression

Tested in Accordance with:
BS 1377-7: 1990: Clause 8

i2 Analytical Ltd
Unit 6 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB



Client: McAuliffe Group
Client Address: McAuliffe House, Northcott Road,
WV14 0TP

Contact: Matthew Handley
Site Address: Belmont Street

Client Reference: 21-56790
Job Number: 21-56790
Date Sampled: 03/02/2021
Date Received: 05/02/2021
Date Tested: 19/02/2021
Sampled By: Client - MH

Testing carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland

Test Results:

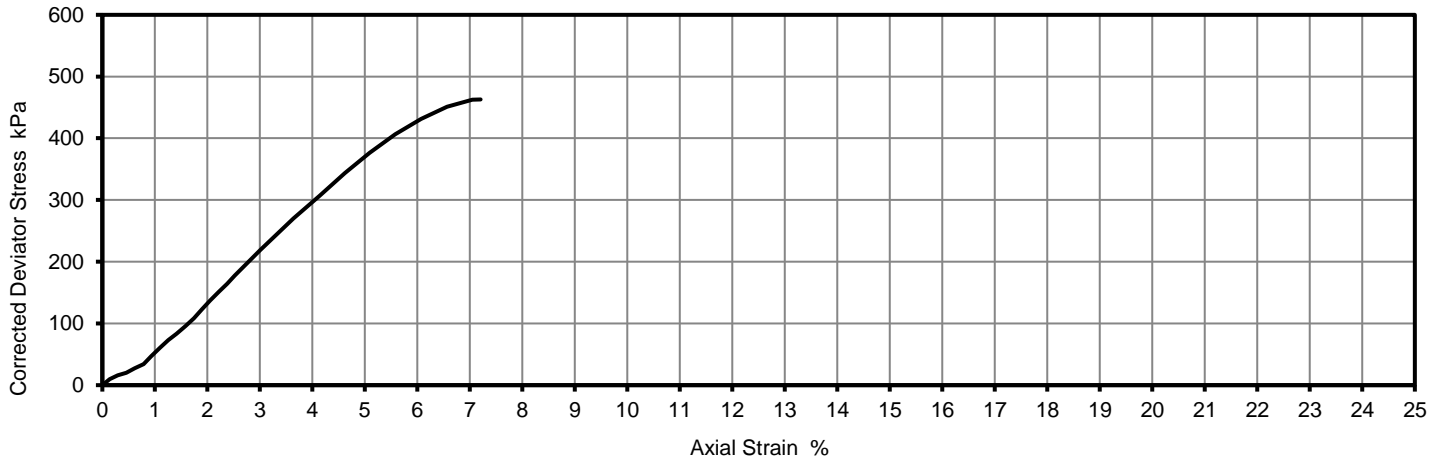
Laboratory Reference: 1769971
Hole No.: BH101
Sample Reference: Not Given
Sample Description: Greyish brown CLAY

Depth Top [m]: 8.00
Depth Base [m]: 8.45
Sample Type: U

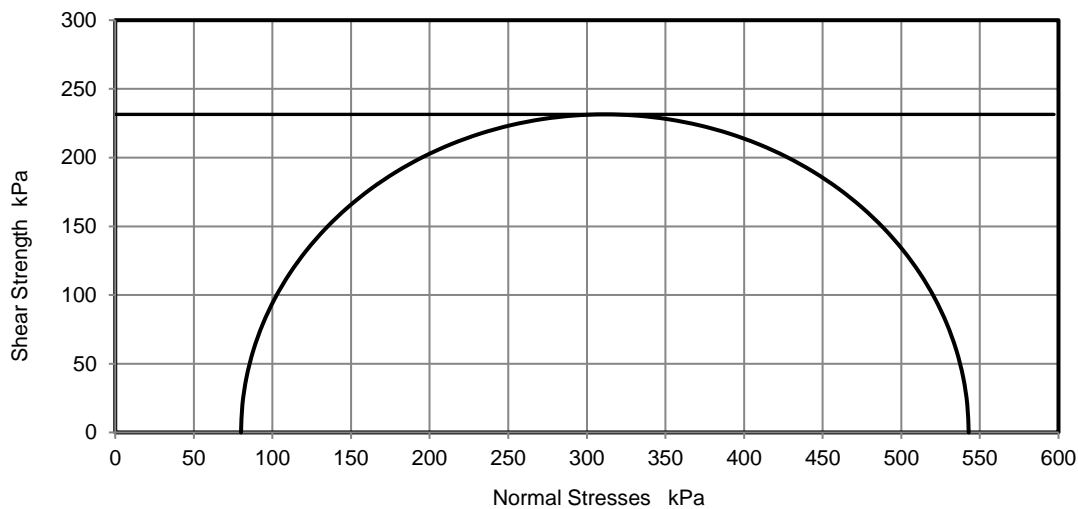
Test Number	1
Length	201.53 mm
Diameter	102.34 mm
Bulk Density	1.97 Mg/m ³
Moisture Content	29.2 %
Dry Density	1.53 Mg/m ³
Membrane Correction	0.40 kPa

Rate of Strain	1.98 %/min
Cell Pressure	80 kPa
Axial Strain at failure	7.2 %
Deviator Stress, ($\sigma_1 - \sigma_3$) _f	463 kPa
Undrained Shear Strength, c_u	231 kPa $\frac{1}{2}(\sigma_1 - \sigma_3)_f$
Mode of Failure	Brittle
Membrane thickness	0.23 mm

Deviator Stress v Axial Strain



Mohr Circles



Position within sample



Note: Deviator stress corrected for area change and membrane effects. Mohr circles and their interpretation is not covered by BS1377.
This is provided for information only.

Remarks: Sample failed at first stage. Unable to achieve multistage. Reported as a single stage.

Signed:

Szczepan Bielatowicz
PL Deputy of Head of Geotechnical Section
for and on behalf of i2 Analytical Ltd

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Tested in Accordance with: BS 1377-7: 1990: Clause 9

Client: McAuliffe Group
Client Address: McAuliffe House, Northcott Road,
WV14 0TP

Contact: Matthew Handley
Site Address: Belmont Street

Client Reference: 21-56790
Job Number: 21-56790
Date Sampled: 03/02/2021
Date Received: 05/02/2021
Date Tested: 19/02/2021
Sampled By: Client - MH

Testing carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland

Test Results:

Laboratory Reference: 1769975
Hole No.: BH101
Sample Reference: Not Given
Sample Description: Brown CLAY

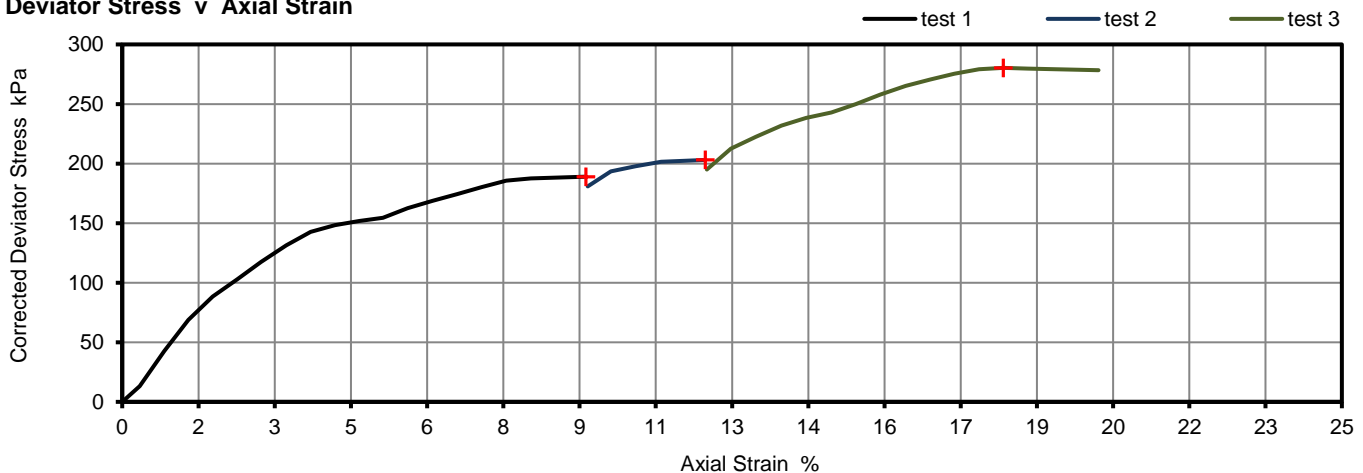
Depth Top [m]: 11.00
Depth Base [m]: 11.45
Sample Type: B

Length	200.28	mm
Diameter	102.04	mm
Bulk Density	1.92	Mg/m ³
Moisture Content	30	%
Dry Density	1.47	Mg/m ³
Membrane thickness	0.27	mm

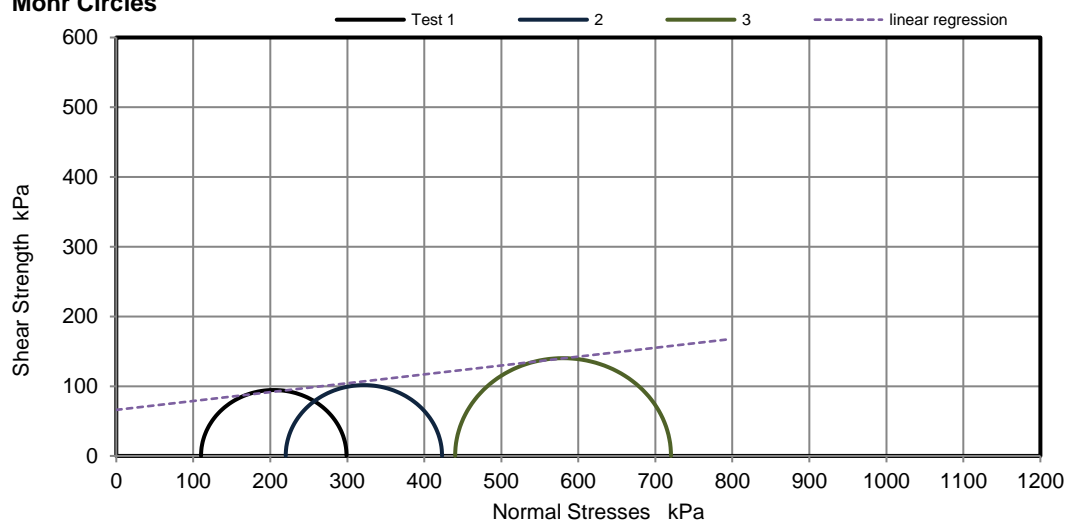
Rate of Strain
Stage Number
Cell Pressure
Axial Strain at failure
Deviator Stress, ($\sigma_1 - \sigma_3$) f
Shear strength, cu
Mode of failure
Membrane Correction

2.00			%/min
1	2	3	
110	220	440	kPa
9.5	12.0	18.1	%
189	203	280	kPa
94	102	140	kPa
Brittle			
0.57	0.67	0.93	kPa

Deviator Stress v Axial Strain



Mohr Circles



Position within sample



Linear Regression
 ϕ_u 7.2 °
cu 66 kPa

Note: Mohr circles and their interpretation is not covered by BS1377. These are provided for information only.

Remarks: Correction values: 110kPa=59N, 220kPa=102N, 440kPa=214N.

Signed:

Szczepan Bielatowicz
PL Deputy of Head of Geotechnical Section
for and on behalf of i2 Analytical Ltd

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Tested in Accordance with: BS 1377-7: 1990: Clause 9

Client: McAuliffe Group
Client Address: McAuliffe House, Northcott Road,
WV14 0TP

Contact: Matthew Handley
Site Address: Belmont Street

Client Reference: 21-56790
Job Number: 21-56790
Date Sampled: 04/02/2021
Date Received: 05/02/2021
Date Tested: 19/02/2021
Sampled By: Client - MH

Testing carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland

Test Results:

Laboratory Reference: 1769977
Hole No.: BH101
Sample Reference: Not Given
Sample Description: Greyish brown CLAY

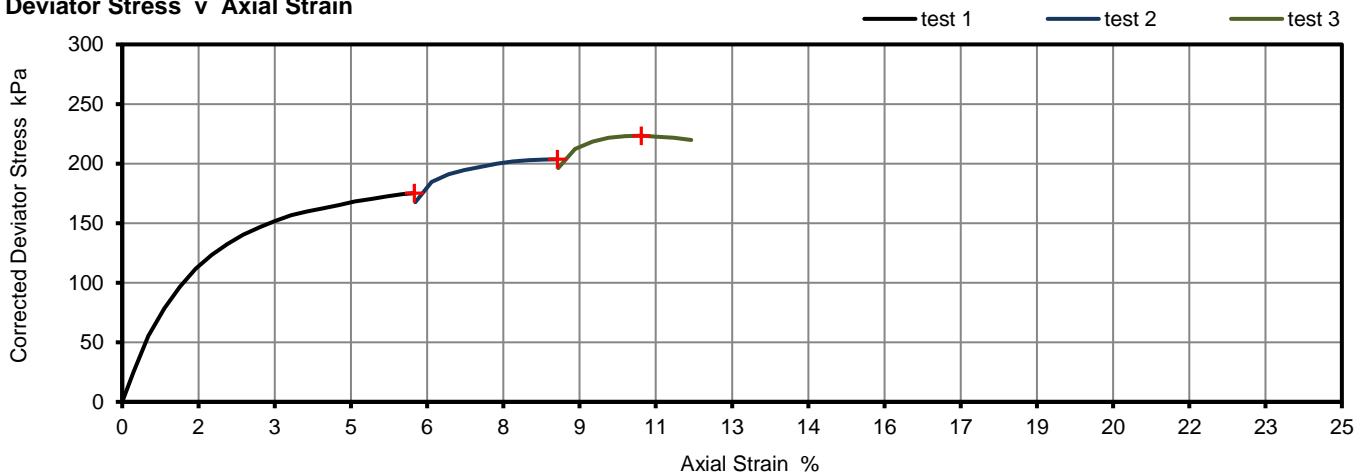
Depth Top [m]: 14.00
Depth Base [m]: 14.45
Sample Type: B

Length	198.73	mm
Diameter	102.20	mm
Bulk Density	1.96	Mg/m ³
Moisture Content	32	%
Dry Density	1.49	Mg/m ³
Membrane thickness	0.25	mm

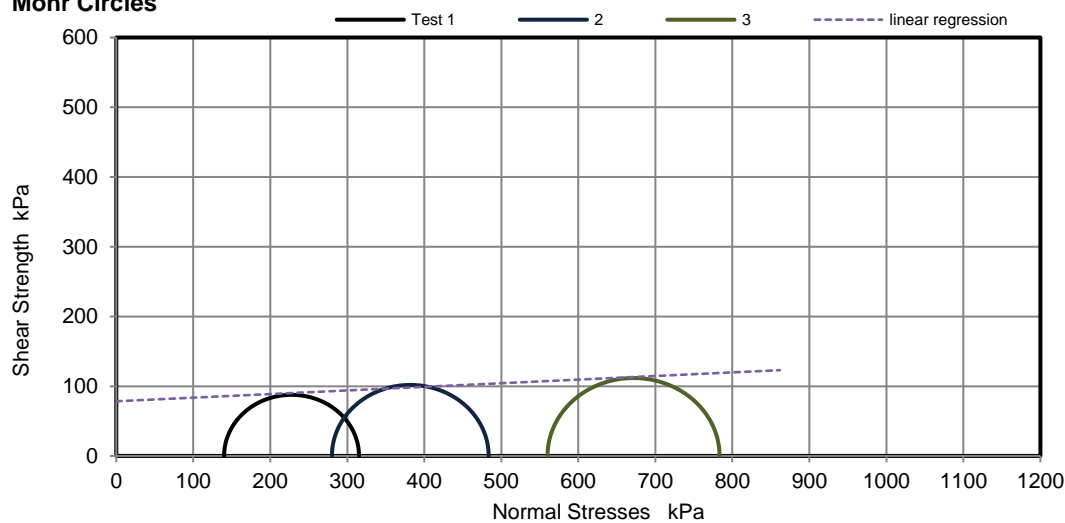
Rate of Strain
Stage Number
Cell Pressure
Axial Strain at failure
Deviator Stress, ($\sigma_1 - \sigma_3$)
Shear strength, c_u
Mode of failure
Membrane Correction

2.00			%/min
1	2	3	
140	280	560	kPa
6.0	8.9	10.6	%
175	204	223	kPa
88	102	112	kPa
Brittle			
0.39	0.50	0.57	kPa

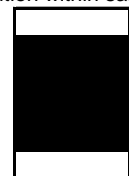
Deviator Stress v Axial Strain



Mohr Circles



Position within sample



Linear Regression
 ϕ_u 3.0 °
 c_u 78 kPa

Note: Mohr circles and their interpretation is not covered by BS1377. These are provided for information only.

Remarks: Correction values: 140kPa=64N, 280kPa=132N, 560kPa=257N.

Signed:

Szczepan Bielatowicz
PL Deputy of Head of Geotechnical Section
for and on behalf of i2 Analytical Ltd

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Tested in Accordance with: BS 1377-7: 1990: Clause 9

Client: McAuliffe Group
Client Address: McAuliffe House, Northcott Road,
WV14 0TP

Contact: Matthew Handley
Site Address: Belmont Street

Client Reference: 21-56790
Job Number: 21-56790
Date Sampled: 04/02/2021
Date Received: 05/02/2021
Date Tested: 19/02/2021
Sampled By: Client - MH

Testing carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland

Test Results:

Laboratory Reference: 1769980
Hole No.: BH101
Sample Reference: Not Given
Sample Description: Greyish brown CLAY

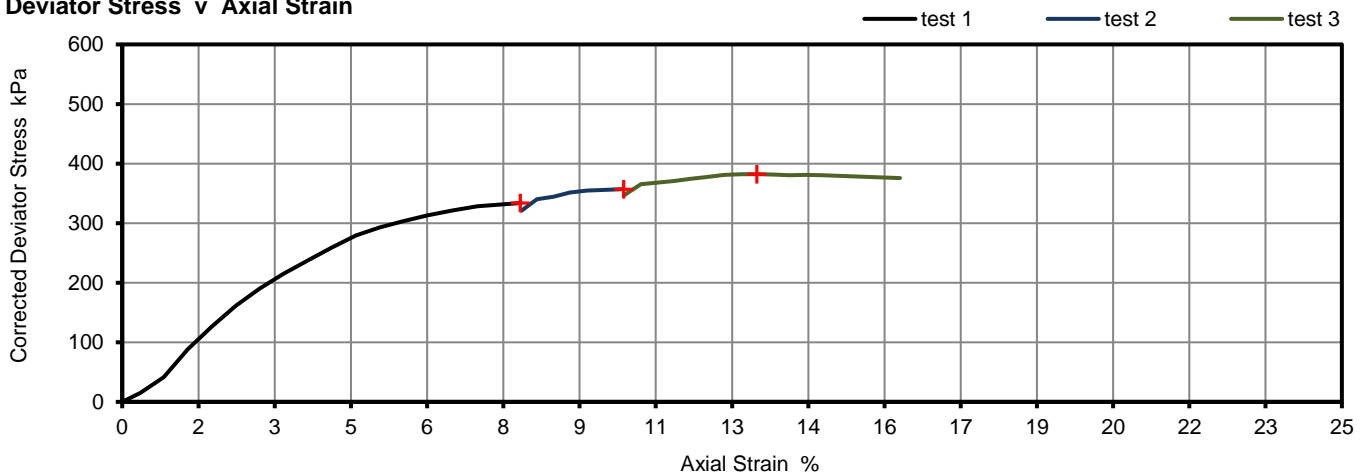
Depth Top [m]: 17.00
Depth Base [m]: 17.35
Sample Type: B

Length	199.21	mm
Diameter	102.14	mm
Bulk Density	1.97	Mg/m ³
Moisture Content	30	%
Dry Density	1.52	Mg/m ³
Membrane thickness	0.29	mm

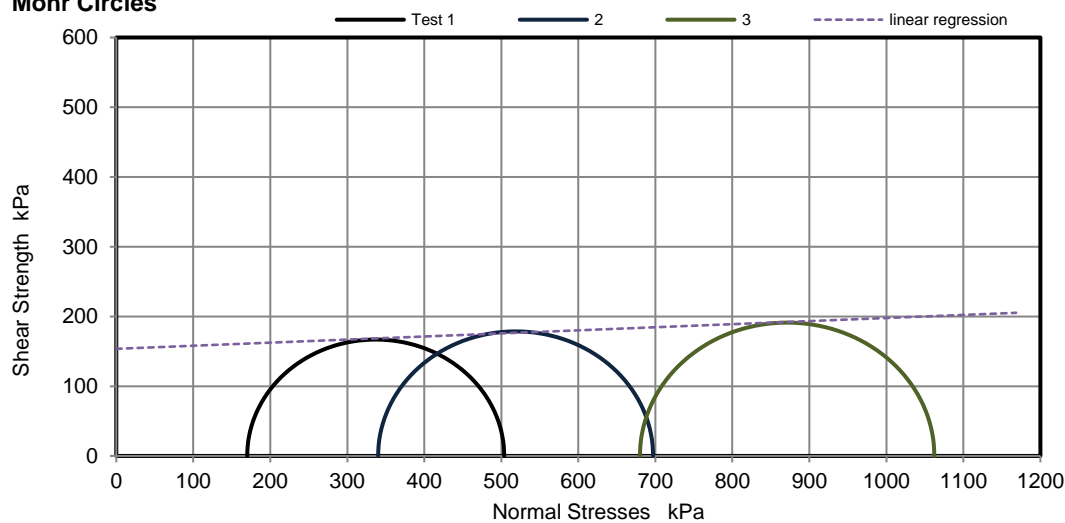
Rate of Strain
Stage Number
Cell Pressure
Axial Strain at failure
Deviator Stress, ($\sigma_1 - \sigma_3$) f
Shear strength, cu
Mode of failure
Membrane Correction

2.00			%/min
1	2	3	
170	340	680	kPa
8.2	10.3	13.0	%
334	357	382	kPa
167	179	191	kPa
Compound			
0.55	0.65	0.77	kPa

Deviator Stress v Axial Strain



Mohr Circles



Position within sample



Linear Regression
 ϕ_u 2.5 °
cu 154 kPa

Note: Mohr circles and their interpretation is not covered by BS1377. These are provided for information only.

Remarks: Correction values: 170kPa=88N, 340kPa=149N, 680kPa=326N.

Signed:

Szczepan Bielatowicz
PL Deputy of Head of Geotechnical Section
for and on behalf of i2 Analytical Ltd

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TEST CERTIFICATE

Liquid and Plastic Limits

i2 Analytical Ltd
Unit 6 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB



Tested in Accordance with: BS 1377-2: 1990: Clause 4.3 and 5

Client: McAuliffe Group
Client Address: McAuliffe House, Northcott Road,
WV14 0TP

Contact: Matthew Handley
Site Address: Belmont Street

Client Reference: 21-56807
Job Number: 21-56807
Date Sampled: 08/02/2021
Date Received: 09/02/2021
Date Tested: 23/02/2021
Sampled By: Client - MH

Testing carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland

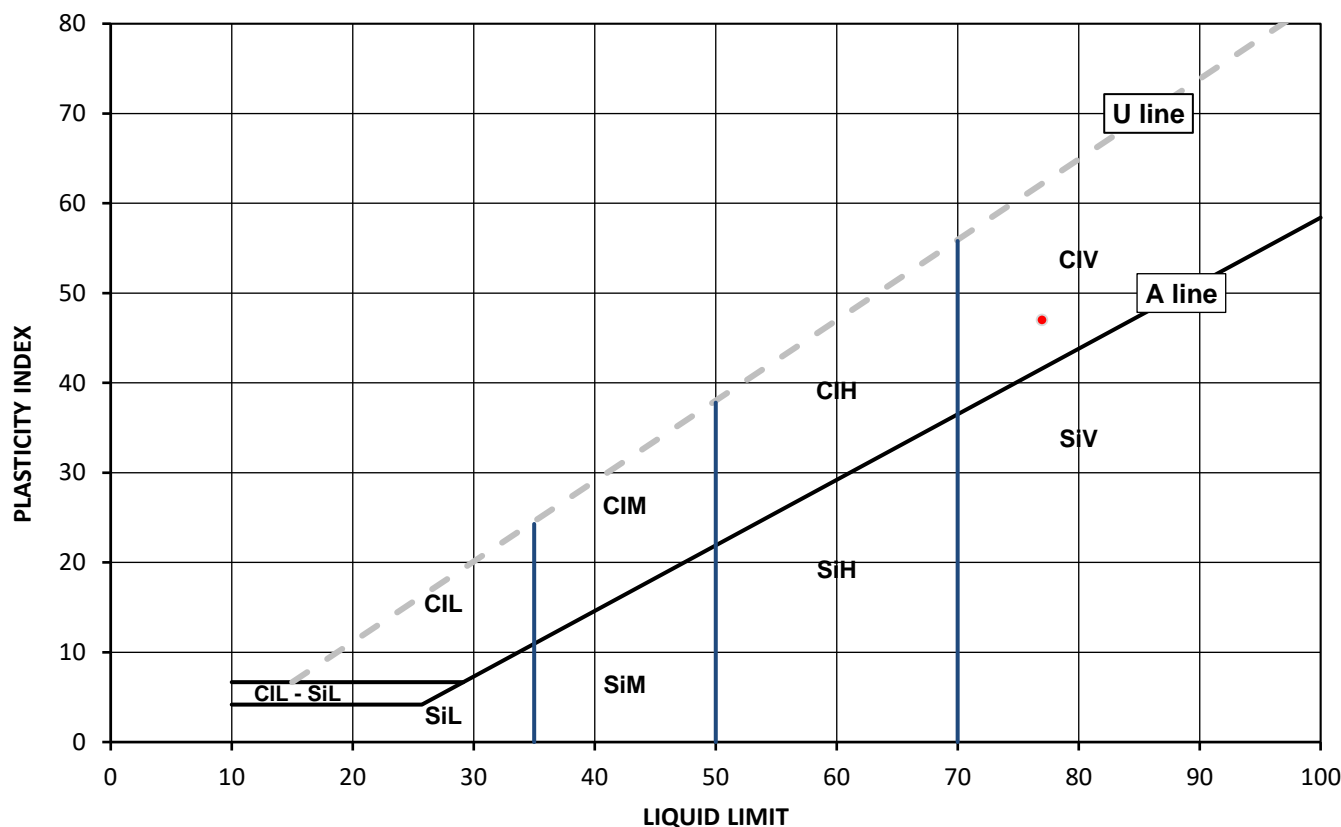
Test Results:

Laboratory Reference: 1770076
Hole No.: BH102
Sample Reference: Not Given
Soil Description: Brown CLAY

Depth Top [m]: 1.50
Depth Base [m]: Not Given
Sample Type: B

Sample Preparation: Tested in natural condition

As Received Moisture Content [W] %	Liquid Limit [WL] %	Plastic Limit [Wp] %	Plasticity Index [Ip] %	% Passing 425µm BS Test Sieve
34	77	30	47	100



Legend, based on BS EN ISO 14688 2:2018 Geotechnical investigation and testing – Identification and classification of soil

	Plasticity	Liquid Limit
Cl Clay	L Low	below 35
Si Silt	M Medium	35 to 50
	H High	50 to 70
	V Very high	exceeding 70
	O Organic	append to classification for organic material (eg CIHO)

Note: Moisture Content by BS 1377-2: 1990: Clause 3.2

Remarks:

Signed:

Aleksandra Jurochnik
PL Technical Reviewer
for and on behalf of i2 Analytical Ltd

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TEST CERTIFICATE

Liquid and Plastic Limits

i2 Analytical Ltd
Unit 6 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB



Tested in Accordance with: BS 1377-2: 1990: Clause 4.3 and 5

Client: McAuliffe Group
Client Address: McAuliffe House, Northcott Road,
WV14 0TP

Contact: Matthew Handley
Site Address: Belmont Street

Client Reference: 21-56807
Job Number: 21-56807
Date Sampled: 08/02/2021
Date Received: 09/02/2021
Date Tested: 23/02/2021
Sampled By: Client - MH

Testing carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland

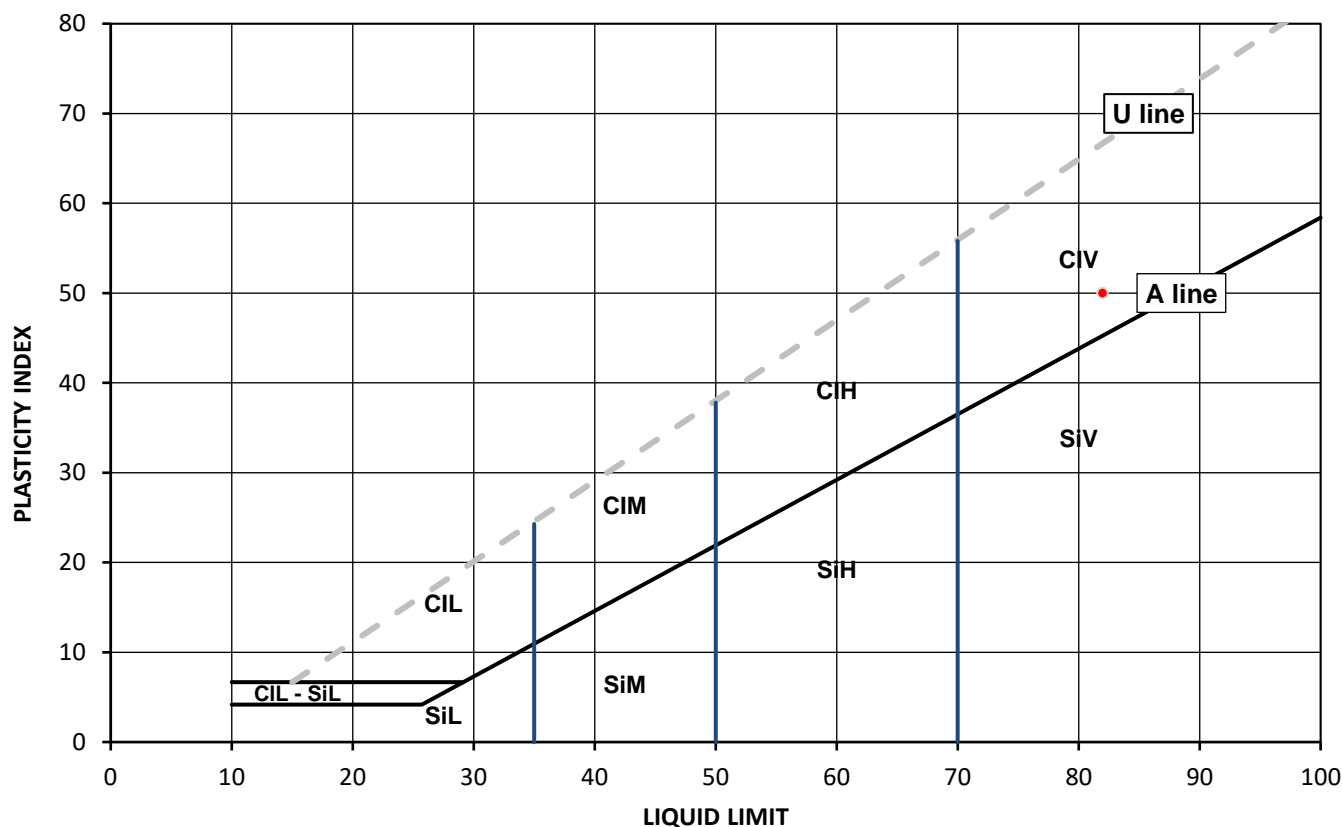
Test Results:

Laboratory Reference: 1770078
Hole No.: BH102
Sample Reference: Not Given
Soil Description: Brown CLAY

Depth Top [m]: 2.50
Depth Base [m]: Not Given
Sample Type: B

Sample Preparation: Tested in natural condition

As Received Moisture Content [W] %	Liquid Limit [WL] %	Plastic Limit [Wp] %	Plasticity Index [Ip] %	% Passing 425µm BS Test Sieve
36	82	32	50	100



Legend, based on BS EN ISO 14688 2:2018 Geotechnical investigation and testing – Identification and classification of soil

	Plasticity	Liquid Limit
Cl	Clay	below 35
Si	Silt	35 to 50
	L Low	50 to 70
	M Medium	exceeding 70
	H High	
	V Very high	
	O Organic	append to classification for organic material (eg CIHO)

Note: Moisture Content by BS 1377-2: 1990: Clause 3.2

Remarks:

Signed:

Aleksandra Jurochnik
PL Technical Reviewer
for and on behalf of i2 Analytical Ltd

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TEST CERTIFICATE

Liquid and Plastic Limits

i2 Analytical Ltd
Unit 6 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB



Tested in Accordance with: BS 1377-2: 1990: Clause 4.3 and 5

Client: McAuliffe Group
Client Address: McAuliffe House, Northcott Road,
WV14 0TP

Contact: Matthew Handley
Site Address: Belmont Street

Client Reference: 21-56807
Job Number: 21-56807
Date Sampled: 08/02/2021
Date Received: 09/02/2021
Date Tested: 23/02/2021
Sampled By: Client - MH

Testing carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland

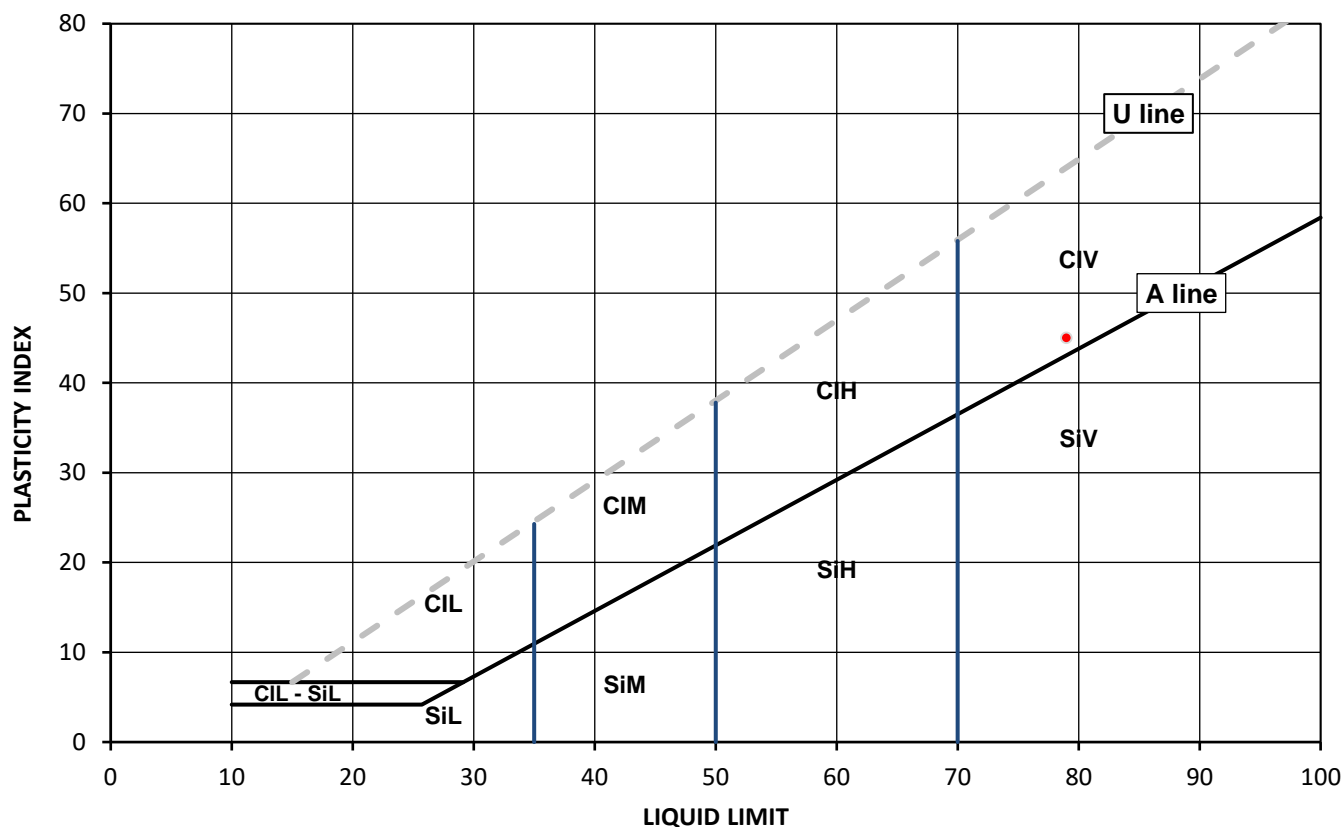
Test Results:

Laboratory Reference: 1770080
Hole No.: BH102
Sample Reference: Not Given
Soil Description: Brown CLAY

Depth Top [m]: 3.50
Depth Base [m]: Not Given
Sample Type: B

Sample Preparation: Tested in natural condition

As Received Moisture Content [W] %	Liquid Limit [WL] %	Plastic Limit [Wp] %	Plasticity Index [Ip] %	% Passing 425µm BS Test Sieve
33	79	34	45	100



Legend, based on BS EN ISO 14688 2:2018 Geotechnical investigation and testing – Identification and classification of soil

	Plasticity	Liquid Limit
Cl Clay	L Low	below 35
Si Silt	M Medium	35 to 50
	H High	50 to 70
	V Very high	exceeding 70
	O Organic	append to classification for organic material (eg CIHO)

Note: Moisture Content by BS 1377-2: 1990: Clause 3.2

Remarks:

Signed:

Aleksandra Jurochnik
PL Technical Reviewer
for and on behalf of i2 Analytical Ltd

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TEST CERTIFICATE

Liquid and Plastic Limits

i2 Analytical Ltd
Unit 6 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB



Tested in Accordance with: BS 1377-2: 1990: Clause 4.3 and 5

Client: McAuliffe Group
Client Address: McAuliffe House, Northcott Road,
WV14 0TP

Contact: Matthew Handley
Site Address: Belmont Street

Client Reference: 21-56807
Job Number: 21-56807
Date Sampled: 08/02/2021
Date Received: 09/02/2021
Date Tested: 23/02/2021
Sampled By: Client - MH

Testing carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland

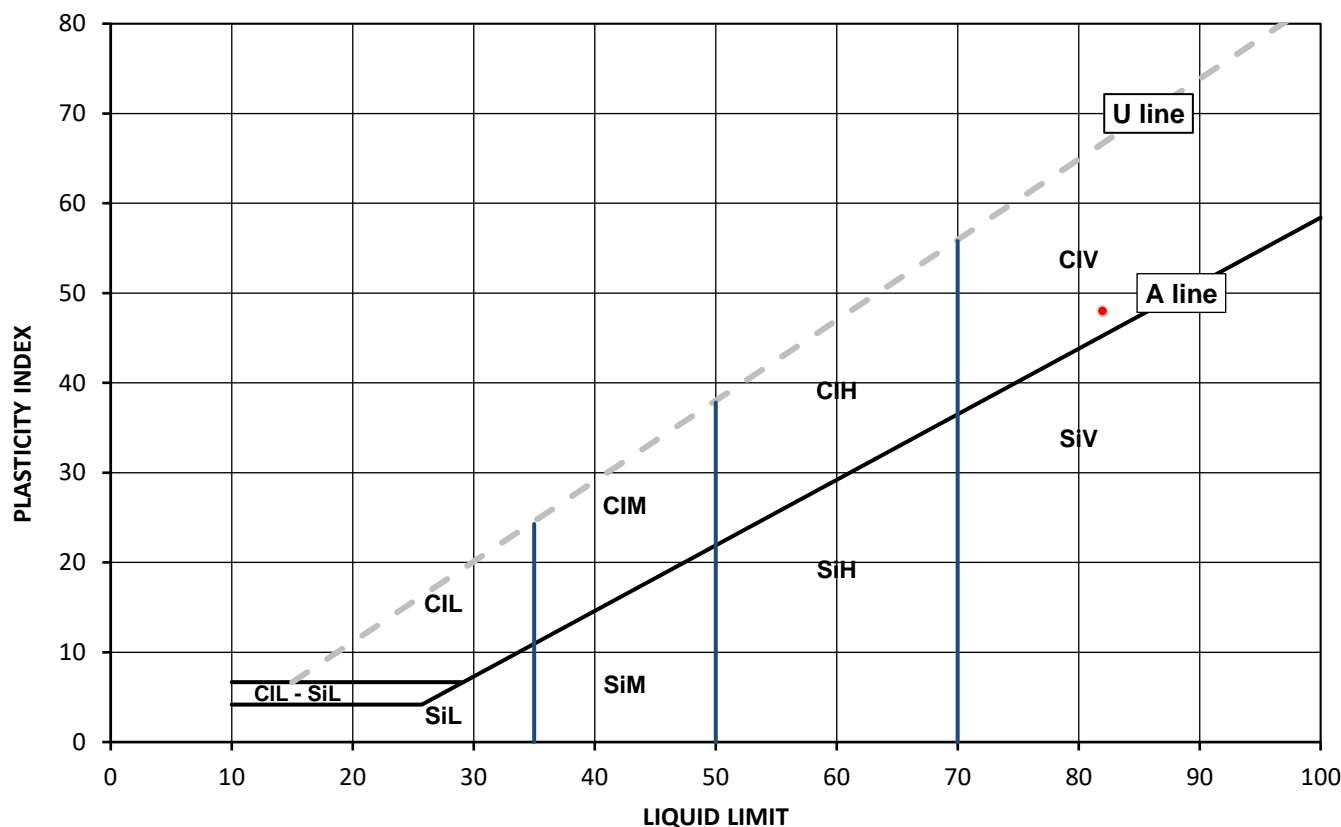
Test Results:

Laboratory Reference: 1770081
Hole No.: BH102
Sample Reference: Not Given
Soil Description: Brown CLAY

Depth Top [m]: 4.50
Depth Base [m]: Not Given
Sample Type: B

Sample Preparation: Tested in natural condition

As Received Moisture Content [W] %	Liquid Limit [WL] %	Plastic Limit [Wp] %	Plasticity Index [Ip] %	% Passing 425µm BS Test Sieve
35	82	34	48	100



Legend, based on BS EN ISO 14688 2:2018 Geotechnical investigation and testing – Identification and classification of soil

	Plasticity	Liquid Limit
Cl	Clay	L Low below 35
Si	Silt	M Medium 35 to 50
		H High 50 to 70
		V Very high exceeding 70
	O Organic	append to classification for organic material (eg CIHO)

Note: Moisture Content by BS 1377-2: 1990: Clause 3.2

Remarks:

Signed:

Aleksandra Jurochnik
PL Technical Reviewer
for and on behalf of i2 Analytical Ltd

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TEST CERTIFICATE

Liquid and Plastic Limits

i2 Analytical Ltd
Unit 6 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB



Tested in Accordance with: BS 1377-2: 1990: Clause 4.3 and 5

Client: McAuliffe Group
Client Address: McAuliffe House, Northcott Road,
WV14 0TP

Contact: Matthew Handley
Site Address: Belmont Street

Client Reference: 21-56807
Job Number: 21-56807
Date Sampled: 08/02/2021
Date Received: 09/02/2021
Date Tested: 23/02/2021
Sampled By: Client - MH

Testing carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland

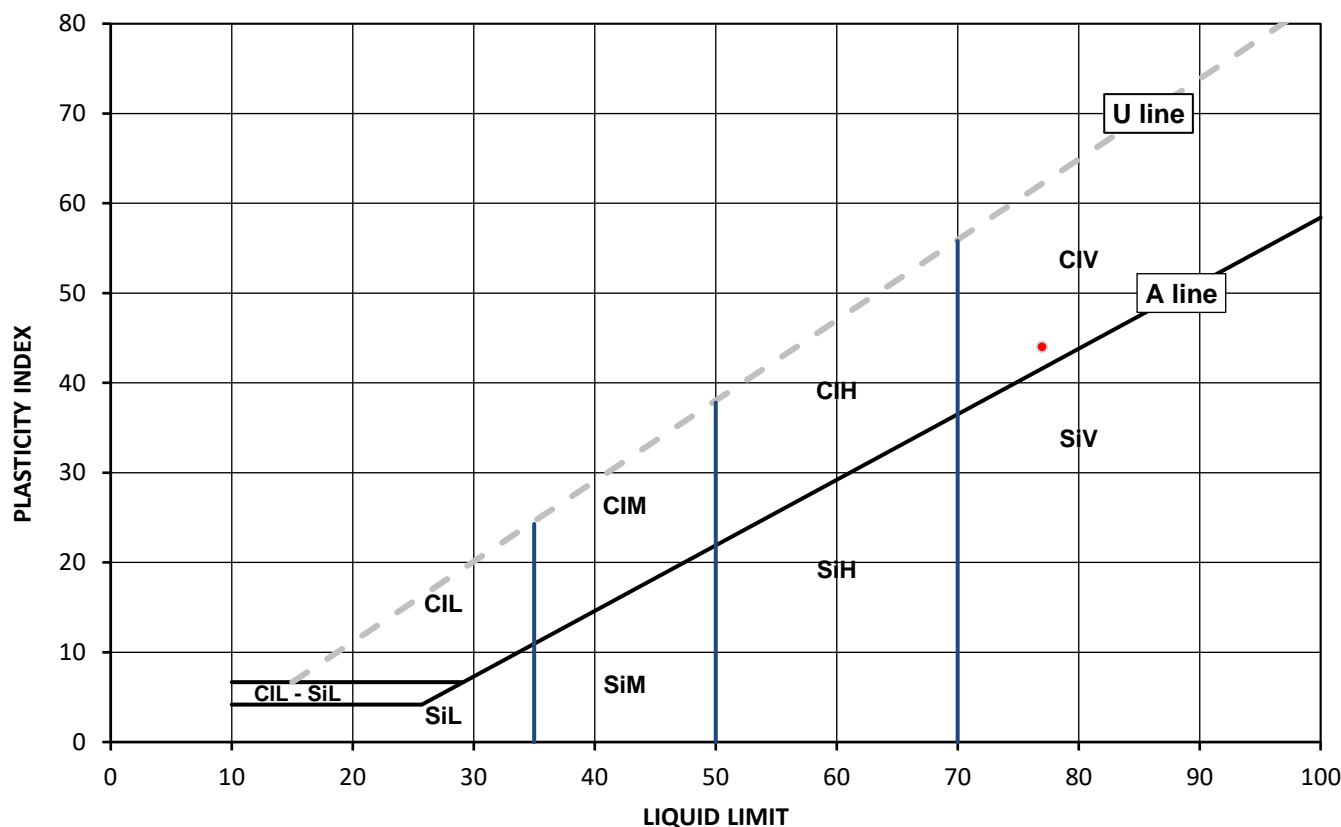
Test Results:

Laboratory Reference: 1770082
Hole No.: BH102
Sample Reference: Not Given
Soil Description: Brown CLAY

Depth Top [m]: 6.00
Depth Base [m]: Not Given
Sample Type: B

Sample Preparation: Tested in natural condition

As Received Moisture Content [W] %	Liquid Limit [WL] %	Plastic Limit [Wp] %	Plasticity Index [Ip] %	% Passing 425µm BS Test Sieve
31	77	33	44	100



Legend, based on BS EN ISO 14688 2:2018 Geotechnical investigation and testing – Identification and classification of soil

	Plasticity	Liquid Limit
Cl Clay	L Low	below 35
Si Silt	M Medium	35 to 50
	H High	50 to 70
	V Very high	exceeding 70
	O Organic	append to classification for organic material (eg CIHO)

Note: Moisture Content by BS 1377-2: 1990: Clause 3.2

Remarks:

Signed:

Aleksandra Jurochnik
PL Technical Reviewer
for and on behalf of i2 Analytical Ltd

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TEST CERTIFICATE

Liquid and Plastic Limits

i2 Analytical Ltd
Unit 6 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB



Tested in Accordance with: BS 1377-2: 1990: Clause 4.3 and 5

Client: McAuliffe Group
Client Address: McAuliffe House, Northcott Road,
WV14 0TP

Contact: Matthew Handley
Site Address: Belmont Street

Client Reference: 21-56807
Job Number: 21-56807
Date Sampled: 08/02/2021
Date Received: 09/02/2021
Date Tested: 23/02/2021
Sampled By: Client - MH

Testing carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland

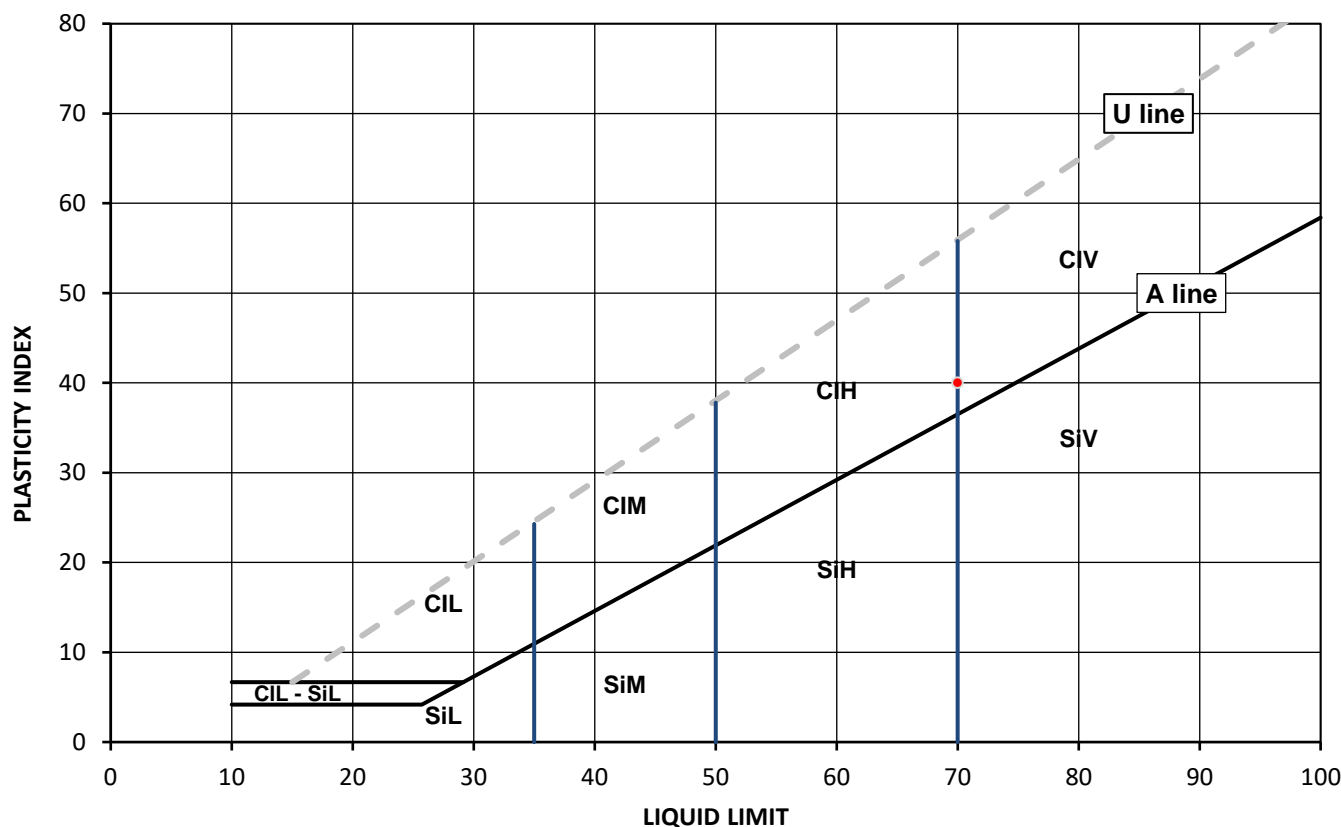
Test Results:

Laboratory Reference: 1770083
Hole No.: BH102
Sample Reference: Not Given
Soil Description: Brown CLAY

Depth Top [m]: 7.50
Depth Base [m]: Not Given
Sample Type: B

Sample Preparation: Tested in natural condition

As Received Moisture Content [W] %	Liquid Limit [WL] %	Plastic Limit [Wp] %	Plasticity Index [Ip] %	% Passing 425µm BS Test Sieve
31	70	30	40	100



Legend, based on BS EN ISO 14688 2:2018 Geotechnical investigation and testing – Identification and classification of soil

	Plasticity	Liquid Limit
Cl Clay	L Low	below 35
Si Silt	M Medium	35 to 50
	H High	50 to 70
	V Very high	exceeding 70
	O Organic	append to classification for organic material (eg CIHO)

Note: Moisture Content by BS 1377-2: 1990: Clause 3.2

Remarks:

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Client: McAuliffe Group
Client Address: McAuliffe House, Northcott Road,
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Contact: Matthew Handley
Site Address: Belmont Street

Client Reference: 21-56807
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Sampled By: Client - MH

Testing carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland

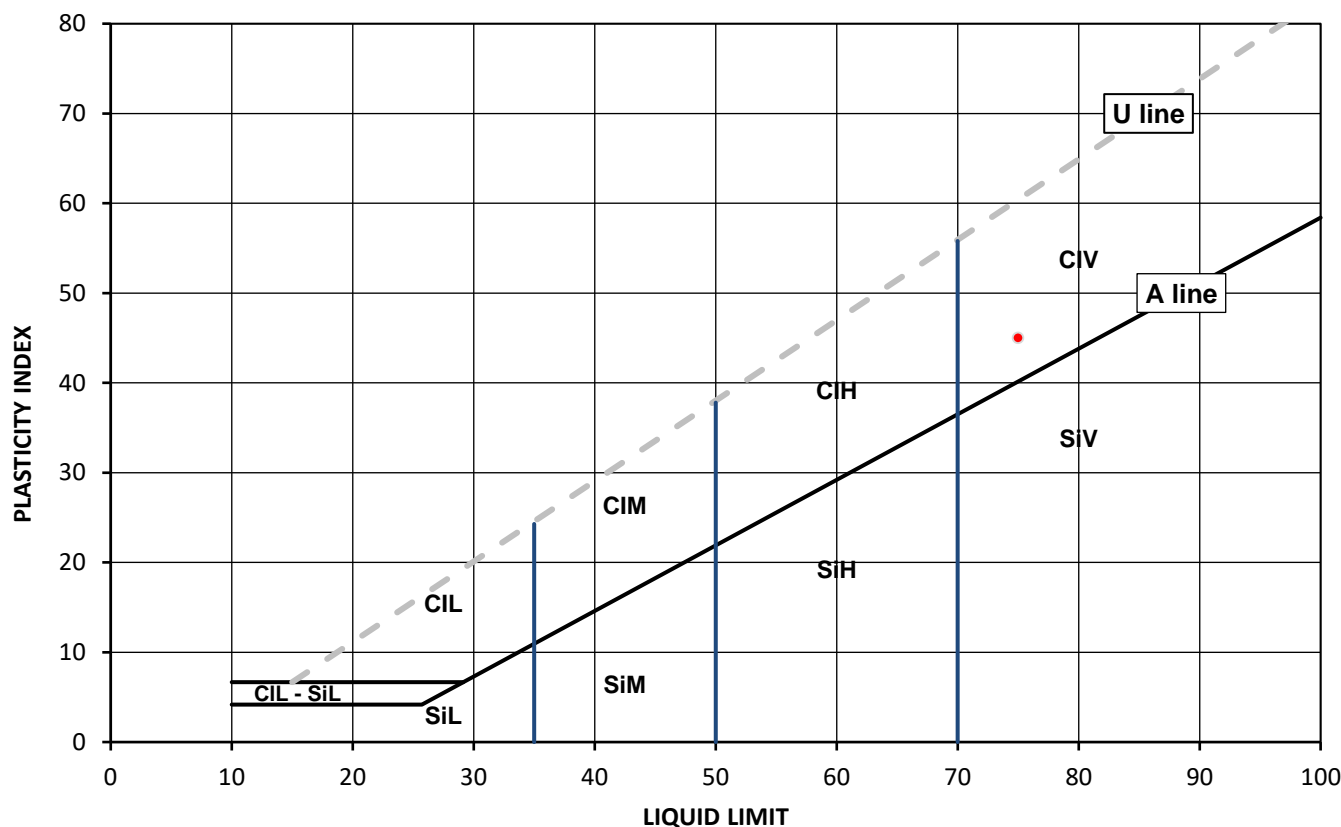
Test Results:

Laboratory Reference: 1770084
Hole No.: BH102
Sample Reference: Not Given
Soil Description: Brown CLAY

Depth Top [m]: 9.00
Depth Base [m]: Not Given
Sample Type: B

Sample Preparation: Tested in natural condition

As Received Moisture Content [W] %	Liquid Limit [WL] %	Plastic Limit [Wp] %	Plasticity Index [Ip] %	% Passing 425µm BS Test Sieve
30	75	30	45	100



Legend, based on BS EN ISO 14688 2:2018 Geotechnical investigation and testing – Identification and classification of soil

	Plasticity	Liquid Limit
Cl Clay	L Low	below 35
Si Silt	M Medium	35 to 50
	H High	50 to 70
	V Very high	exceeding 70
	O Organic	append to classification for organic material (eg CIHO)

Note: Moisture Content by BS 1377-2: 1990: Clause 3.2

Remarks:

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WV14 0TP

Contact: Matthew Handley
Site Address: Belmont Street

Client Reference: 21-56807
Job Number: 21-56807
Date Sampled: 08/02/2021
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Date Tested: 23/02/2021
Sampled By: Client - MH

Testing carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland

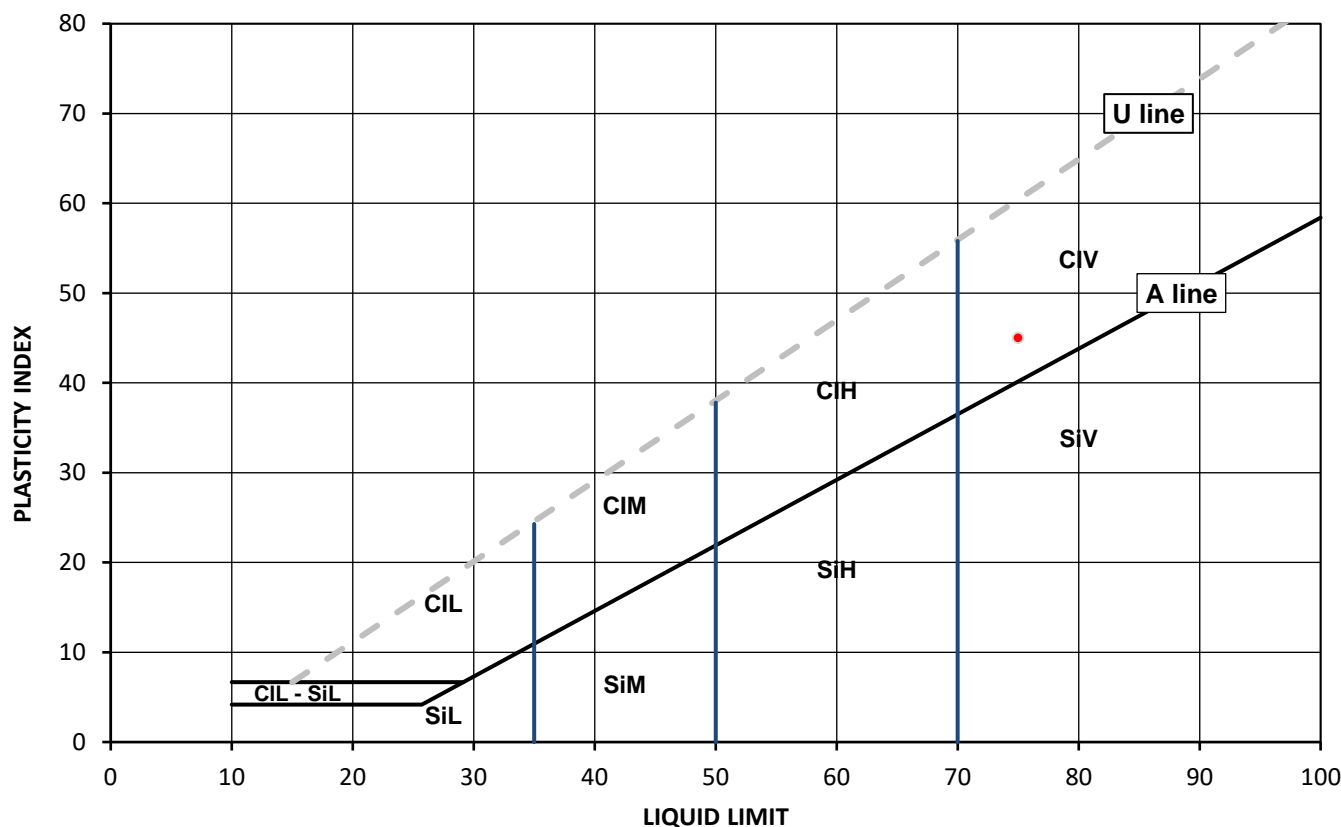
Test Results:

Laboratory Reference: 1770085
Hole No.: BH102
Sample Reference: Not Given
Soil Description: Brown CLAY

Depth Top [m]: 10.50
Depth Base [m]: Not Given
Sample Type: B

Sample Preparation: Tested in natural condition

As Received Moisture Content [W] %	Liquid Limit [WL] %	Plastic Limit [Wp] %	Plasticity Index [Ip] %	% Passing 425µm BS Test Sieve
29	75	30	45	100



Legend, based on BS EN ISO 14688 2:2018 Geotechnical investigation and testing – Identification and classification of soil

	Plasticity	Liquid Limit
Cl Clay	L Low	below 35
Si Silt	M Medium	35 to 50
	H High	50 to 70
	V Very high	exceeding 70
	O Organic	append to classification for organic material (eg CIHO)

Note: Moisture Content by BS 1377-2: 1990: Clause 3.2

Remarks:

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TEST CERTIFICATE

Liquid and Plastic Limits

i2 Analytical Ltd
Unit 6 Harrowden Road
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Northampton NN4 7EB



Tested in Accordance with: BS 1377-2: 1990: Clause 4.3 and 5

Client: McAuliffe Group
Client Address: McAuliffe House, Northcott Road,
WV14 0TP

Contact: Matthew Handley
Site Address: Belmont Street

Client Reference: 21-56807
Job Number: 21-56807
Date Sampled: 08/02/2021
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Sampled By: Client - MH

Testing carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland

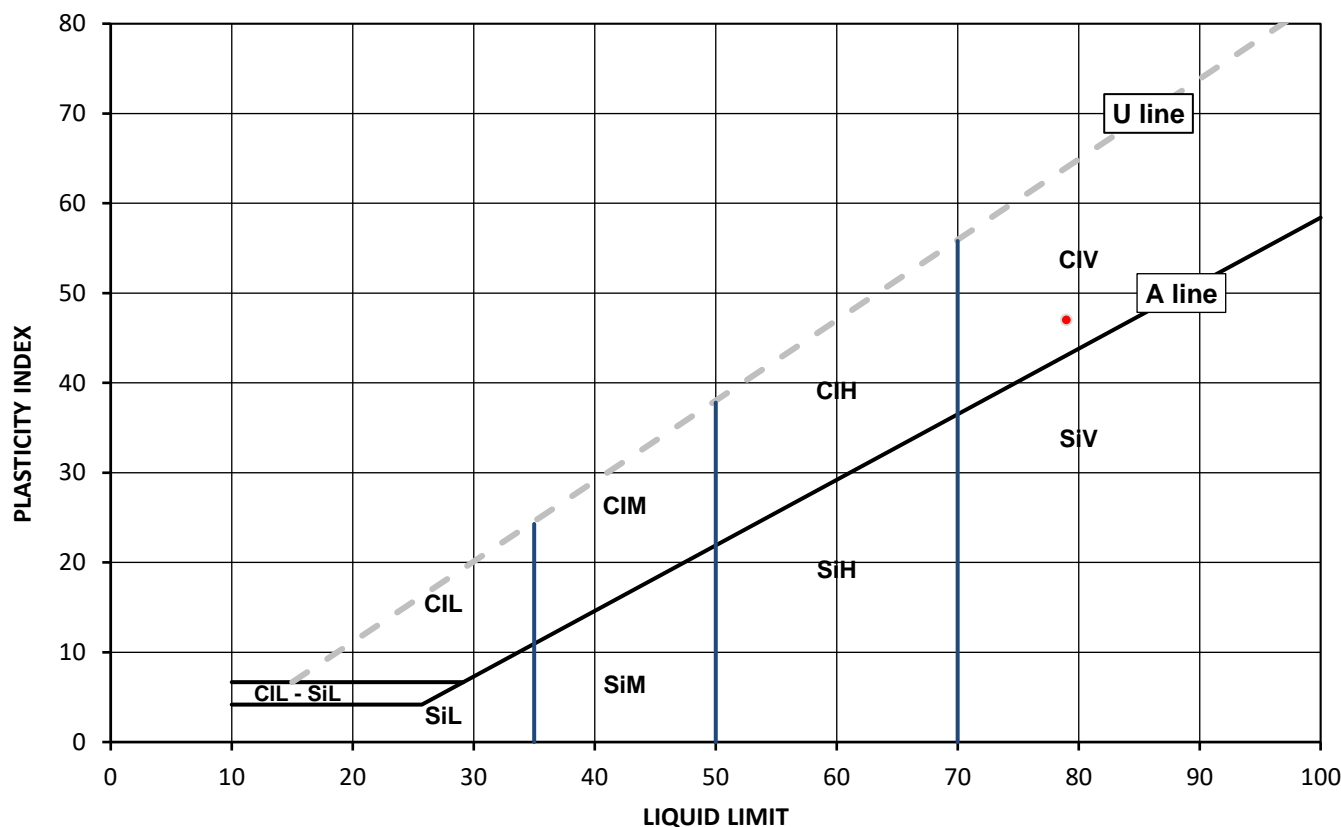
Test Results:

Laboratory Reference: 1770090
Hole No.: BH102
Sample Reference: Not Given
Soil Description: Brown CLAY

Depth Top [m]: 12.00
Depth Base [m]: Not Given
Sample Type: B

Sample Preparation: Tested in natural condition

As Received Moisture Content [W] %	Liquid Limit [WL] %	Plastic Limit [Wp] %	Plasticity Index [Ip] %	% Passing 425µm BS Test Sieve
29	79	32	47	100



Legend, based on BS EN ISO 14688 2:2018 Geotechnical investigation and testing – Identification and classification of soil

	Plasticity	Liquid Limit
Cl Clay	L Low	below 35
Si Silt	M Medium	35 to 50
	H High	50 to 70
	V Very high	exceeding 70
	O Organic	append to classification for organic material (eg CIHO)

Note: Moisture Content by BS 1377-2: 1990: Clause 3.2

Remarks:

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Northampton NN4 7EB



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Client: McAuliffe Group
Client Address: McAuliffe House, Northcott Road,
WV14 0TP

Contact: Matthew Handley
Site Address: Belmont Street

Client Reference: 21-56807
Job Number: 21-56807
Date Sampled: 08/02/2021
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Date Tested: 23/02/2021
Sampled By: Client - MH

Testing carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland

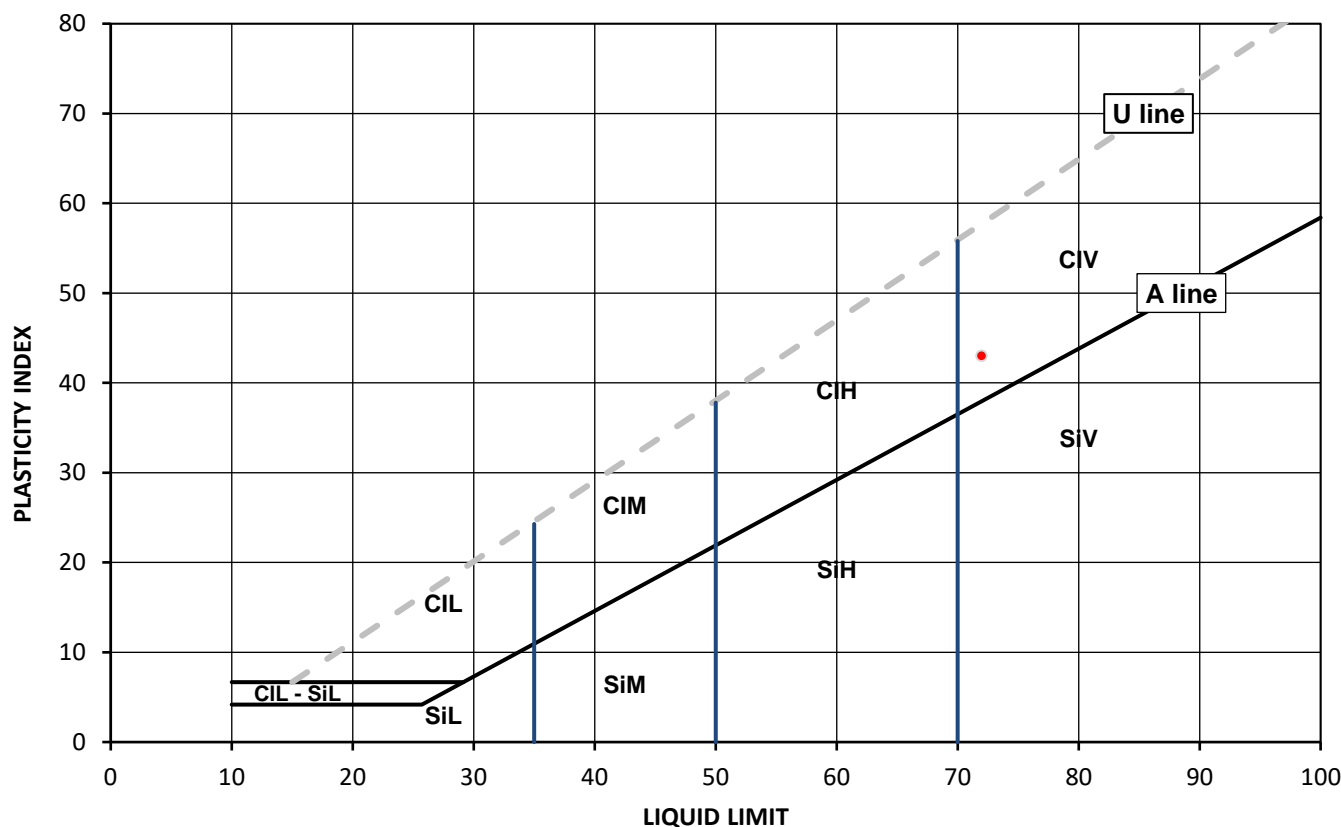
Test Results:

Laboratory Reference: 1770091
Hole No.: BH102
Sample Reference: Not Given
Soil Description: Brown CLAY

Depth Top [m]: 13.50
Depth Base [m]: Not Given
Sample Type: B

Sample Preparation: Tested in natural condition

As Received Moisture Content [W] %	Liquid Limit [WL] %	Plastic Limit [Wp] %	Plasticity Index [Ip] %	% Passing 425µm BS Test Sieve
27	72	29	43	100



Legend, based on BS EN ISO 14688 2:2018 Geotechnical investigation and testing – Identification and classification of soil

		Plasticity	Liquid Limit
Cl	Clay	L Low	below 35
Si	Silt	M Medium	35 to 50
		H High	50 to 70
		V Very high	exceeding 70
		O Organic	append to classification for organic material (eg CIHO)

Note: Moisture Content by BS 1377-2: 1990: Clause 3.2

Remarks:

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Northampton NN4 7EB



Tested in Accordance with: BS 1377-2: 1990: Clause 4.3 and 5

Client: McAuliffe Group
Client Address: McAuliffe House, Northcott Road,
WV14 0TP

Contact: Matthew Handley
Site Address: Belmont Street

Client Reference: 21-56807
Job Number: 21-56807
Date Sampled: 08/02/2021
Date Received: 09/02/2021
Date Tested: 23/02/2021
Sampled By: Client - MH

Testing carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland

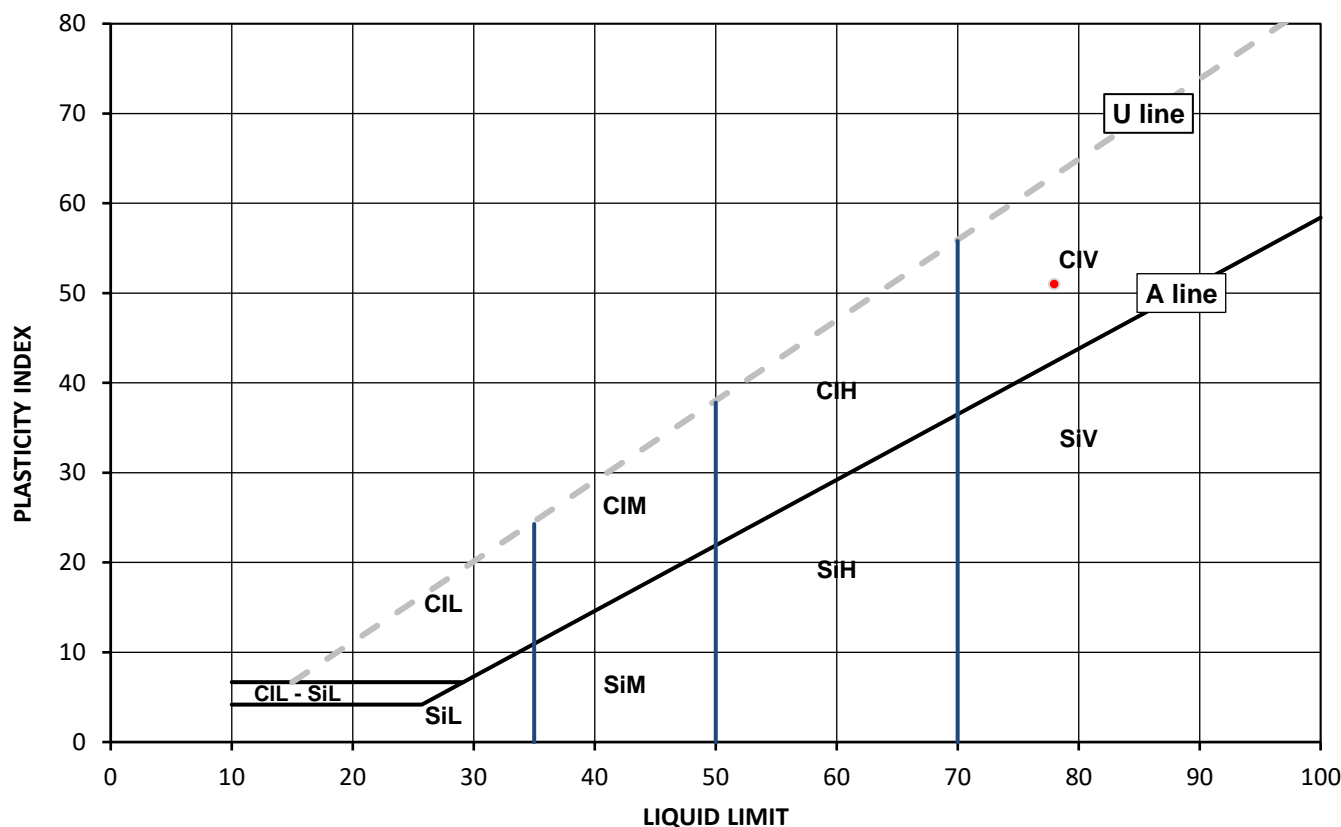
Test Results:

Laboratory Reference: 1770092
Hole No.: BH102
Sample Reference: Not Given
Soil Description: Brown CLAY

Depth Top [m]: 15.00
Depth Base [m]: Not Given
Sample Type: B

Sample Preparation: Tested in natural condition

As Received Moisture Content [W] %	Liquid Limit [WL] %	Plastic Limit [Wp] %	Plasticity Index [Ip] %	% Passing 425µm BS Test Sieve
29	78	27	51	100



Legend, based on BS EN ISO 14688 2:2018 Geotechnical investigation and testing – Identification and classification of soil

	Plasticity	Liquid Limit
Cl	Clay	L Low below 35
Si	Silt	M Medium 35 to 50
		H High 50 to 70
		V Very high exceeding 70
	O Organic	append to classification for organic material (eg CIHO)

Note: Moisture Content by BS 1377-2: 1990: Clause 3.2

Remarks:

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Northampton NN4 7EB



Tested in Accordance with: BS 1377-2: 1990: Clause 4.3 and 5

Client: McAuliffe Group
Client Address: McAuliffe House, Northcott Road,
WV14 0TP

Contact: Matthew Handley
Site Address: Belmont Street

Client Reference: 21-56807
Job Number: 21-56807
Date Sampled: 08/02/2021
Date Received: 09/02/2021
Date Tested: 23/02/2021
Sampled By: Client - MH

Testing carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland

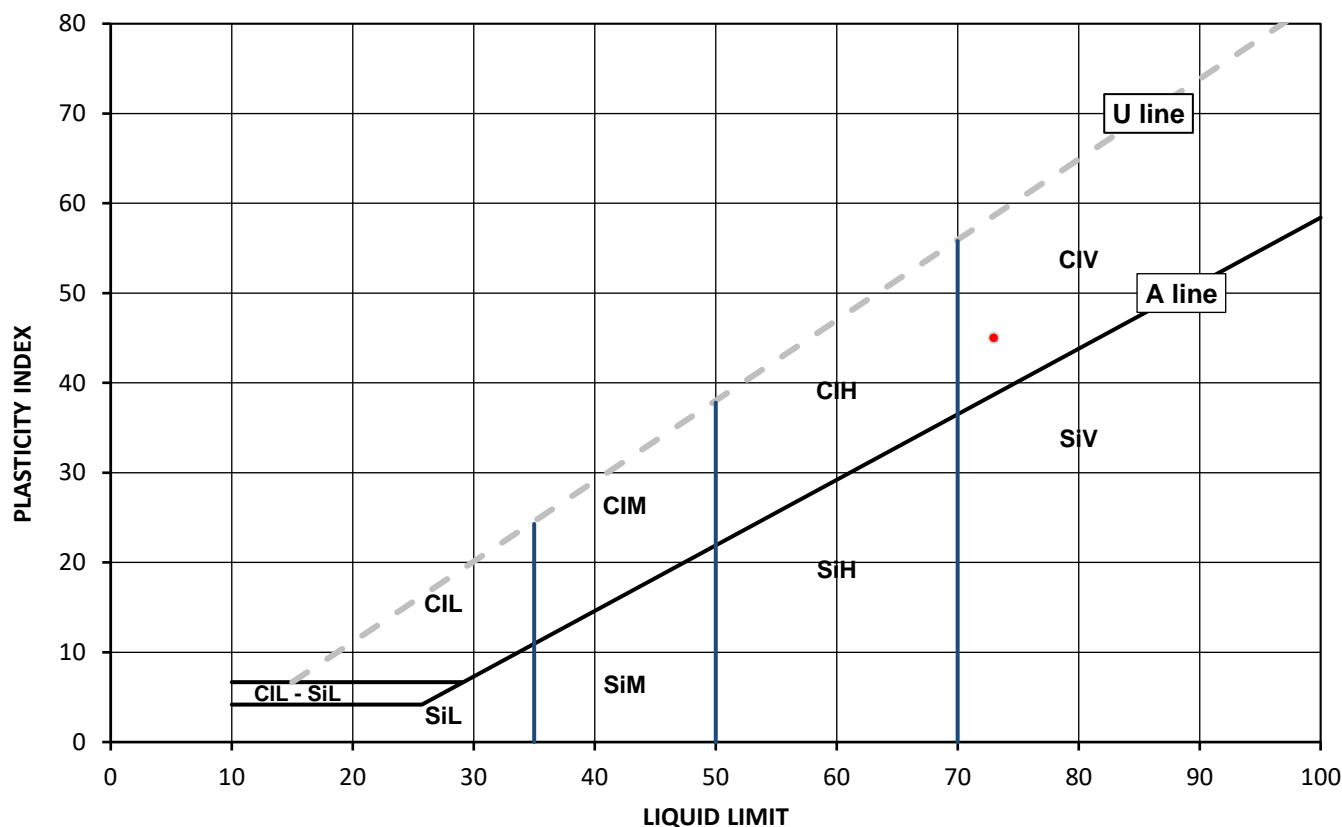
Test Results:

Laboratory Reference: 1770093
Hole No.: BH102
Sample Reference: Not Given
Soil Description: Brown CLAY

Depth Top [m]: 16.50
Depth Base [m]: Not Given
Sample Type: B

Sample Preparation: Tested in natural condition

As Received Moisture Content [W] %	Liquid Limit [WL] %	Plastic Limit [Wp] %	Plasticity Index [Ip] %	% Passing 425µm BS Test Sieve
29	73	28	45	100



Legend, based on BS EN ISO 14688 2:2018 Geotechnical investigation and testing – Identification and classification of soil

		Plasticity	Liquid Limit
Cl	Clay	L Low	below 35
Si	Silt	M Medium	35 to 50
		H High	50 to 70
		V Very high	exceeding 70
		O Organic	append to classification for organic material (eg CIHO)

Note: Moisture Content by BS 1377-2: 1990: Clause 3.2

Remarks:

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TEST CERTIFICATE

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Northampton NN4 7EB



Tested in Accordance with: BS 1377-2: 1990: Clause 4.3 and 5

Client: McAuliffe Group
Client Address: McAuliffe House, Northcott Road,
WV14 0TP

Contact: Matthew Handley
Site Address: Belmont Street

Client Reference: 21-56807
Job Number: 21-56807
Date Sampled: 08/02/2021
Date Received: 09/02/2021
Date Tested: 23/02/2021
Sampled By: Client - MH

Testing carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland

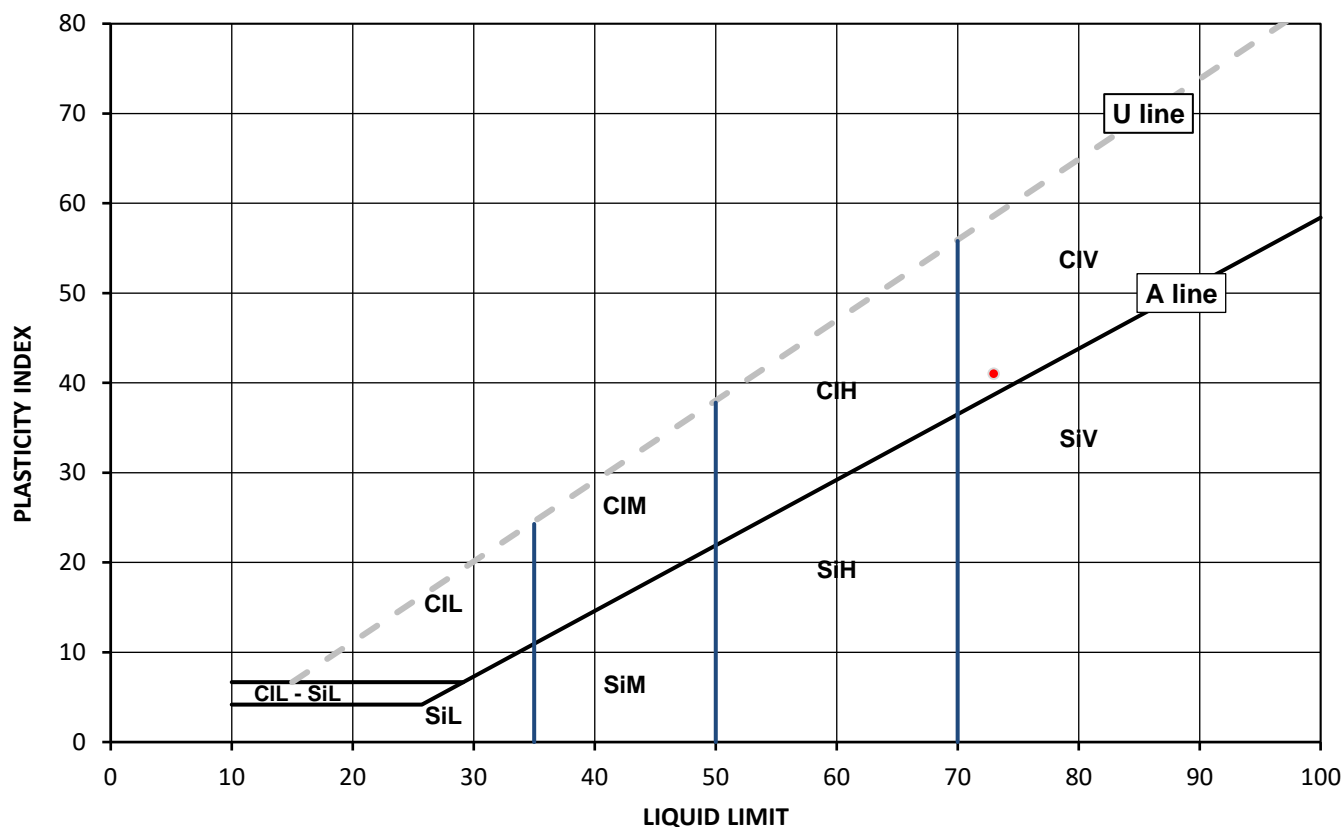
Test Results:

Laboratory Reference: 1770095
Hole No.: BH102
Sample Reference: Not Given
Soil Description: Brown CLAY

Depth Top [m]: 18.00
Depth Base [m]: Not Given
Sample Type: B

Sample Preparation: Tested in natural condition

As Received Moisture Content [W] %	Liquid Limit [WL] %	Plastic Limit [Wp] %	Plasticity Index [Ip] %	% Passing 425µm BS Test Sieve
30	73	32	41	100



Legend, based on BS EN ISO 14688 2:2018 Geotechnical investigation and testing – Identification and classification of soil

	Plasticity	Liquid Limit
Cl	Clay	L Low below 35
Si	Silt	M Medium 35 to 50
		H High 50 to 70
		V Very high exceeding 70
	O Organic	append to classification for organic material (eg CIHO)

Note: Moisture Content by BS 1377-2: 1990: Clause 3.2

Remarks:

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Northampton NN4 7EB



Tested in Accordance with: BS 1377-2: 1990: Clause 4.3 and 5

Client: McAuliffe Group
Client Address: McAuliffe House, Northcott Road,
WV14 0TP

Contact: Matthew Handley
Site Address: Belmont Street

Client Reference: 21-56807
Job Number: 21-56807
Date Sampled: 08/02/2021
Date Received: 09/02/2021
Date Tested: 23/02/2021
Sampled By: Client - MH

Testing carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland

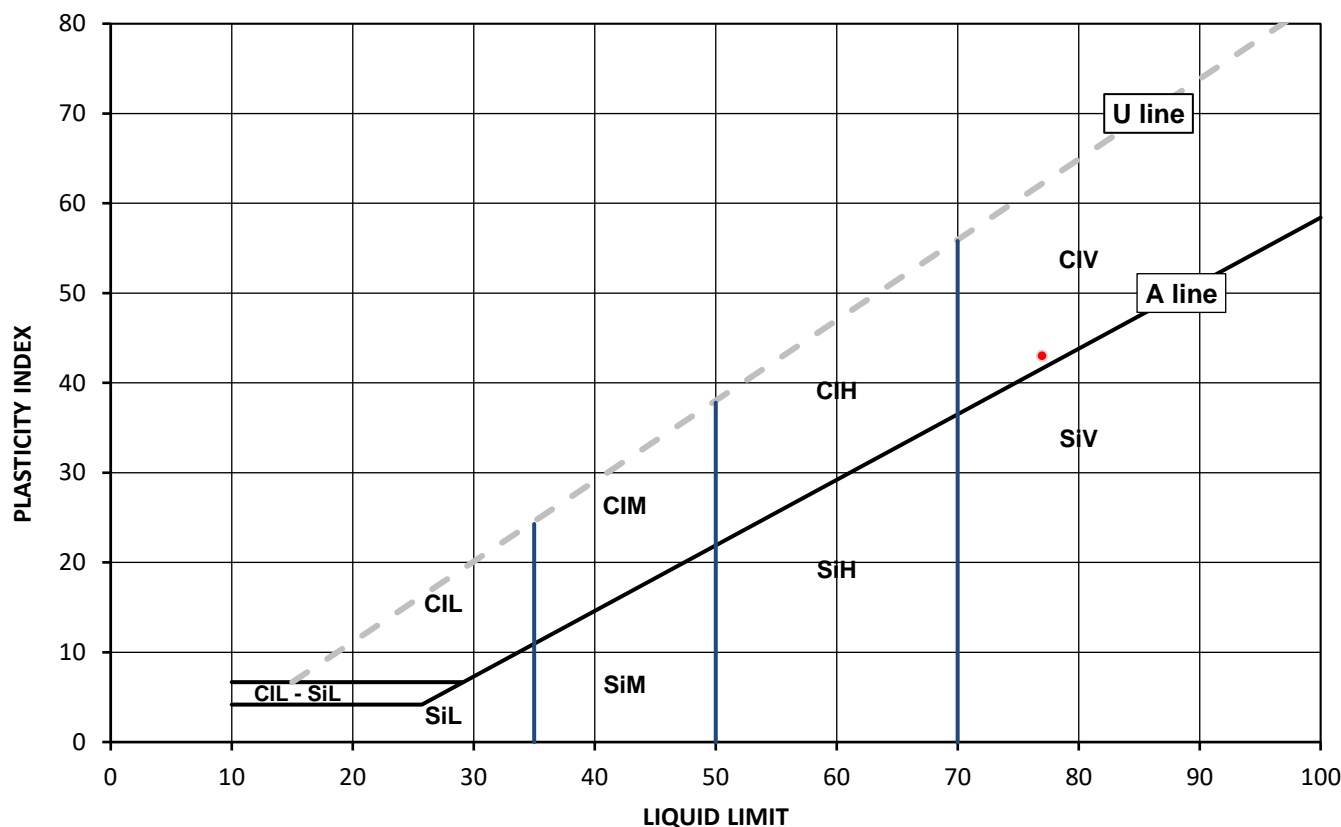
Test Results:

Laboratory Reference: 1770096
Hole No.: BH102
Sample Reference: Not Given
Soil Description: Brown CLAY

Depth Top [m]: 19.50
Depth Base [m]: Not Given
Sample Type: B

Sample Preparation: Tested in natural condition

As Received Moisture Content [W] %	Liquid Limit [WL] %	Plastic Limit [Wp] %	Plasticity Index [Ip] %	% Passing 425µm BS Test Sieve
30	77	34	43	100



Legend, based on BS EN ISO 14688 2:2018 Geotechnical investigation and testing – Identification and classification of soil

	Plasticity	Liquid Limit
Cl	Clay	L Low below 35
Si	Silt	M Medium 35 to 50
		H High 50 to 70
		V Very high exceeding 70
	O Organic	append to classification for organic material (eg CIHO)

Note: Moisture Content by BS 1377-2: 1990: Clause 3.2

Remarks:

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Northampton NN4 7EB



Tested in Accordance with: BS 1377-2: 1990: Clause 4.3 and 5

Client: McAuliffe Group
Client Address: McAuliffe House, Northcott Road,
WV14 0TP

Contact: Matthew Handley
Site Address: Belmont Street

Client Reference: 21-56807
Job Number: 21-56807
Date Sampled: 08/02/2021
Date Received: 09/02/2021
Date Tested: 23/02/2021
Sampled By: Client - MH

Testing carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland

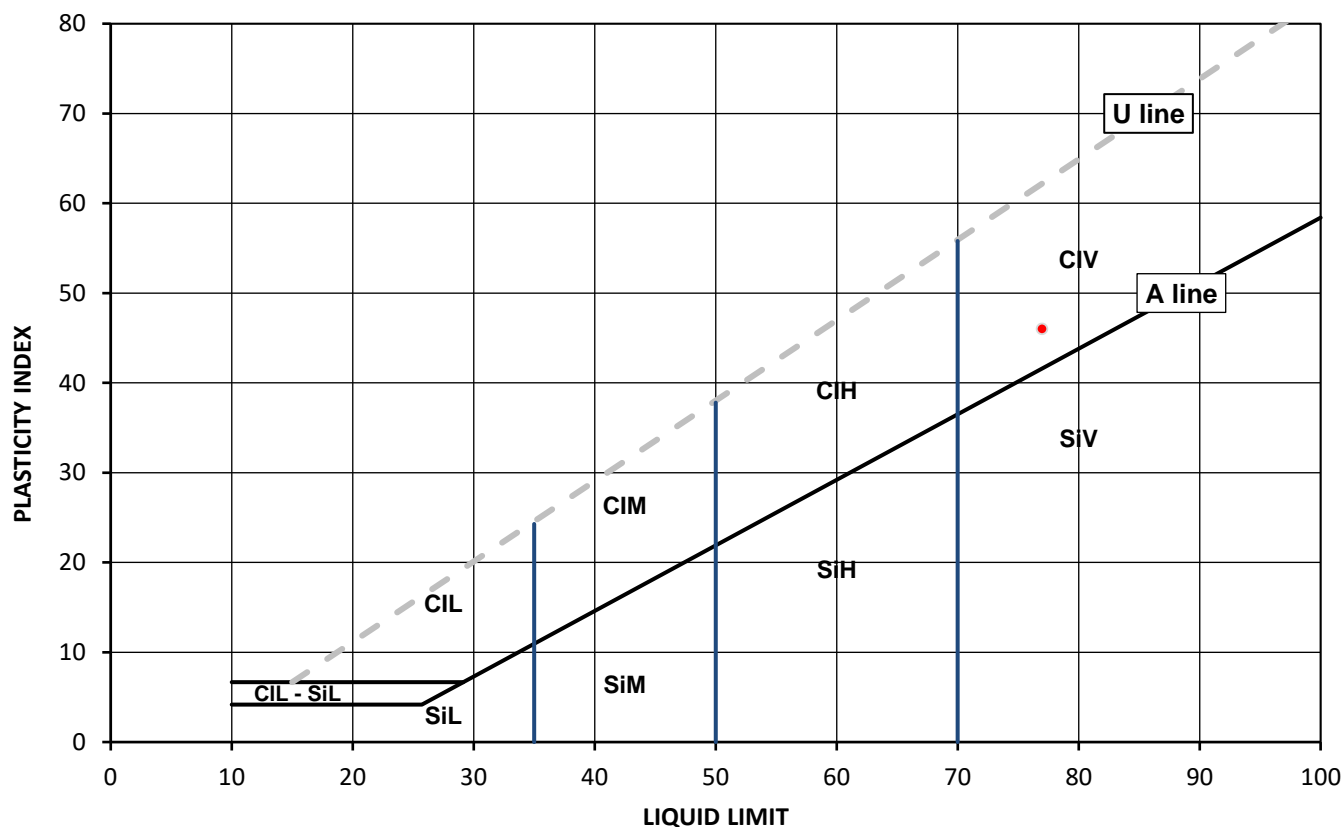
Test Results:

Laboratory Reference: 1770097
Hole No.: BH102
Sample Reference: Not Given
Soil Description: Brown CLAY

Depth Top [m]: 21.00
Depth Base [m]: Not Given
Sample Type: B

Sample Preparation: Tested in natural condition

As Received Moisture Content [W] %	Liquid Limit [WL] %	Plastic Limit [Wp] %	Plasticity Index [Ip] %	% Passing 425µm BS Test Sieve
29	77	31	46	100



Legend, based on BS EN ISO 14688 2:2018 Geotechnical investigation and testing – Identification and classification of soil

		Plasticity	Liquid Limit
Cl	Clay	L Low	below 35
Si	Silt	M Medium	35 to 50
		H High	50 to 70
		V Very high	exceeding 70
		O Organic	append to classification for organic material (eg CIHO)

Note: Moisture Content by BS 1377-2: 1990: Clause 3.2

Remarks:

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SUMMARY REPORT

Summary of Classification Test Results

i2 Analytical Ltd
Unit 8 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB



Tested in Accordance with:

Moisture Content by BS 1377-2: 1990: Clause 3.2; Water Content by BS EN
17892-1: 2014; Atterberg by BS 1377-2: 1990: Clause 4.3 (4 Point Test),
Clause 4.4 (1 Point Test) and 5; PD by BS 1377-2: 1990: Clause 8.2

Client Reference: 21-56807

Job Number: 21-56807

Date Sampled: 08/02/2021

Date Received: 09/02/2021

Date Tested: 23/02/2021

Sampled By: Client - MH

Client: McAuliffe Group

Client Address: McAuliffe House, Northcott Road,
WV14 0TP

Contact: Matthew Handley

Site Address: Belmont Street

Testing carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland

Test results

Laboratory Reference	Hole No.	Sample				Description	Remarks	Moisture Content [W]	Water Content [W]	Atterberg				Density			Total Porosity#		
		Reference	Depth Top	Depth Base	Type					% Passing 425um	WL	Wp	Ip	bulk	dry	PD			
			m	m															
1770076	BH102	Not Given	1.50	Not Given	B	Brown CLAY	Atterberg 4 Point	34		100	77	30	47						
1770078	BH102	Not Given	2.50	Not Given	B	Brown CLAY	Atterberg 4 Point	36		100	82	32	50						
1770080	BH102	Not Given	3.50	Not Given	B	Brown CLAY	Atterberg 4 Point	33		100	79	34	45						
1770081	BH102	Not Given	4.50	Not Given	B	Brown CLAY	Atterberg 4 Point	35		100	82	34	48						
1770082	BH102	Not Given	6.00	Not Given	B	Brown CLAY	Atterberg 4 Point	31		100	77	33	44						
1770083	BH102	Not Given	7.50	Not Given	B	Brown CLAY	Atterberg 4 Point	31		100	70	30	40						
1770084	BH102	Not Given	9.00	Not Given	B	Brown CLAY	Atterberg 4 Point	30		100	75	30	45						
1770085	BH102	Not Given	10.50	Not Given	B	Brown CLAY	Atterberg 4 Point	29		100	75	30	45						
1770090	BH102	Not Given	12.00	Not Given	B	Brown CLAY	Atterberg 4 Point	29		100	79	32	47						
1770091	BH102	Not Given	13.50	Not Given	B	Brown CLAY	Atterberg 4 Point	27		100	72	29	43						

Note: # Non accredited; NP - Non plastic

Comments:

Signed:

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PL Technical Reviewer
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SUMMARY REPORT

Summary of Classification Test Results

i2 Analytical Ltd
Unit 8 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB



Tested in Accordance with:

Client: McAuliffe Group
Client Address: McAuliffe House, Northcott Road,
WV14 0TP

Moisture Content by BS 1377-2: 1990: Clause 3.2; Water Content by BS EN
17892-1: 2014; Atterberg by BS 1377-2: 1990: Clause 4.3 (4 Point Test),
Clause 4.4 (1 Point Test) and 5; PD by BS 1377-2: 1990: Clause 8.2

Client Reference: 21-56807
Job Number: 21-56807
Date Sampled: 08/02/2021
Date Received: 09/02/2021
Date Tested: 23/02/2021
Sampled By: Client - MH

Contact: Matthew Handley
Site Address: Belmont Street

Testing carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland

Test results

Laboratory Reference	Hole No.	Sample				Description	Remarks	Moisture Content [W]	Water Content [W]	Atterberg				Density			Total Porosity#		
		Reference	Depth Top	Depth Base	Type					% Passing 425um	WL	Wp	Ip	bulk	dry	PD			
			m	m										Mg/m3	Mg/m3	Mg/m3			
1770092	BH102	Not Given	15.00	Not Given	B	Brown CLAY	Atterberg 4 Point	29		100	78	27	51						
1770093	BH102	Not Given	16.50	Not Given	B	Brown CLAY	Atterberg 4 Point	29		100	73	28	45						
1770095	BH102	Not Given	18.00	Not Given	B	Brown CLAY	Atterberg 4 Point	30		100	73	32	41						
1770096	BH102	Not Given	19.50	Not Given	B	Brown CLAY	Atterberg 4 Point	30		100	77	34	43						
1770097	BH102	Not Given	21.00	Not Given	B	Brown CLAY	Atterberg 4 Point	29		100	77	31	46						

Note: # Non accredited; NP - Non plastic

Comments:

Signed:

Aleksandra Jurochnik
PL Technical Reviewer
for and on behalf of i2 Analytical Ltd

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TEST CERTIFICATE

Particle Size Distribution

i2 Analytical Ltd
Unit 6 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB



Tested in Accordance with: BS 1377-2: 1990

Client: McAuliffe Group
Client Address: McAuliffe House, Northcott Road,
WV14 0TP

Contact: Matthew Handley
Site Address: Belmont Street

Client Reference: 21-56807
Job Number: 21-56807
Date Sampled: 08/02/2021
Date Received: 09/02/2021
Date Tested: 23/02/2021
Sampled By: Client - MH

Testing carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland

Test Results:

Laboratory Reference: 1770076

Hole No.: BH102

Sample Reference: Not Given

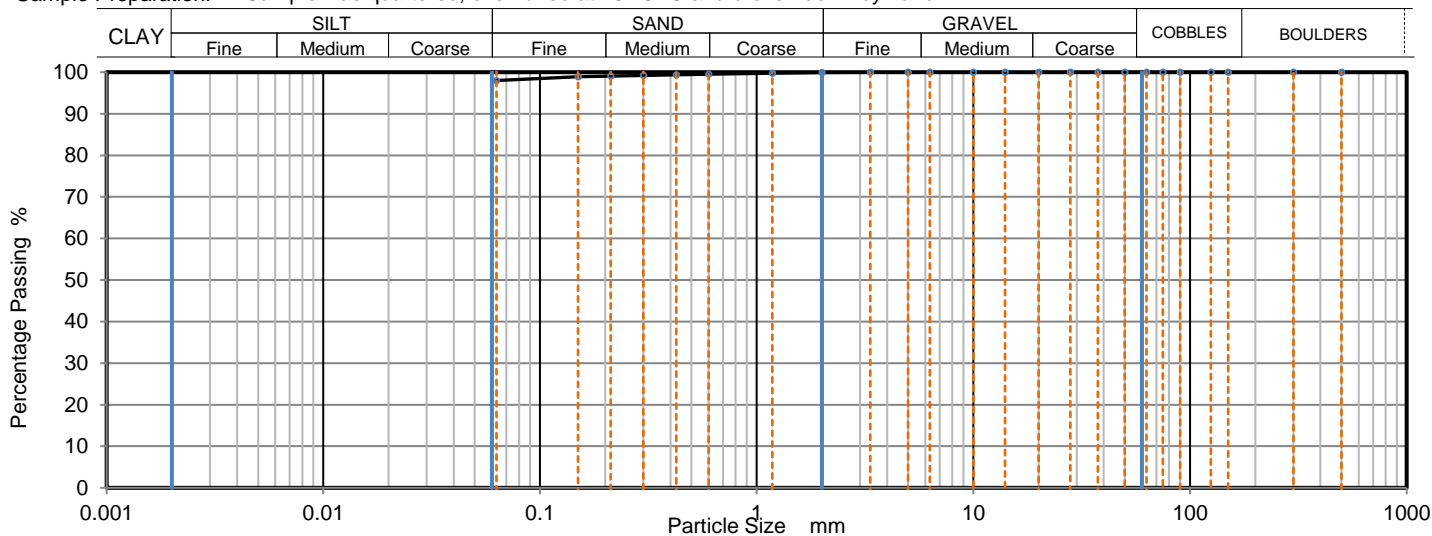
Sample Description: Brown CLAY

Sample Preparation: Sample was quartered, oven dried at 107.5 °C and broken down by hand.

Depth Top [m]: 1.50

Depth Base [m]: Not Given

Sample Type: B



Sieving		Sedimentation	
Particle Size mm	% Passing	Particle Size mm	% Passing
500	100		
300	100		
150	100		
125	100		
90	100		
75	100		
63	100		
50	100		
37.5	100		
28	100		
20	100		
14	100		
10	100		
6.3	100		
5	100		
3.35	100		
2	100		
1.18	100		
0.6	100		
0.425	99		
0.3	99		
0.212	99		
0.15	99		
0.063	98		

Sample Proportions	% dry mass
Very coarse	0
Gravel	0
Sand	2
Fines <0.063mm	98

Grading Analysis	
D100	mm
D60	mm
D30	mm
D10	mm
Uniformity Coefficient	N/A
Curvature Coefficient	

Uniformity Coefficient and Coefficient of Curvature calculated in accordance with BS EN ISO 14688-2: 2004 + A1: 2013

Note: Tested in Accordance with BS1377:Part 2:1990, clause 9.2

Remarks:

Signed:

Aleksandra Jurochnik
PL Technical Reviewer
for and on behalf of i2 Analytical Ltd

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TEST CERTIFICATE

Particle Size Distribution

i2 Analytical Ltd
Unit 6 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB



Tested in Accordance with: BS 1377-2: 1990

Client: McAuliffe Group
Client Address: McAuliffe House, Northcott Road,
WV14 0TP

Contact: Matthew Handley
Site Address: Belmont Street

Client Reference: 21-56807
Job Number: 21-56807
Date Sampled: 08/02/2021
Date Received: 09/02/2021
Date Tested: 23/02/2021
Sampled By: Client - MH

Testing carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland

Test Results:

Laboratory Reference: 1770078

Hole No.: BH102

Sample Reference: Not Given

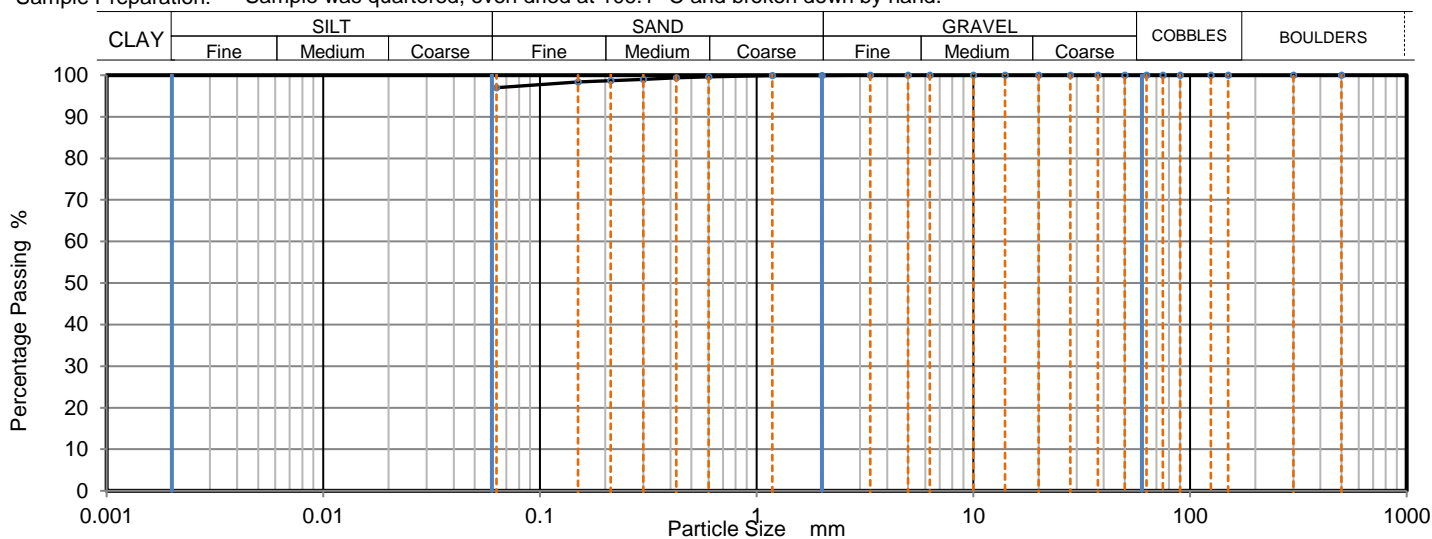
Sample Description: Brown CLAY

Sample Preparation: Sample was quartered, oven dried at 106.1 °C and broken down by hand.

Depth Top [m]: 2.50

Depth Base [m]: Not Given

Sample Type: B



Sieving		Sedimentation	
Particle Size mm	% Passing	Particle Size mm	% Passing
500	100		
300	100		
150	100		
125	100		
90	100		
75	100		
63	100		
50	100		
37.5	100		
28	100		
20	100		
14	100		
10	100		
6.3	100		
5	100		
3.35	100		
2	100		
1.18	100		
0.6	100		
0.425	99		
0.3	99		
0.212	99		
0.15	98		
0.063	98		

Sample Proportions	% dry mass
Very coarse	0
Gravel	0
Sand	2
Fines <0.063mm	98

Grading Analysis	
D100	mm
D60	mm
D30	mm
D10	mm
Uniformity Coefficient	N/A
Curvature Coefficient	

Uniformity Coefficient and Coefficient of Curvature calculated in accordance with BS EN ISO 14688-2: 2004 + A1: 2013

Note: Tested in Accordance with BS1377:Part 2:1990, clause 9.2

Remarks:

Signed:

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PL Technical Reviewer
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TEST CERTIFICATE

Particle Size Distribution

i2 Analytical Ltd
Unit 6 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB



Tested in Accordance with: BS 1377-2: 1990

Client: McAuliffe Group
Client Address: McAuliffe House, Northcott Road,
WV14 0TP

Contact: Matthew Handley
Site Address: Belmont Street

Client Reference: 21-56807
Job Number: 21-56807
Date Sampled: 08/02/2021
Date Received: 09/02/2021
Date Tested: 23/02/2021
Sampled By: Client - MH

Testing carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland

Test Results:

Laboratory Reference: 1770080

Hole No.: BH102

Sample Reference: Not Given

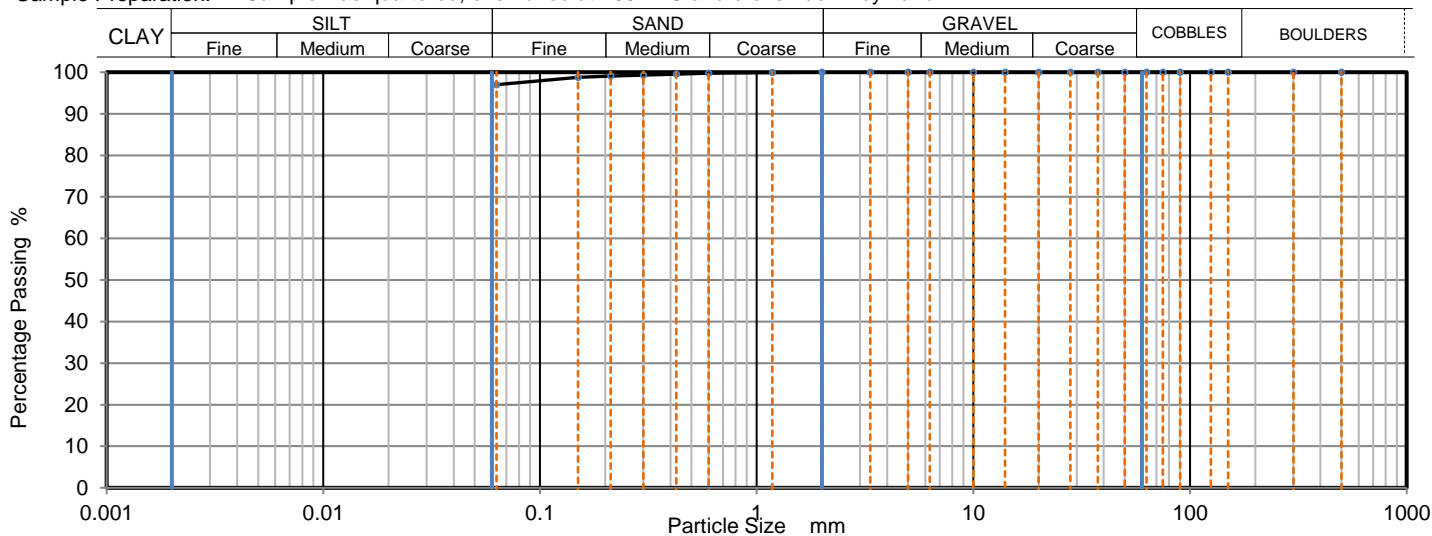
Sample Description: Brown CLAY

Sample Preparation: Sample was quartered, oven dried at 106.1 °C and broken down by hand.

Depth Top [m]: 3.50

Depth Base [m]: Not Given

Sample Type: B



Sieving		Sedimentation	
Particle Size mm	% Passing	Particle Size mm	% Passing
500	100		
300	100		
150	100		
125	100		
90	100		
75	100		
63	100		
50	100		
37.5	100		
28	100		
20	100		
14	100		
10	100		
6.3	100		
5	100		
3.35	100		
2	100		
1.18	100		
0.6	100		
0.425	100		
0.3	99		
0.212	99		
0.15	99		
0.063	98		

Sample Proportions	% dry mass
Very coarse	0
Gravel	0
Sand	2
Fines <0.063mm	98

Grading Analysis	
D100	mm
D60	mm
D30	mm
D10	mm
Uniformity Coefficient	N/A
Curvature Coefficient	

Uniformity Coefficient and Coefficient of Curvature calculated in accordance with BS EN ISO 14688-2: 2004 + A1: 2013

Note: Tested in Accordance with BS1377:Part 2:1990, clause 9.2

Remarks:

Signed:

Aleksandra Jurochnik
PL Technical Reviewer
for and on behalf of i2 Analytical Ltd

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TEST CERTIFICATE

Particle Size Distribution

i2 Analytical Ltd
Unit 6 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB



Tested in Accordance with: BS 1377-2: 1990

Client: McAuliffe Group
Client Address: McAuliffe House, Northcott Road,
WV14 0TP

Contact: Matthew Handley
Site Address: Belmont Street

Client Reference: 21-56807
Job Number: 21-56807
Date Sampled: 08/02/2021
Date Received: 09/02/2021
Date Tested: 23/02/2021
Sampled By: Client - MH

Testing carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland

Test Results:

Laboratory Reference: 1770081

Hole No.: BH102

Sample Reference: Not Given

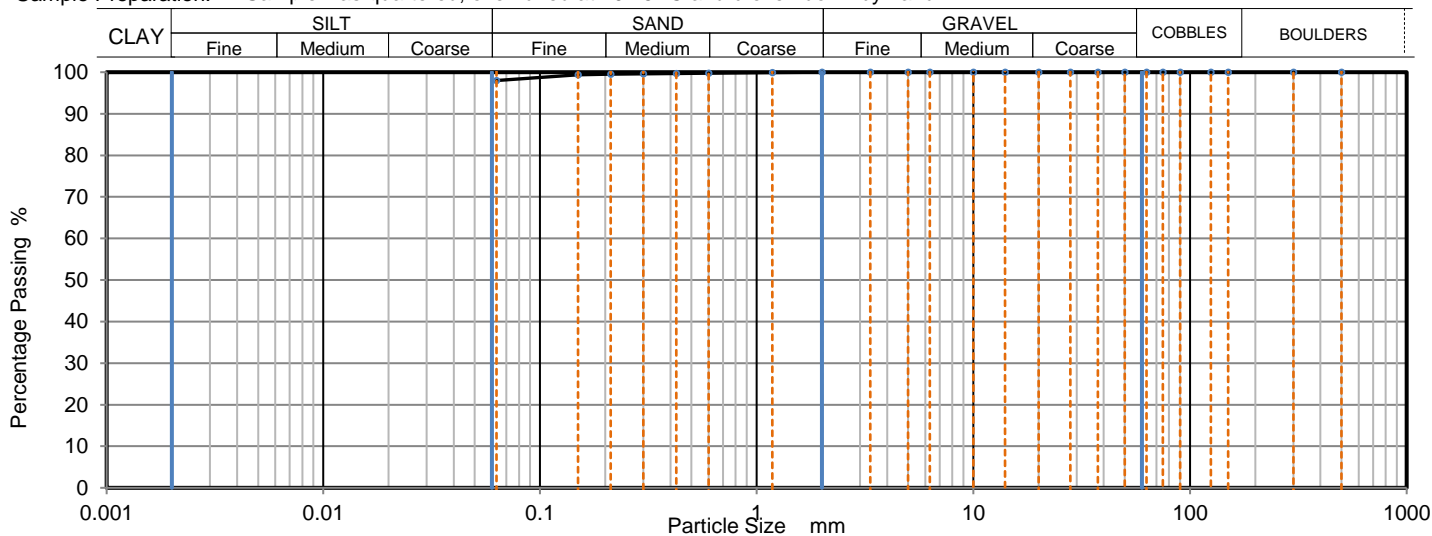
Sample Description: Brown CLAY

Sample Preparation: Sample was quartered, oven dried at 107.5 °C and broken down by hand.

Depth Top [m]: 4.50

Depth Base [m]: Not Given

Sample Type: B



Sieving		Sedimentation	
Particle Size mm	% Passing	Particle Size mm	% Passing
500	100		
300	100		
150	100		
125	100		
90	100		
75	100		
63	100		
50	100		
37.5	100		
28	100		
20	100		
14	100		
10	100		
6.3	100		
5	100		
3.35	100		
2	100		
1.18	100		
0.6	100		
0.425	100		
0.3	100		
0.212	100		
0.15	99		
0.063	99		

Sample Proportions	% dry mass
Very coarse	0
Gravel	0
Sand	1
Fines <0.063mm	98

Grading Analysis	
D100	mm
D60	mm
D30	mm
D10	mm
Uniformity Coefficient	N/A
Curvature Coefficient	

Uniformity Coefficient and Coefficient of Curvature calculated in accordance with BS EN ISO 14688-2: 2004 + A1: 2013

Note: Tested in Accordance with BS1377:Part 2:1990, clause 9.2

Remarks:

Signed:

Aleksandra Jurochnik
PL Technical Reviewer
for and on behalf of i2 Analytical Ltd

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TEST CERTIFICATE

Particle Size Distribution

i2 Analytical Ltd
Unit 6 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB



Tested in Accordance with: BS 1377-2: 1990

Client: McAuliffe Group
Client Address: McAuliffe House, Northcott Road,
WV14 0TP

Contact: Matthew Handley
Site Address: Belmont Street

Client Reference: 21-56807
Job Number: 21-56807
Date Sampled: 08/02/2021
Date Received: 09/02/2021
Date Tested: 23/02/2021
Sampled By: Client - MH

Testing carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland

Test Results:

Laboratory Reference: 1770082

Hole No.: BH102

Sample Reference: Not Given

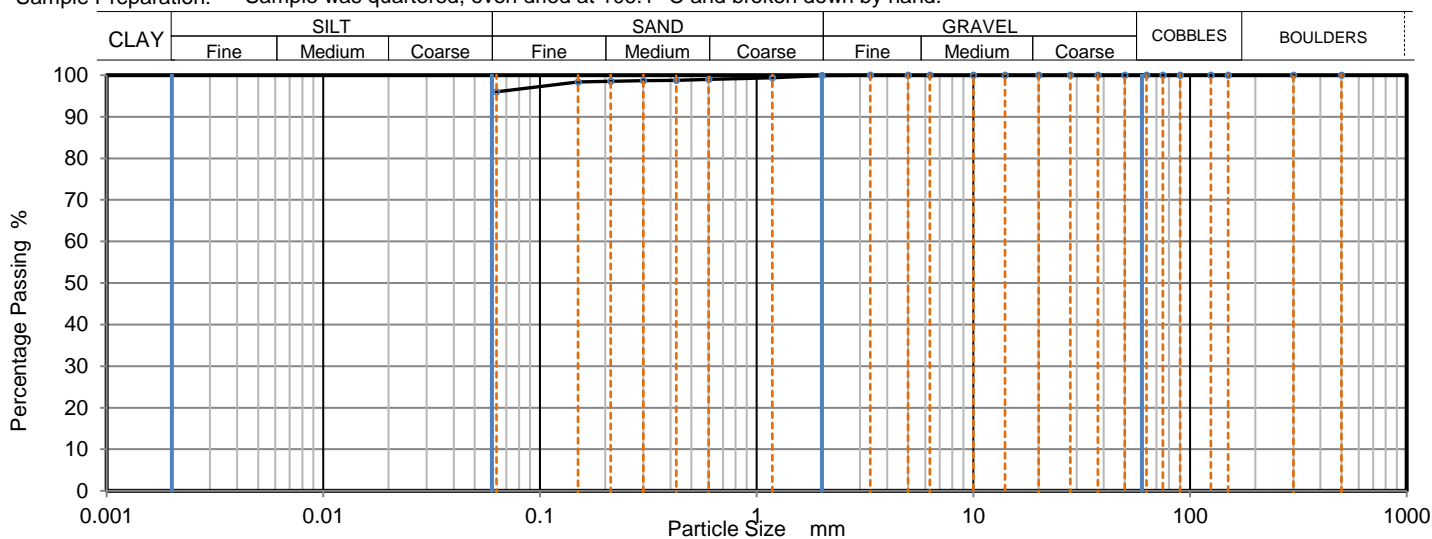
Sample Description: Brown CLAY

Sample Preparation: Sample was quartered, oven dried at 106.1 °C and broken down by hand.

Depth Top [m]: 6.00

Depth Base [m]: Not Given

Sample Type: B



Sieving		Sedimentation	
Particle Size mm	% Passing	Particle Size mm	% Passing
500	100		
300	100		
150	100		
125	100		
90	100		
75	100		
63	100		
50	100		
37.5	100		
28	100		
20	100		
14	100		
10	100		
6.3	100		
5	100		
3.35	100		
2	100		
1.18	99		
0.6	99		
0.425	99		
0.3	99		
0.212	99		
0.15	98		
0.063	96		

Sample Proportions	% dry mass
Very coarse	0
Gravel	0
Sand	4
Fines <0.063mm	96

Grading Analysis	
D100	mm
D60	mm
D30	mm
D10	mm
Uniformity Coefficient	N/A
Curvature Coefficient	

Uniformity Coefficient and Coefficient of Curvature calculated in accordance with BS EN ISO 14688-2: 2004 + A1: 2013

Note: Tested in Accordance with BS1377:Part 2:1990, clause 9.2

Remarks:

Signed:

Aleksandra Jurochnik
PL Technical Reviewer
for and on behalf of i2 Analytical Ltd

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TEST CERTIFICATE

Particle Size Distribution

i2 Analytical Ltd
Unit 6 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB



Tested in Accordance with: BS 1377-2: 1990

Client: McAuliffe Group
Client Address: McAuliffe House, Northcott Road,
WV14 0TP

Contact: Matthew Handley
Site Address: Belmont Street

Client Reference: 21-56807
Job Number: 21-56807
Date Sampled: 08/02/2021
Date Received: 09/02/2021
Date Tested: 23/02/2021
Sampled By: Client - MH

Testing carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland

Test Results:

Laboratory Reference: 1770083

Hole No.: BH102

Sample Reference: Not Given

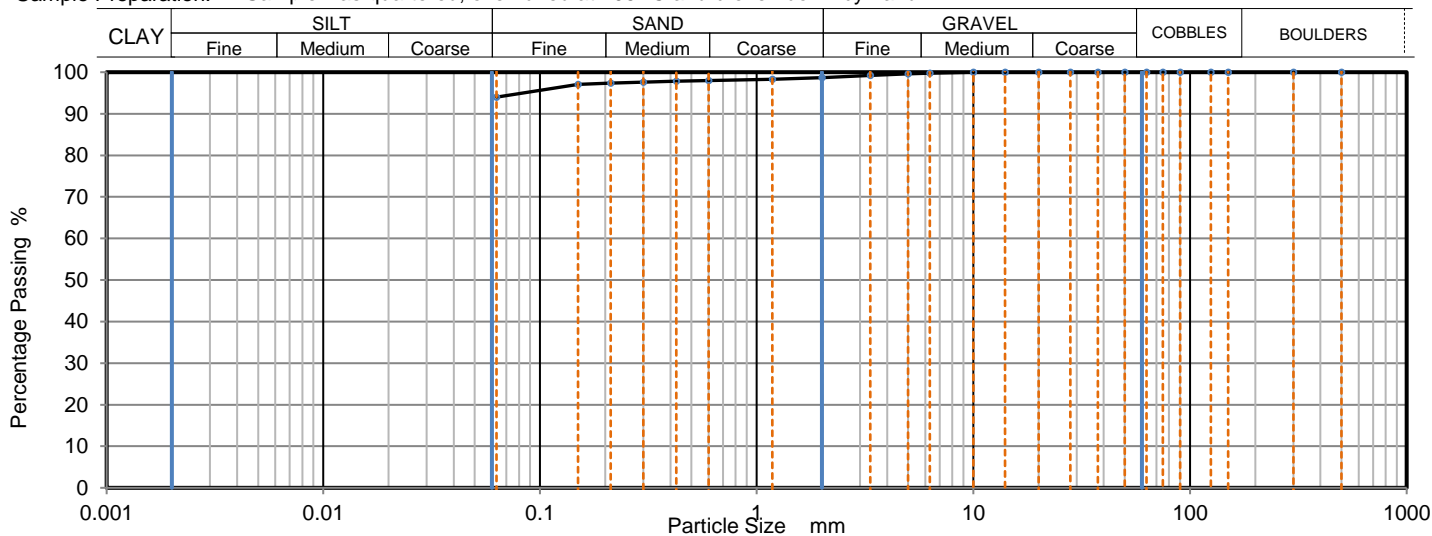
Sample Description: Brown CLAY

Sample Preparation: Sample was quartered, oven dried at 106 °C and broken down by hand.

Depth Top [m]: 7.50

Depth Base [m]: Not Given

Sample Type: B



Sieving		Sedimentation	
Particle Size mm	% Passing	Particle Size mm	% Passing
500	100		
300	100		
150	100		
125	100		
90	100		
75	100		
63	100		
50	100		
37.5	100		
28	100		
20	100		
14	100		
10	100		
6.3	100		
5	100		
3.35	99		
2	99		
1.18	98		
0.6	98		
0.425	98		
0.3	98		
0.212	97		
0.15	97		
0.063	94		

Sample Proportions	% dry mass
Very coarse	0
Gravel	1
Sand	4
Fines <0.063mm	94

Grading Analysis	
D100	mm
D60	mm
D30	mm
D10	mm
Uniformity Coefficient	N/A
Curvature Coefficient	

Uniformity Coefficient and Coefficient of Curvature calculated in accordance with BS EN ISO 14688-2: 2004 + A1: 2013

Note: Tested in Accordance with BS1377:Part 2:1990, clause 9.2

Remarks:

Signed:

Aleksandra Jurochnik
PL Technical Reviewer
for and on behalf of i2 Analytical Ltd

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TEST CERTIFICATE

Particle Size Distribution

i2 Analytical Ltd
Unit 6 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB



Tested in Accordance with: BS 1377-2: 1990

Client: McAuliffe Group
Client Address: McAuliffe House, Northcott Road,
WV14 0TP

Contact: Matthew Handley
Site Address: Belmont Street

Client Reference: 21-56807
Job Number: 21-56807
Date Sampled: 08/02/2021
Date Received: 09/02/2021
Date Tested: 23/02/2021
Sampled By: Client - MH

Testing carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland

Test Results:

Laboratory Reference: 1770084

Hole No.: BH102

Sample Reference: Not Given

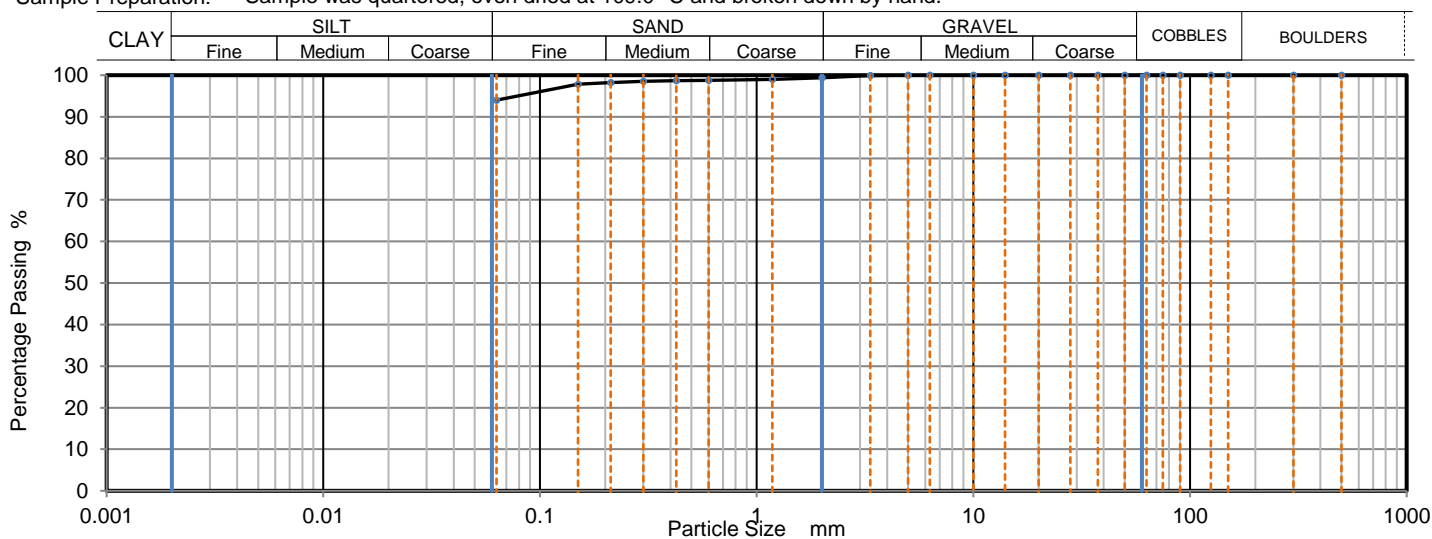
Sample Description: Brown CLAY

Sample Preparation: Sample was quartered, oven dried at 109.0 °C and broken down by hand.

Depth Top [m]: 9.00

Depth Base [m]: Not Given

Sample Type: B



Sieving		Sedimentation	
Particle Size mm	% Passing	Particle Size mm	% Passing
500	100		
300	100		
150	100		
125	100		
90	100		
75	100		
63	100		
50	100		
37.5	100		
28	100		
20	100		
14	100		
10	100		
6.3	100		
5	100		
3.35	100		
2	99		
1.18	99		
0.6	99		
0.425	99		
0.3	99		
0.212	98		
0.15	98		
0.063	94		

Sample Proportions	% dry mass
Very coarse	0
Gravel	1
Sand	5
Fines <0.063mm	94

Grading Analysis	
D100	mm
D60	mm
D30	mm
D10	mm
Uniformity Coefficient	N/A
Curvature Coefficient	

Uniformity Coefficient and Coefficient of Curvature calculated in accordance with BS EN ISO 14688-2: 2004 + A1: 2013

Note: Tested in Accordance with BS1377:Part 2:1990, clause 9.2

Remarks:

Signed:

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PL Technical Reviewer
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TEST CERTIFICATE

Particle Size Distribution

i2 Analytical Ltd
Unit 6 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB



Tested in Accordance with: BS 1377-2: 1990

Client: McAuliffe Group
Client Address: McAuliffe House, Northcott Road,
WV14 0TP

Contact: Matthew Handley
Site Address: Belmont Street

Client Reference: 21-56807
Job Number: 21-56807
Date Sampled: 08/02/2021
Date Received: 09/02/2021
Date Tested: 23/02/2021
Sampled By: Client - MH

Testing carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland

Test Results:

Laboratory Reference: 1770085

Hole No.: BH102

Sample Reference: Not Given

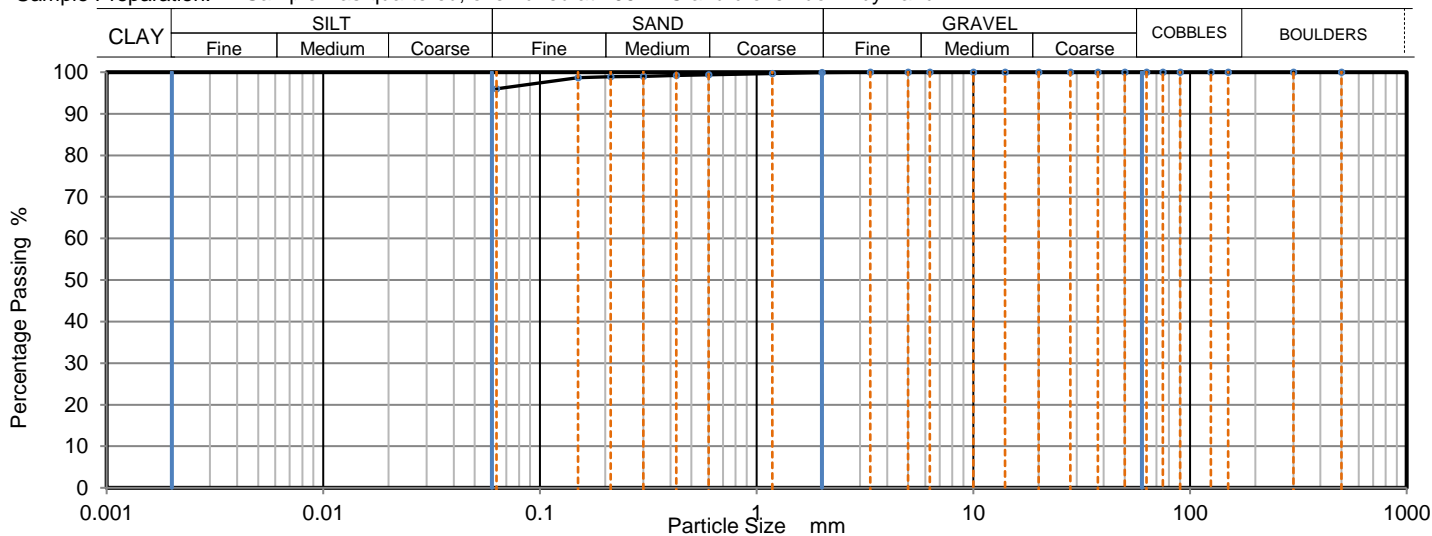
Sample Description: Brown CLAY

Sample Preparation: Sample was quartered, oven dried at 106.1 °C and broken down by hand.

Depth Top [m]: 10.50

Depth Base [m]: Not Given

Sample Type: B



Sieving		Sedimentation	
Particle Size mm	% Passing	Particle Size mm	% Passing
500	100		
300	100		
150	100		
125	100		
90	100		
75	100		
63	100		
50	100		
37.5	100		
28	100		
20	100		
14	100		
10	100		
6.3	100		
5	100		
3.35	100		
2	100		
1.18	100		
0.6	99		
0.425	99		
0.3	99		
0.212	99		
0.15	99		
0.063	96		

Sample Proportions	% dry mass
Very coarse	0
Gravel	0
Sand	4
Fines <0.063mm	96

Grading Analysis	
D100	mm
D60	mm
D30	mm
D10	mm
Uniformity Coefficient	N/A
Curvature Coefficient	

Uniformity Coefficient and Coefficient of Curvature calculated in accordance with BS EN ISO 14688-2: 2004 + A1: 2013

Note: Tested in Accordance with BS1377:Part 2:1990, clause 9.2

Remarks:

Signed:

Aleksandra Jurochnik
PL Technical Reviewer
for and on behalf of i2 Analytical Ltd

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TEST CERTIFICATE

Particle Size Distribution

i2 Analytical Ltd
Unit 6 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB



Tested in Accordance with: BS 1377-2: 1990

Client: McAuliffe Group
Client Address: McAuliffe House, Northcott Road,
WV14 0TP

Contact: Matthew Handley
Site Address: Belmont Street

Client Reference: 21-56807
Job Number: 21-56807
Date Sampled: 08/02/2021
Date Received: 09/02/2021
Date Tested: 23/02/2021
Sampled By: Client - MH

Testing carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland

Test Results:

Laboratory Reference: 1770090

Hole No.: BH102

Sample Reference: Not Given

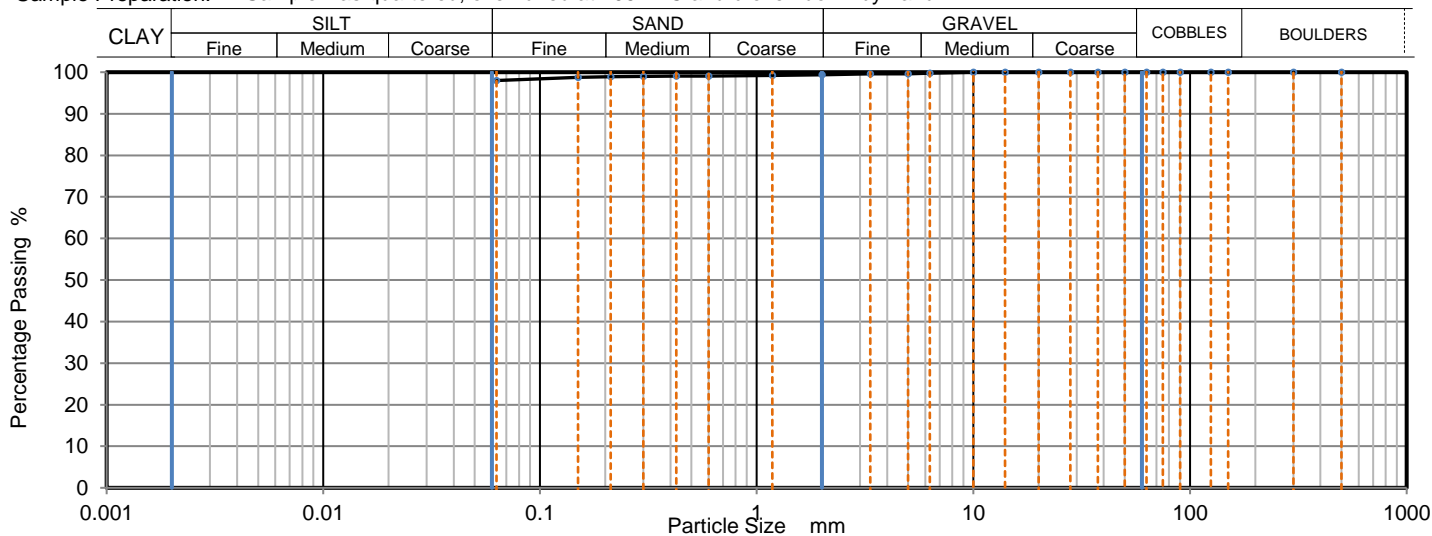
Sample Description: Brown CLAY

Sample Preparation: Sample was quartered, oven dried at 106.2 °C and broken down by hand.

Depth Top [m]: 12.00

Depth Base [m]: Not Given

Sample Type: B



Sieving		Sedimentation	
Particle Size mm	% Passing	Particle Size mm	% Passing
500	100		
300	100		
150	100		
125	100		
90	100		
75	100		
63	100		
50	100		
37.5	100		
28	100		
20	100		
14	100		
10	100		
6.3	100		
5	100		
3.35	100		
2	99		
1.18	99		
0.6	99		
0.425	99		
0.3	99		
0.212	99		
0.15	99		
0.063	99		

Sample Proportions	% dry mass
Very coarse	0
Gravel	1
Sand	1
Fines <0.063mm	99

Grading Analysis	
D100	mm
D60	mm
D30	mm
D10	mm
Uniformity Coefficient	N/A
Curvature Coefficient	

Uniformity Coefficient and Coefficient of Curvature calculated in accordance with BS EN ISO 14688-2: 2004 + A1: 2013

Note: Tested in Accordance with BS1377:Part 2:1990, clause 9.2

Remarks:

Signed:

Aleksandra Jurochnik
PL Technical Reviewer
for and on behalf of i2 Analytical Ltd

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TEST CERTIFICATE

Particle Size Distribution

i2 Analytical Ltd
Unit 6 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB



Tested in Accordance with: BS 1377-2: 1990

Client: McAuliffe Group
Client Address: McAuliffe House, Northcott Road,
WV14 0TP

Contact: Matthew Handley
Site Address: Belmont Street

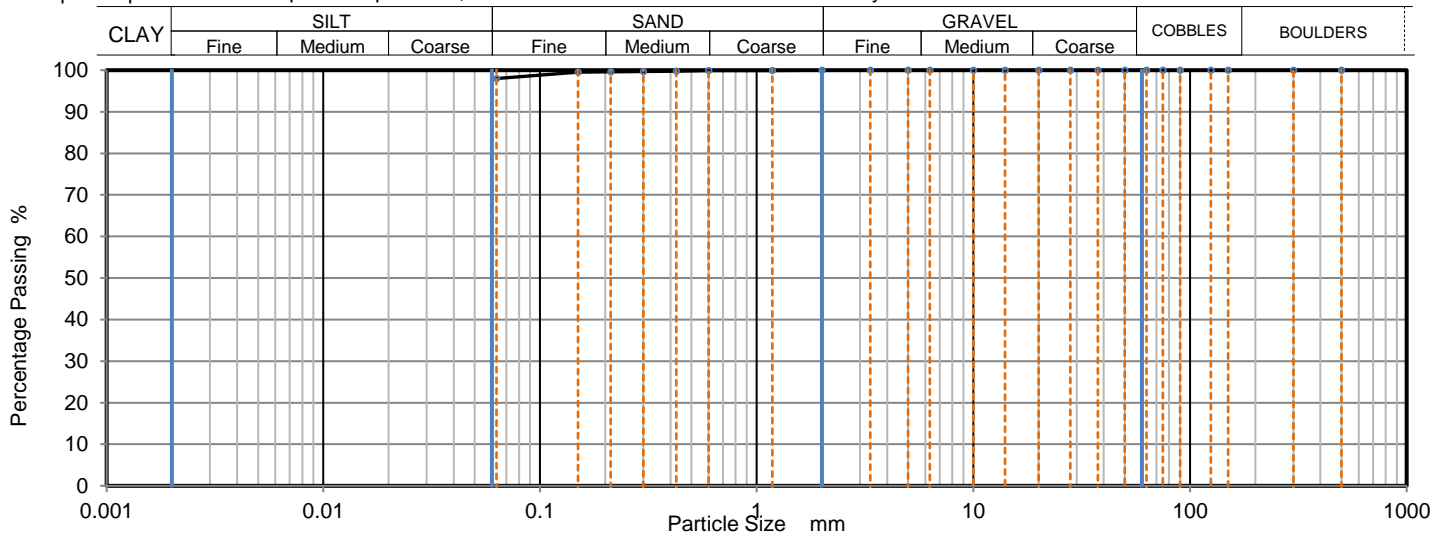
Client Reference: 21-56807
Job Number: 21-56807
Date Sampled: 08/02/2021
Date Received: 09/02/2021
Date Tested: 23/02/2021
Sampled By: Client - MH

Testing carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland

Test Results:

Laboratory Reference: 1770091
Hole No.: BH102
Sample Reference: Not Given
Sample Description: Brown CLAY
Sample Preparation: Sample was quartered, oven dried at 106.0 °C and broken down by hand.

Depth Top [m]: 13.50
Depth Base [m]: Not Given
Sample Type: B



Sieving		Sedimentation	
Particle Size mm	% Passing	Particle Size mm	% Passing
500	100		
300	100		
150	100		
125	100		
90	100		
75	100		
63	100		
50	100		
37.5	100		
28	100		
20	100		
14	100		
10	100		
6.3	100		
5	100		
3.35	100		
2	100		
1.18	100		
0.6	100		
0.425	100		
0.3	100		
0.212	100		
0.15	100		
0.063	98		

Sample Proportions	% dry mass
Very coarse	0
Gravel	0
Sand	2
Fines <0.063mm	98

Grading Analysis	
D100	mm
D60	mm
D30	mm
D10	mm
Uniformity Coefficient	N/A
Curvature Coefficient	

Uniformity Coefficient and Coefficient of Curvature calculated in accordance with BS EN ISO 14688-2: 2004 + A1: 2013

Note: Tested in Accordance with BS1377:Part 2:1990, clause 9.2

Remarks:

Signed:

Aleksandra Jurochnik
PL Technical Reviewer
for and on behalf of i2 Analytical Ltd

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TEST CERTIFICATE

Particle Size Distribution

i2 Analytical Ltd
Unit 6 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB



Tested in Accordance with: BS 1377-2: 1990

Client: McAuliffe Group
Client Address: McAuliffe House, Northcott Road,
WV14 0TP

Contact: Matthew Handley
Site Address: Belmont Street

Client Reference: 21-56807
Job Number: 21-56807
Date Sampled: 08/02/2021
Date Received: 09/02/2021
Date Tested: 23/02/2021
Sampled By: Client - MH

Testing carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland

Test Results:

Laboratory Reference: 1770092

Hole No.: BH102

Sample Reference: Not Given

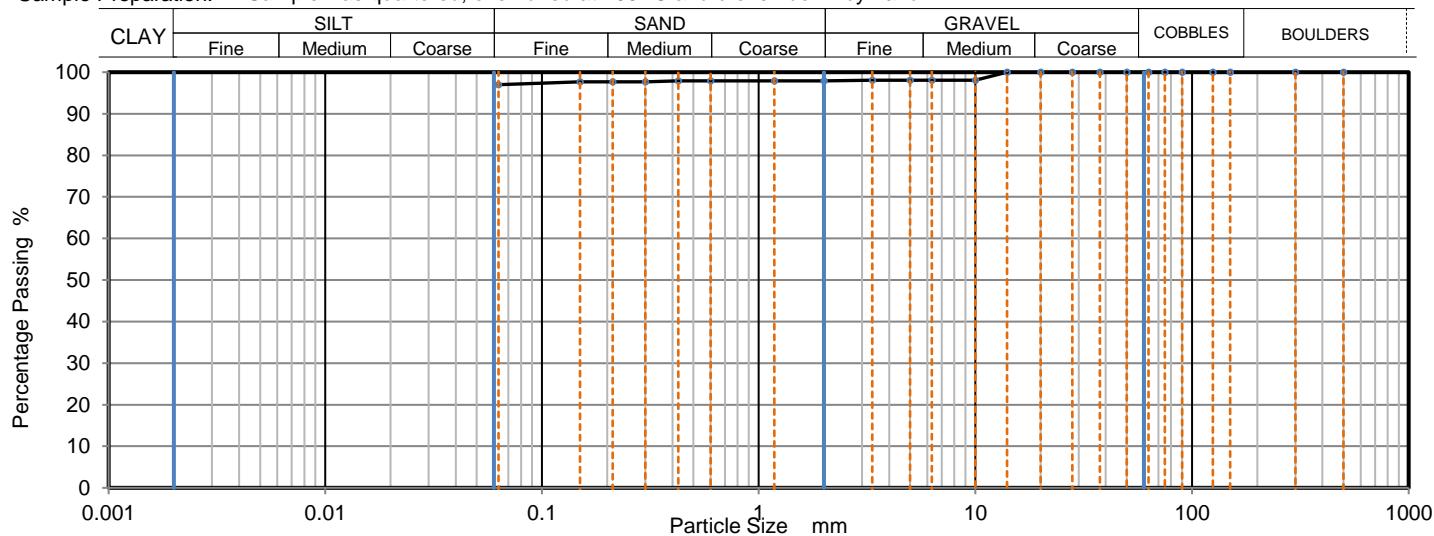
Sample Description: Brown CLAY

Sample Preparation: Sample was quartered, oven dried at 106 °C and broken down by hand.

Depth Top [m]: 15.00

Depth Base [m]: Not Given

Sample Type: B



Sieving		Sedimentation	
Particle Size mm	% Passing	Particle Size mm	% Passing
500	100		
300	100		
150	100		
125	100		
90	100		
75	100		
63	100		
50	100		
37.5	100		
28	100		
20	100		
14	100		
10	98		
6.3	98		
5	98		
3.35	98		
2	98		
1.18	98		
0.6	98		
0.425	98		
0.3	98		
0.212	98		
0.15	98		
0.063	98		

Sample Proportions	% dry mass
Very coarse	0
Gravel	2
Sand	0
Fines <0.063mm	97

Grading Analysis	
D100	mm
D60	mm
D30	mm
D10	mm
Uniformity Coefficient	N/A
Curvature Coefficient	

Uniformity Coefficient and Coefficient of Curvature calculated in accordance with BS EN ISO 14688-2: 2004 + A1: 2013

Note: Tested in Accordance with BS1377:Part 2:1990, clause 9.2

Remarks:

Signed:

Aleksandra Jurochnik
PL Technical Reviewer
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TEST CERTIFICATE

Particle Size Distribution

i2 Analytical Ltd
Unit 6 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB



Tested in Accordance with: BS 1377-2: 1990

Client: McAuliffe Group
Client Address: McAuliffe House, Northcott Road,
WV14 0TP

Contact: Matthew Handley
Site Address: Belmont Street

Client Reference: 21-56807
Job Number: 21-56807
Date Sampled: 08/02/2021
Date Received: 09/02/2021
Date Tested: 23/02/2021
Sampled By: Client - MH

Testing carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland

Test Results:

Laboratory Reference: 1770093

Hole No.: BH102

Sample Reference: Not Given

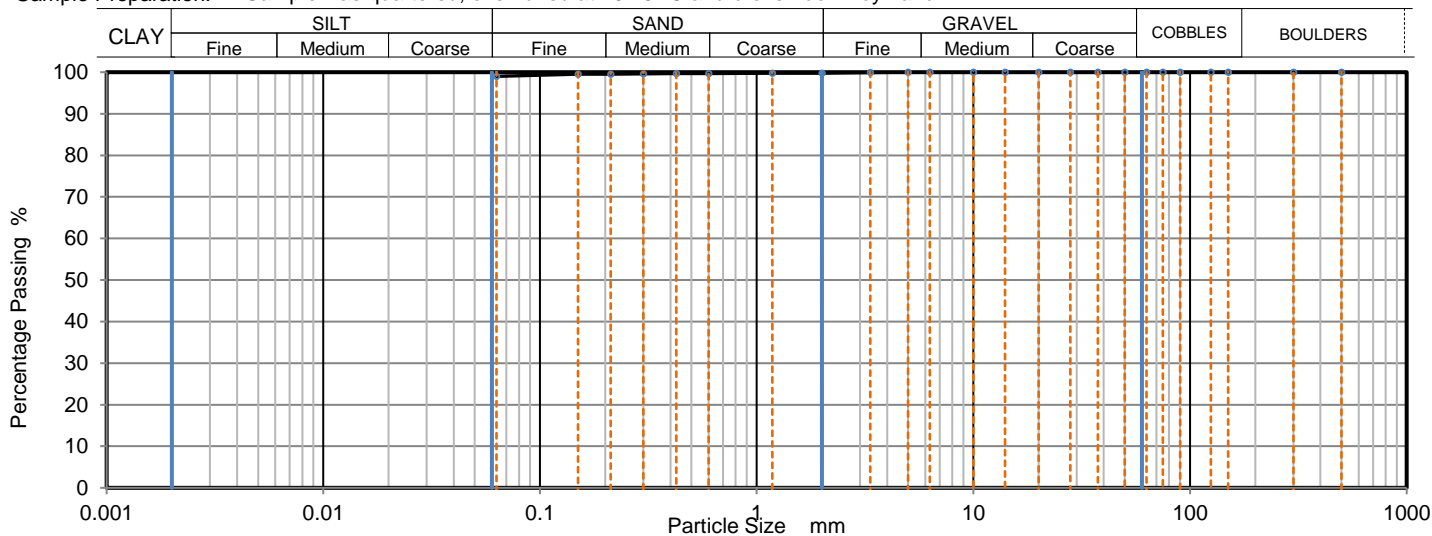
Sample Description: Brown CLAY

Sample Preparation: Sample was quartered, oven dried at 107.5 °C and broken down by hand.

Depth Top [m]: 16.50

Depth Base [m]: Not Given

Sample Type: B



Sieving		Sedimentation	
Particle Size mm	% Passing	Particle Size mm	% Passing
500	100		
300	100		
150	100		
125	100		
90	100		
75	100		
63	100		
50	100		
37.5	100		
28	100		
20	100		
14	100		
10	100		
6.3	100		
5	100		
3.35	100		
2	100		
1.18	100		
0.6	100		
0.425	100		
0.3	100		
0.212	100		
0.15	100		
0.063	99		

Sample Proportions	% dry mass
Very coarse	0
Gravel	0
Sand	1
Fines <0.063mm	99

Grading Analysis	
D100	mm
D60	mm
D30	mm
D10	mm
Uniformity Coefficient	N/A
Curvature Coefficient	

Uniformity Coefficient and Coefficient of Curvature calculated in accordance with BS EN ISO 14688-2: 2004 + A1: 2013

Note: Tested in Accordance with BS1377:Part 2:1990, clause 9.2

Remarks:

Signed:

Aleksandra Jurochnik
PL Technical Reviewer
for and on behalf of i2 Analytical Ltd

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TEST CERTIFICATE

Particle Size Distribution

i2 Analytical Ltd
Unit 6 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB



Tested in Accordance with: BS 1377-2: 1990

Client: McAuliffe Group
Client Address: McAuliffe House, Northcott Road,
WV14 0TP

Contact: Matthew Handley
Site Address: Belmont Street

Client Reference: 21-56807
Job Number: 21-56807
Date Sampled: 08/02/2021
Date Received: 09/02/2021
Date Tested: 23/02/2021
Sampled By: Client - MH

Testing carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland

Test Results:

Laboratory Reference: 1770095

Hole No.: BH102

Sample Reference: Not Given

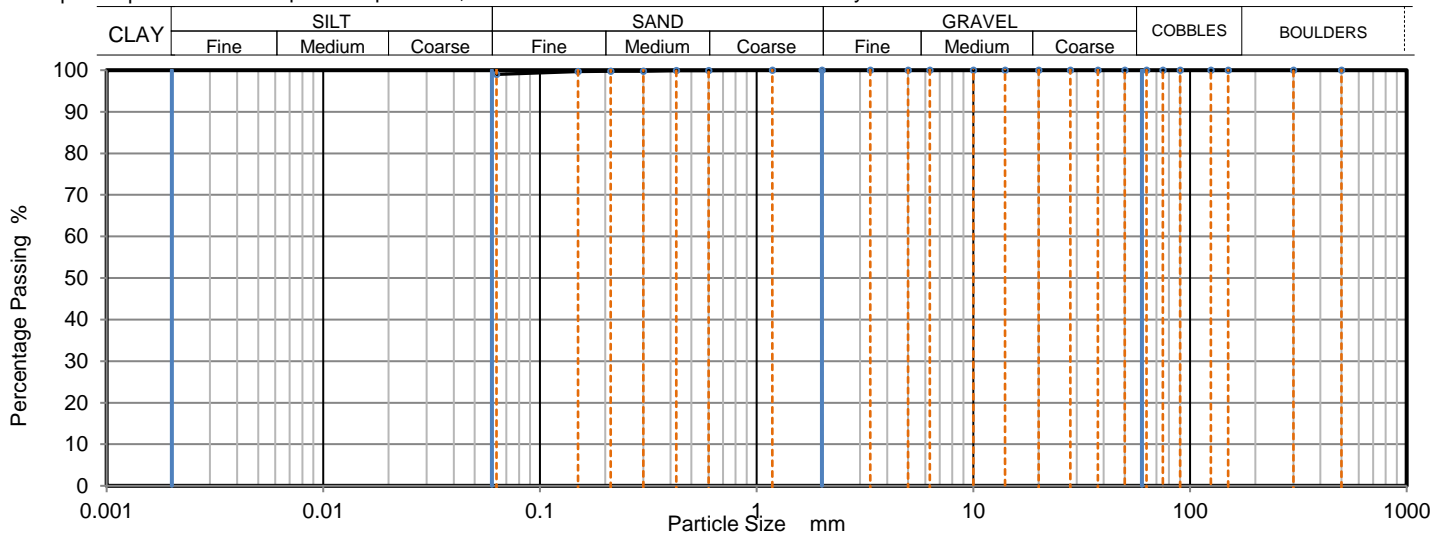
Sample Description: Brown CLAY

Sample Preparation: Sample was quartered, oven dried at 106 °C and broken down by hand.

Depth Top [m]: 18.00

Depth Base [m]: Not Given

Sample Type: B



Sieving		Sedimentation	
Particle Size mm	% Passing	Particle Size mm	% Passing
500	100		
300	100		
150	100		
125	100		
90	100		
75	100		
63	100		
50	100		
37.5	100		
28	100		
20	100		
14	100		
10	100		
6.3	100		
5	100		
3.35	100		
2	100		
1.18	100		
0.6	100		
0.425	100		
0.3	100		
0.212	100		
0.15	100		
0.063	100		

Sample Proportions	% dry mass
Very coarse	0
Gravel	0
Sand	0
Fines <0.063mm	100

Grading Analysis	
D100	mm
D60	mm
D30	mm
D10	mm
Uniformity Coefficient	N/A
Curvature Coefficient	

Uniformity Coefficient and Coefficient of Curvature calculated in accordance with BS EN ISO 14688-2: 2004 + A1: 2013

Note: Tested in Accordance with BS1377:Part 2:1990, clause 9.2

Remarks:

Signed:

Aleksandra Jurochnik
PL Technical Reviewer
for and on behalf of i2 Analytical Ltd

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TEST CERTIFICATE

Particle Size Distribution

i2 Analytical Ltd
Unit 6 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB



Tested in Accordance with: BS 1377-2: 1990

Client: McAuliffe Group
Client Address: McAuliffe House, Northcott Road,
WV14 0TP

Contact: Matthew Handley
Site Address: Belmont Street

Client Reference: 21-56807
Job Number: 21-56807
Date Sampled: 08/02/2021
Date Received: 09/02/2021
Date Tested: 23/02/2021
Sampled By: Client - MH

Testing carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland

Test Results:

Laboratory Reference: 1770096

Hole No.: BH102

Sample Reference: Not Given

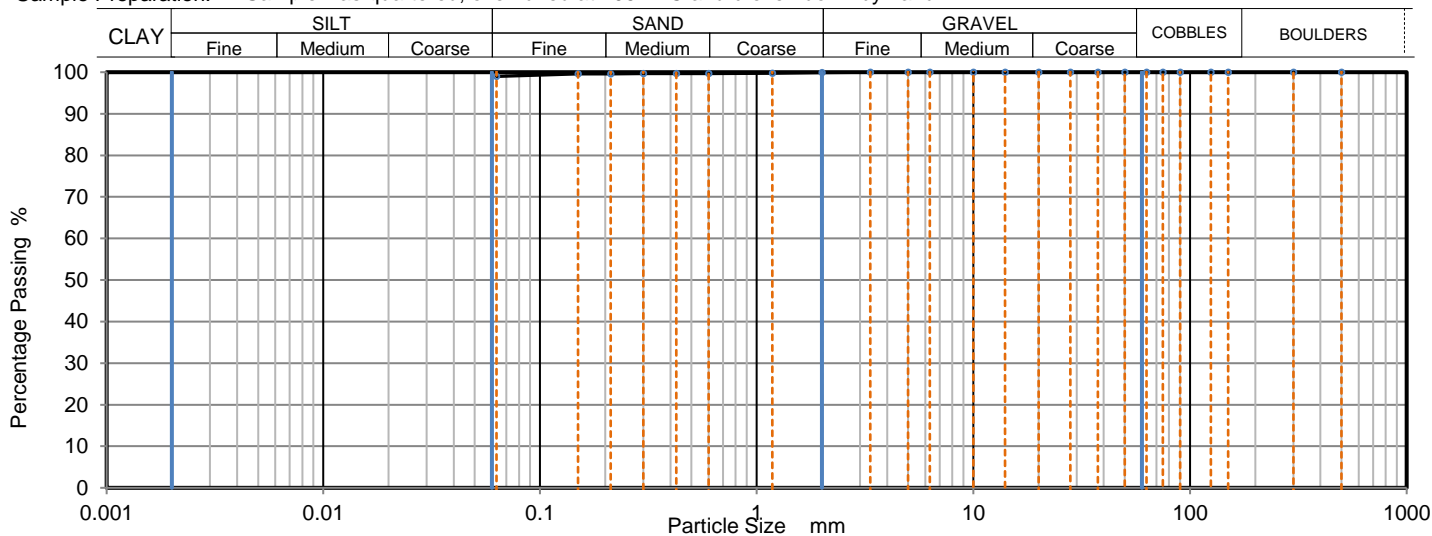
Sample Description: Brown CLAY

Sample Preparation: Sample was quartered, oven dried at 106.1 °C and broken down by hand.

Depth Top [m]: 19.50

Depth Base [m]: Not Given

Sample Type: B



Sieving		Sedimentation	
Particle Size mm	% Passing	Particle Size mm	% Passing
500	100		
300	100		
150	100		
125	100		
90	100		
75	100		
63	100		
50	100		
37.5	100		
28	100		
20	100		
14	100		
10	100		
6.3	100		
5	100		
3.35	100		
2	100		
1.18	100		
0.6	100		
0.425	100		
0.3	100		
0.212	100		
0.15	100		
0.063	99		

Sample Proportions	% dry mass
Very coarse	0
Gravel	0
Sand	1
Fines <0.063mm	99

Grading Analysis	
D100	mm
D60	mm
D30	mm
D10	mm
Uniformity Coefficient	N/A
Curvature Coefficient	

Uniformity Coefficient and Coefficient of Curvature calculated in accordance with BS EN ISO 14688-2: 2004 + A1: 2013

Note: Tested in Accordance with BS1377:Part 2:1990, clause 9.2

Remarks:

Signed:

Aleksandra Jurochnik
PL Technical Reviewer
for and on behalf of i2 Analytical Ltd

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TEST CERTIFICATE

Particle Size Distribution

i2 Analytical Ltd
Unit 6 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB



Tested in Accordance with: BS 1377-2: 1990

Client: McAuliffe Group
Client Address: McAuliffe House, Northcott Road,
WV14 0TP

Contact: Matthew Handley
Site Address: Belmont Street

Client Reference: 21-56807
Job Number: 21-56807
Date Sampled: 08/02/2021
Date Received: 09/02/2021
Date Tested: 23/02/2021
Sampled By: Client - MH

Testing carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland

Test Results:

Laboratory Reference: 1770097

Hole No.: BH102

Sample Reference: Not Given

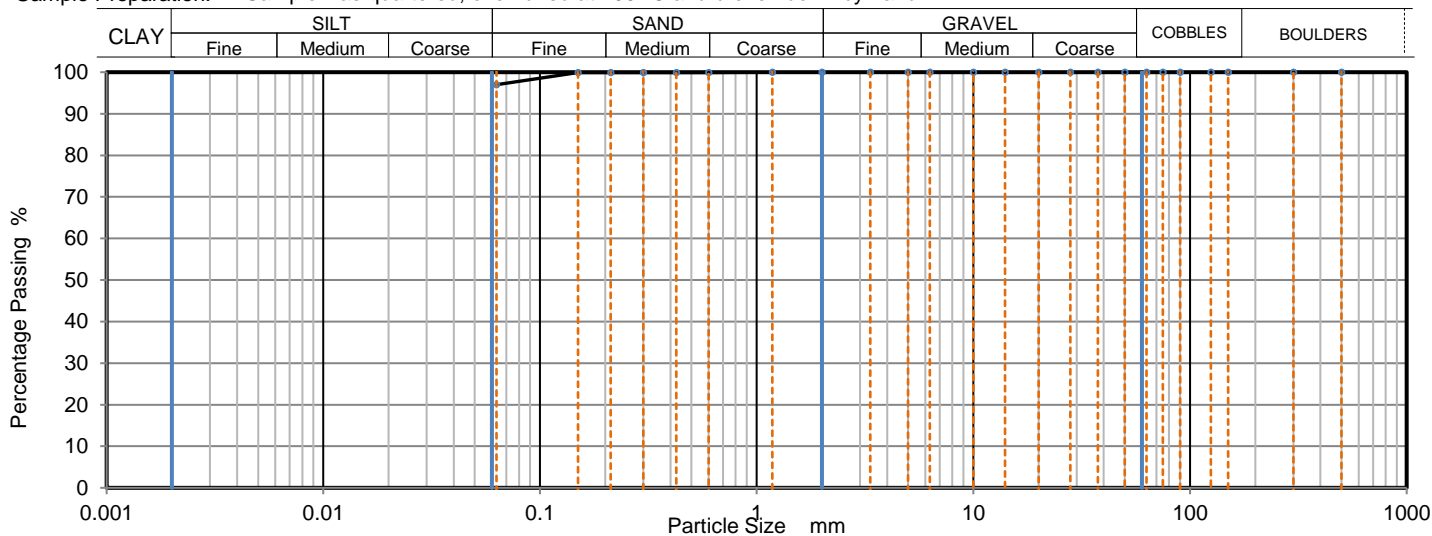
Sample Description: Brown CLAY

Sample Preparation: Sample was quartered, oven dried at 106 °C and broken down by hand.

Depth Top [m]: 21.00

Depth Base [m]: Not Given

Sample Type: B



Sieving		Sedimentation	
Particle Size mm	% Passing	Particle Size mm	% Passing
500	100		
300	100		
150	100		
125	100		
90	100		
75	100		
63	100		
50	100		
37.5	100		
28	100		
20	100		
14	100		
10	100		
6.3	100		
5	100		
3.35	100		
2	100		
1.18	100		
0.6	100		
0.425	100		
0.3	100		
0.212	100		
0.15	100		
0.063	97		

Sample Proportions	% dry mass
Very coarse	0
Gravel	0
Sand	3
Fines <0.063mm	97

Grading Analysis	
D100	mm
D60	mm
D30	mm
D10	mm
Uniformity Coefficient	N/A
Curvature Coefficient	

Uniformity Coefficient and Coefficient of Curvature calculated in accordance with BS EN ISO 14688-2: 2004 + A1: 2013

Note: Tested in Accordance with BS1377:Part 2:1990, clause 9.2

Remarks:

Signed:

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PL Technical Reviewer
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TEST CERTIFICATE

Unconsolidated Undrained

Triaxial Compression

Tested in Accordance with:
BS 1377-7: 1990: Clause 8

i2 Analytical Ltd
Unit 6 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB



Client: McAuliffe Group
Client Address: McAuliffe House, Northcott Road,
WV14 0TP

Contact: Matthew Handley
Site Address: Belmont Street

Client Reference: 21-56807
Job Number: 21-56807
Date Sampled: 08/02/2021
Date Received: 09/02/2021
Date Tested: 19/02/2021
Sampled By: Client - MH

Testing carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland

Test Results:

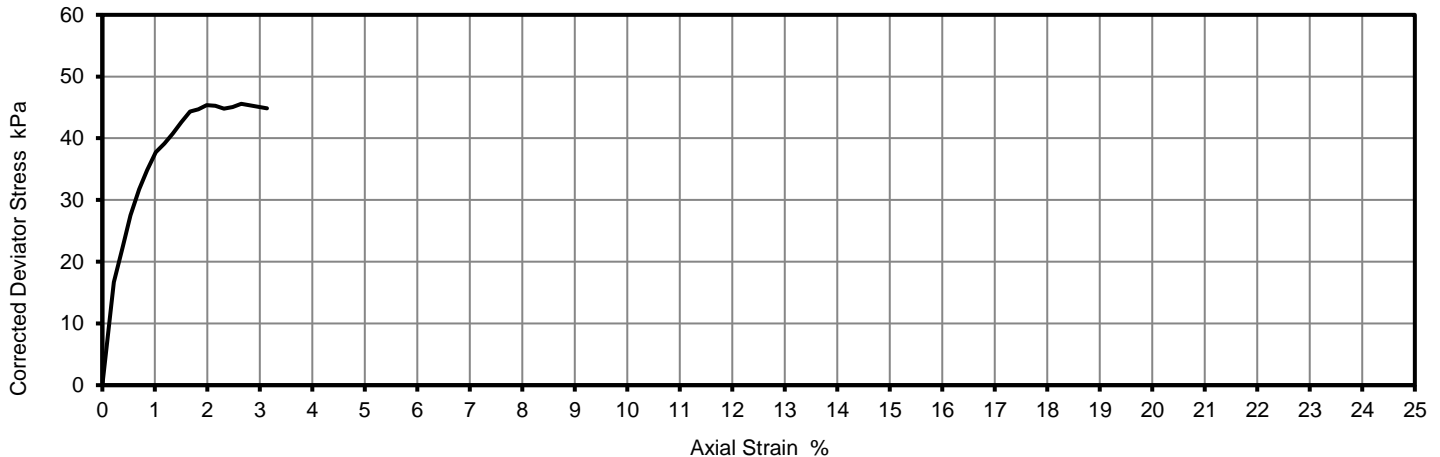
Laboratory Reference: 1770077
Hole No.: BH102
Sample Reference: Not Given
Sample Description: Brown CLAY

Depth Top [m]: 1.20
Depth Base [m]: 1.65
Sample Type: U

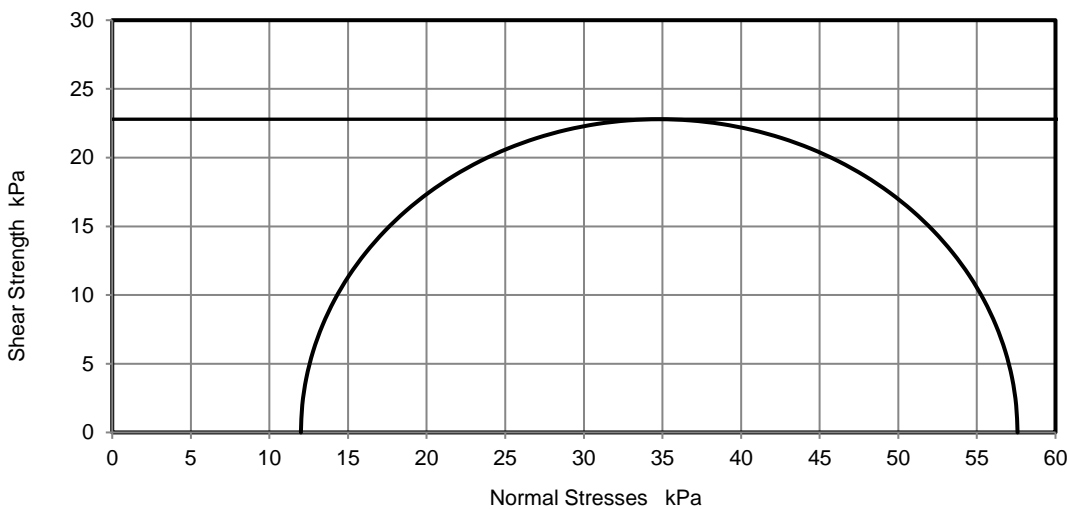
Test Number	1
Length	202.48 mm
Diameter	102.10 mm
Bulk Density	1.94 Mg/m ³
Moisture Content	34 %
Dry Density	1.45 Mg/m ³
Membrane Correction	0.20 kPa

Rate of Strain	1.98 %/min
Cell Pressure	12 kPa
Axial Strain at failure	2.6 %
Deviator Stress, $(\sigma_1 - \sigma_3)_f$	46 kPa
Undrained Shear Strength, c_u	23 kPa $\frac{1}{2}(\sigma_1 - \sigma_3)_f$
Mode of Failure	Brittle
Membrane thickness	0.28 mm

Deviator Stress v Axial Strain



Mohr Circles



Position within sample



Note: Deviator stress corrected for area change and membrane effects. Mohr circles and their interpretation is not covered by BS1377.
This is provided for information only.

Remarks: Sample failed at first stage. Unable to achieve multistage. Reported as a single stage.

Signed:

Aleksandra Jurochnik
PL Technical Reviewer
for and on behalf of i2 Analytical Ltd

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TEST CERTIFICATE

Unconsolidated Undrained

Triaxial Compression

Tested in Accordance with:
BS 1377-7: 1990: Clause 8

i2 Analytical Ltd
Unit 6 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB



Client: McAuliffe Group
Client Address: McAuliffe House, Northcott Road,
WV14 0TP

Contact: Matthew Handley
Site Address: Belmont Street

Client Reference: 21-56807
Job Number: 21-56807
Date Sampled: 08/02/2021
Date Received: 09/02/2021
Date Tested: 19/02/2021
Sampled By: Client - MH

Testing carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland

Test Results:

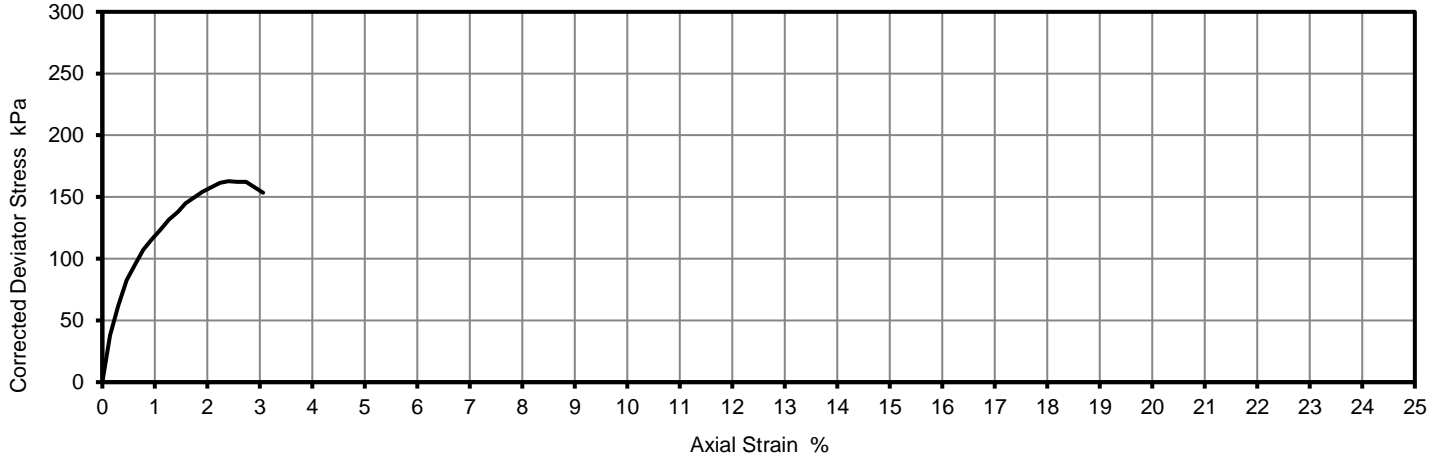
Laboratory Reference: 1770086
Hole No.: BH102
Sample Reference: Not Given
Sample Description: Brown CLAY

Depth Top [m]: 5.00
Depth Base [m]: 5.45
Sample Type: U

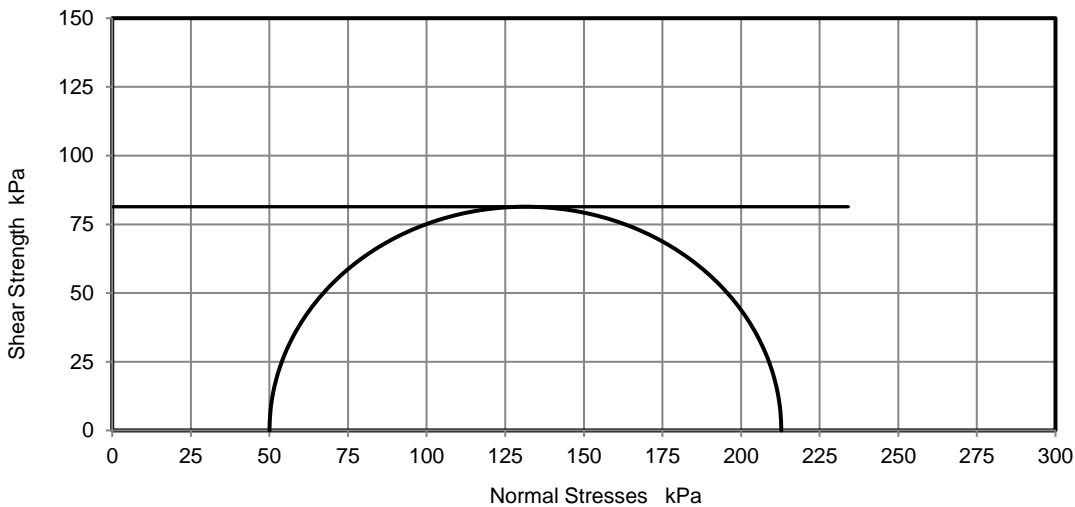
Test Number	1
Length	202.17 mm
Diameter	102.58 mm
Bulk Density	1.93 Mg/m ³
Moisture Content	31 %
Dry Density	1.47 Mg/m ³
Membrane Correction	0.17 kPa

Rate of Strain	1.98 %/min
Cell Pressure	50 kPa
Axial Strain at failure	2.4 %
Deviator Stress, ($\sigma_1 - \sigma_3$) _f	163 kPa
Undrained Shear Strength, c_u	81 kPa $\frac{1}{2}(\sigma_1 - \sigma_3)_f$
Mode of Failure	Brittle
Membrane thickness	0.27 mm

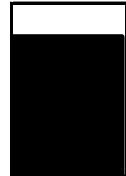
Deviator Stress v Axial Strain



Mohr Circles



Position within sample



Note: Deviator stress corrected for area change and membrane effects. Mohr circles and their interpretation is not covered by BS1377.
This is provided for information only.

Remarks: Sample failed at first stage. Unable to achieve multistage. Reported as a single stage.

Signed:

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PL Technical Reviewer
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TEST CERTIFICATE

Unconsolidated Undrained

Triaxial Compression

Tested in Accordance with:
BS 1377-7: 1990: Clause 8

i2 Analytical Ltd
Unit 6 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB



Client: McAuliffe Group
Client Address: McAuliffe House, Northcott Road,
WV14 0TP

Contact: Matthew Handley
Site Address: Belmont Street

Client Reference: 21-56807
Job Number: 21-56807
Date Sampled: 08/02/2021
Date Received: 09/02/2021
Date Tested: 19/02/2021
Sampled By: Client - MH

Testing carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland

Test Results:

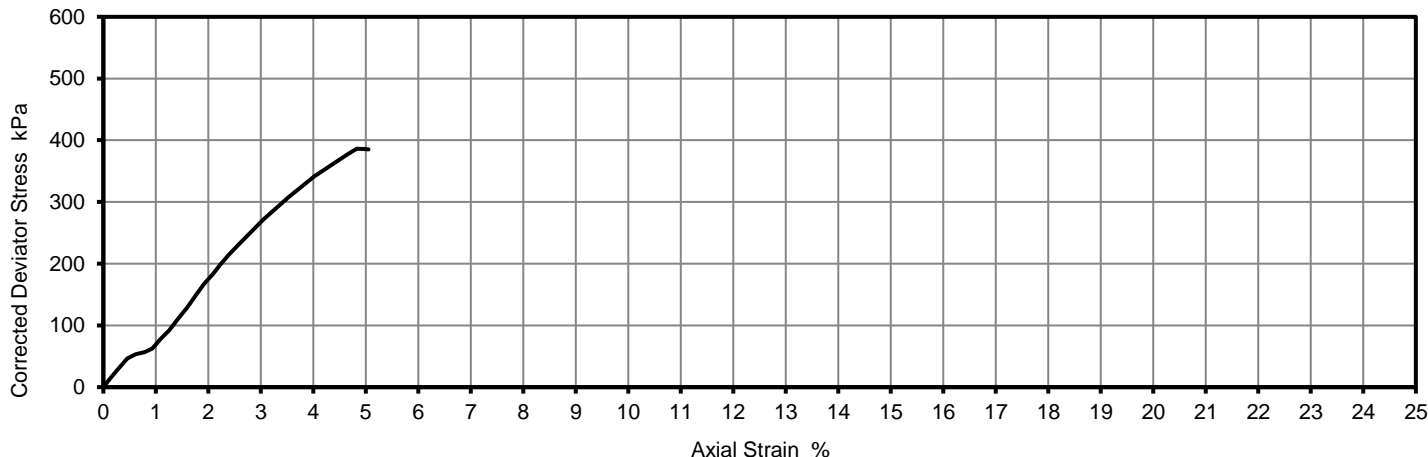
Laboratory Reference: 1770087
Hole No.: BH102
Sample Reference: Not Given
Sample Description: Brown CLAY

Depth Top [m]: 8.00
Depth Base [m]: 8.45
Sample Type: U

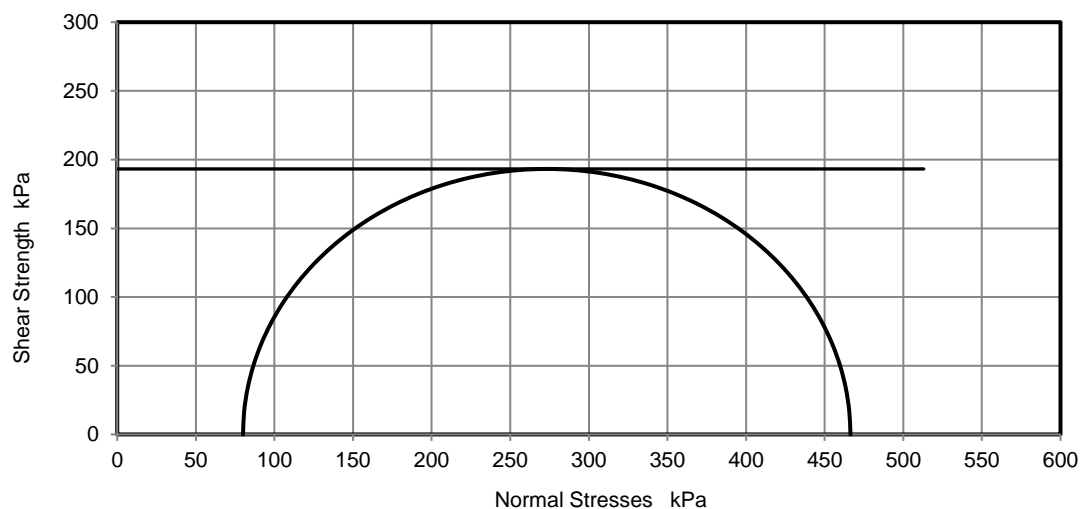
Test Number	1
Length	200.35 mm
Diameter	102.36 mm
Bulk Density	1.98 Mg/m ³
Moisture Content	28 %
Dry Density	1.55 Mg/m ³
Membrane Correction	0.34 kPa

Rate of Strain	2.00 %/min
Cell Pressure	80 kPa
Axial Strain at failure	4.8 %
Deviator Stress, ($\sigma_1 - \sigma_3$) _f	386 kPa
Undrained Shear Strength, c_u	193 kPa $\frac{1}{2}(\sigma_1 - \sigma_3)_f$
Mode of Failure	Brittle
Membrane thickness	0.26 mm

Deviator Stress v Axial Strain



Mohr Circles



Position within sample



Note: Deviator stress corrected for area change and membrane effects. Mohr circles and their interpretation is not covered by BS1377.
This is provided for information only.

Remarks: Sample failed at first stage. Unable to achieve multistage. Reported as a single stage.

Signed:

Aleksandra Jurochnik
PL Technical Reviewer
for and on behalf of i2 Analytical Ltd

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TEST CERTIFICATE

Unconsolidated Undrained

Triaxial Compression

Tested in Accordance with:
BS 1377-7: 1990: Clause 8

i2 Analytical Ltd
Unit 6 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB



Client: McAuliffe Group
Client Address: McAuliffe House, Northcott Road,
WV14 0TP

Contact: Matthew Handley
Site Address: Belmont Street

Client Reference: 21-56807
Job Number: 21-56807
Date Sampled: 08/02/2021
Date Received: 09/02/2021
Date Tested: 19/02/2021
Sampled By: Client - MH

Testing carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland

Test Results:

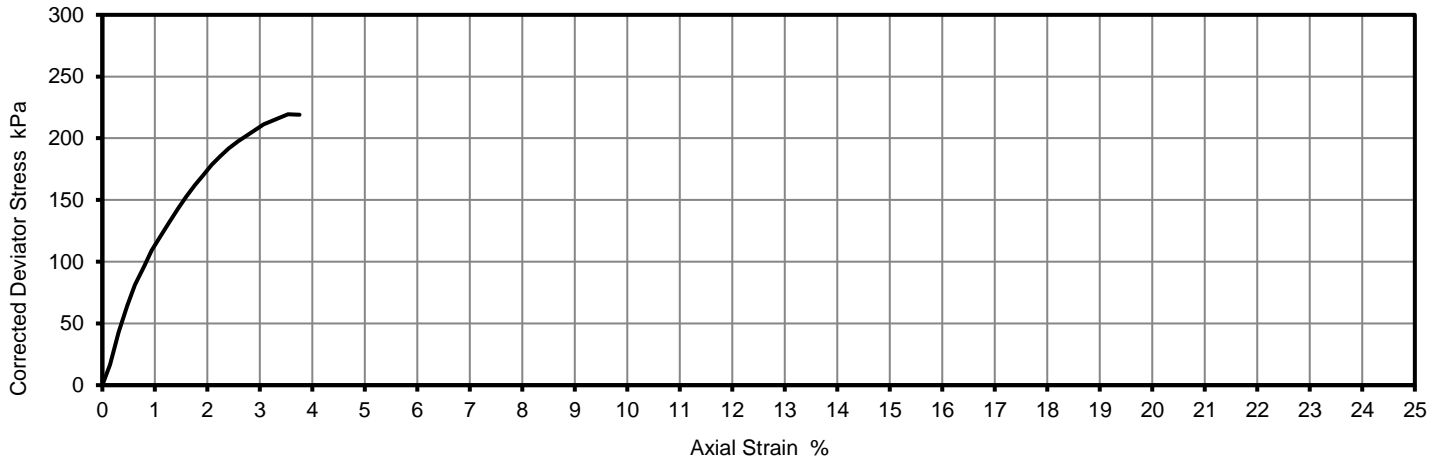
Laboratory Reference: 1770088
Hole No.: BH102
Sample Reference: Not Given
Sample Description: Greyish brown CLAY

Depth Top [m]: 11.00
Depth Base [m]: 11.45
Sample Type: U

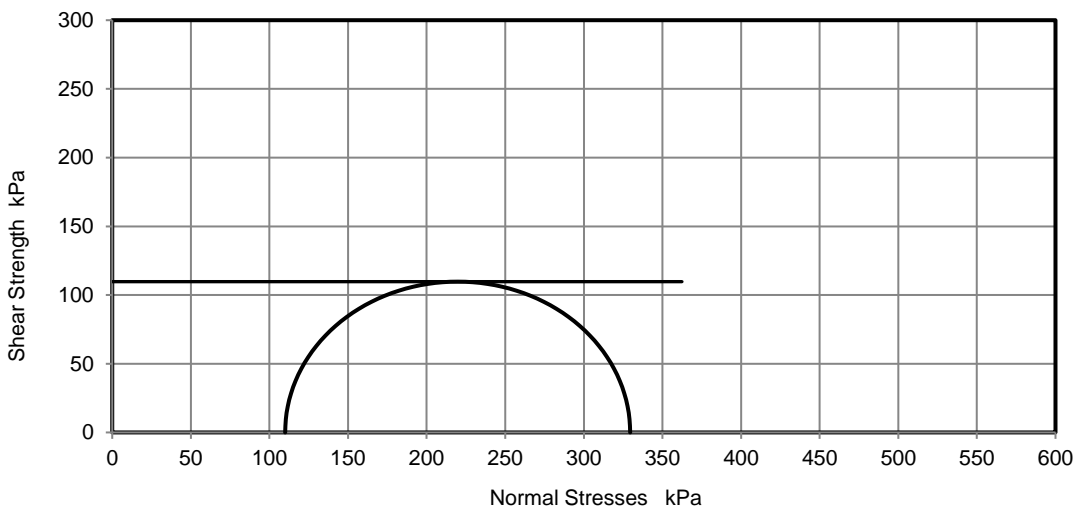
Test Number	1
Length	200.75 mm
Diameter	102.43 mm
Bulk Density	1.97 Mg/m ³
Moisture Content	29 %
Dry Density	1.52 Mg/m ³
Membrane Correction	0.28 kPa

Rate of Strain	1.99 %/min
Cell Pressure	110 kPa
Axial Strain at failure	3.5 %
Deviator Stress, ($\sigma_1 - \sigma_3$) _f	219 kPa
Undrained Shear Strength, c_u	110 kPa $\frac{1}{2}(\sigma_1 - \sigma_3)_f$
Mode of Failure	Brittle
Membrane thickness	0.30 mm

Deviator Stress v Axial Strain



Mohr Circles



Position within sample



Note: Deviator stress corrected for area change and membrane effects. Mohr circles and their interpretation is not covered by BS1377.
This is provided for information only.

Remarks:

Signed:

Aleksandra Jurochnik
PL Technical Reviewer
for and on behalf of i2 Analytical Ltd

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TEST CERTIFICATE

Unconsolidated Undrained Triaxial Compression

i2 Analytical Ltd
Unit 6 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB



Tested in Accordance with: BS 1377-7: 1990: Clause 9

Client: McAuliffe Group
Client Address: McAuliffe House, Northcott Road,
WV14 0TP

Contact: Matthew Handley
Site Address: Belmont Street

Client Reference: 21-56807
Job Number: 21-56807
Date Sampled: 08/02/2021
Date Received: 09/02/2021
Date Tested: 19/02/2021
Sampled By: Client - MH

Testing carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland

Test Results:

Laboratory Reference: 1770079
Hole No.: BH102
Sample Reference: Not Given
Sample Description: Brown CLAY

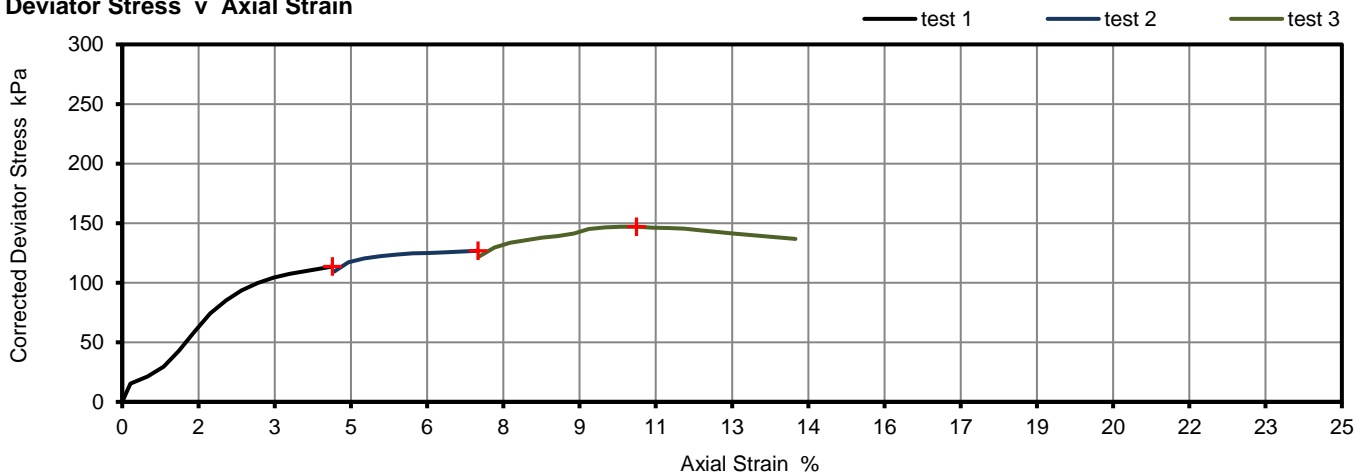
Depth Top [m]: 3.00
Depth Base [m]: 3.45
Sample Type: U

Length	201.59	mm
Diameter	102.53	mm
Bulk Density	1.91	Mg/m ³
Moisture Content	34	%
Dry Density	1.42	Mg/m ³
Membrane thickness	0.29	mm

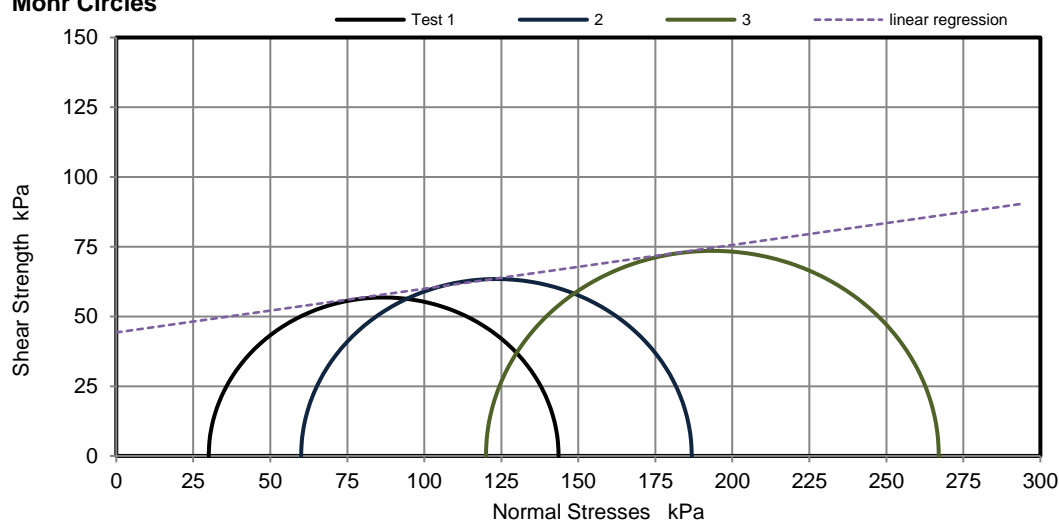
Rate of Strain
Stage Number
Cell Pressure
Axial Strain at failure
Deviator Stress, ($\sigma_1 - \sigma_3$) f
Shear strength, cu
Mode of failure
Membrane Correction

1.98			%/min
1	2	3	
30	60	120	kPa
4.3	7.3	10.5	%
114	127	147	kPa
57	63	74	kPa
Brittle			
0.33	0.51	0.65	kPa

Deviator Stress v Axial Strain



Mohr Circles



Position within sample



Linear Regression
 ϕ_u 8.9 °
cu 44 kPa

Note: Mohr circles and their interpretation is not covered by BS1377. These are provided for information only.

Remarks: Correction values: 30kPa=16N, 60kPa=26N, 120kPa=47N.

Signed:

Aleksandra Jurochnik
PL Technical Reviewer
for and on behalf of i2 Analytical Ltd

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TEST CERTIFICATE

Unconsolidated Undrained Triaxial Compression

i2 Analytical Ltd
Unit 6 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB



Tested in Accordance with: BS 1377-7: 1990: Clause 9

Client: McAuliffe Group
Client Address: McAuliffe House, Northcott Road,
WV14 0TP

Contact: Matthew Handley
Site Address: Belmont Street

Client Reference: 21-56807
Job Number: 21-56807
Date Sampled: 08/02/2021
Date Received: 09/02/2021
Date Tested: 20/02/2021
Sampled By: Client - MH

Testing carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland

Test Results:

Laboratory Reference: 1770089
Hole No.: BH102
Sample Reference: Not Given
Sample Description: Brown CLAY

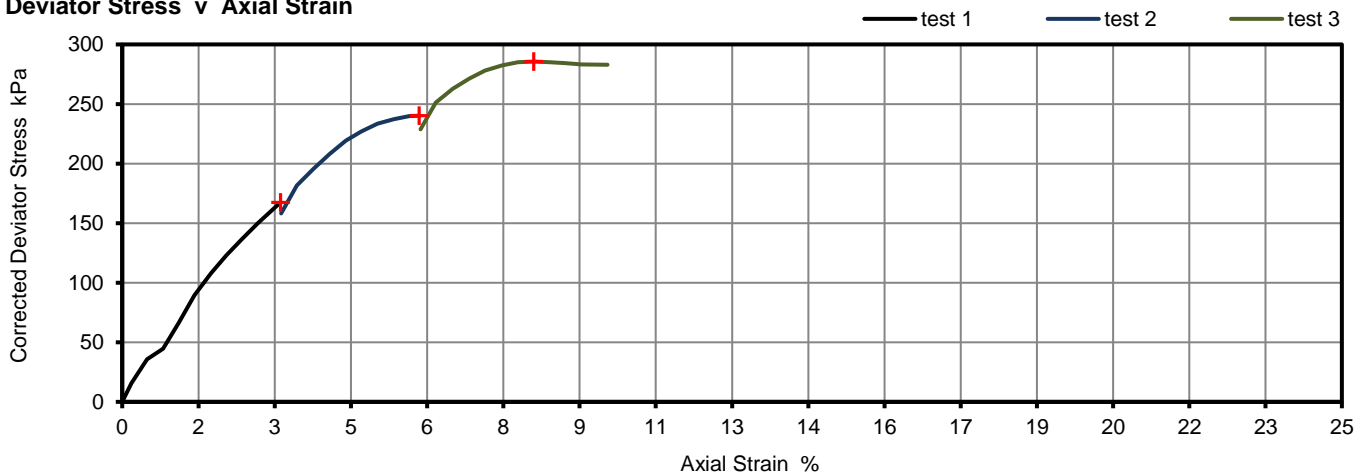
Depth Top [m]: 14.00
Depth Base [m]: 14.45
Sample Type: U

Length	199.84	mm
Diameter	102.39	mm
Bulk Density	1.96	Mg/m ³
Moisture Content	26	%
Dry Density	1.55	Mg/m ³
Membrane thickness	0.27	mm

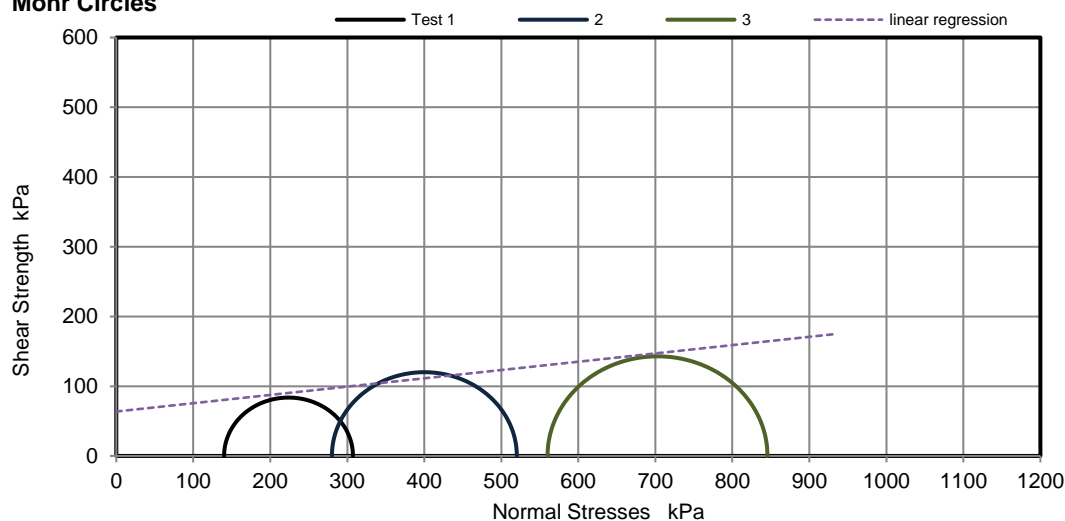
Rate of Strain
Stage Number
Cell Pressure
Axial Strain at failure
Deviator Stress, ($\sigma_1 - \sigma_3$) f
Shear strength, cu
Mode of failure
Membrane Correction

2.00			%/min
1	2	3	
140	280	560	kPa
3.2	6.1	8.4	%
167	240	286	kPa
84	120	143	kPa
Brittle			
0.23	0.42	0.52	kPa

Deviator Stress v Axial Strain



Mohr Circles



Position within sample



Linear Regression
 ϕ_u 6.8 °
cu 64 kPa

Note: Mohr circles and their interpretation is not covered by BS1377. These are provided for information only.

Remarks: Correction values: 140kPa=65N, 280kPa=154N, 560kPa=213N.

Signed:

Aleksandra Jurochnik
PL Technical Reviewer
for and on behalf of i2 Analytical Ltd

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TEST CERTIFICATE

Unconsolidated Undrained Triaxial Compression

i2 Analytical Ltd
Unit 6 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB



Tested in Accordance with: BS 1377-7: 1990: Clause 9

Client: McAuliffe Group
Client Address: McAuliffe House, Northcott Road,
WV14 0TP

Contact: Matthew Handley
Site Address: Belmont Street

Client Reference: 21-56807
Job Number: 21-56807
Date Sampled: 08/02/2021
Date Received: 09/02/2021
Date Tested: 20/02/2021
Sampled By: Client - MH

Testing carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland

Test Results:

Laboratory Reference: 1770094
Hole No.: BH102
Sample Reference: Not Given
Sample Description: Greyish brown CLAY

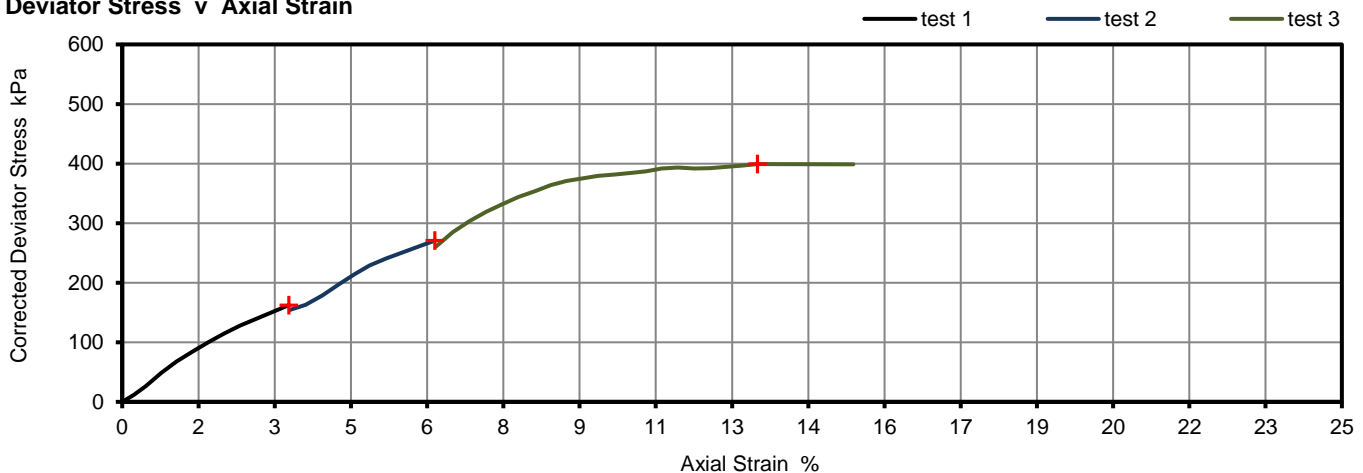
Depth Top [m]: 17.00
Depth Base [m]: 17.45
Sample Type: U

Length	201.70	mm
Diameter	101.83	mm
Bulk Density	1.91	Mg/m3
Moisture Content	28	%
Dry Density	1.49	Mg/m3
Membrane thickness	0.31	mm

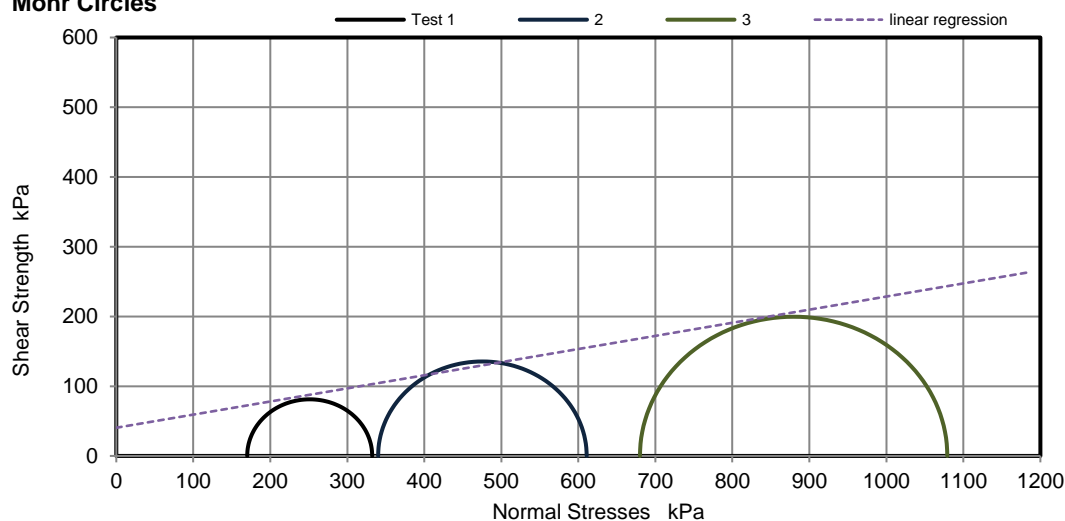
Rate of Strain
Stage Number
Cell Pressure
Axial Strain at failure
Deviator Stress, ($\sigma_1 - \sigma_3$) f
Shear strength, cu
Mode of failure
Membrane Correction

1.98			%/min
1	2	3	
170	340	680	kPa
3.4	6.4	13.0	%
162	271	399	kPa
81	135	200	kPa
Brittle			
0.28	0.50	0.83	kPa

Deviator Stress v Axial Strain



Mohr Circles



Position within sample



Linear Regression
 ϕ_u 10.7 °
cu 40 kPa

Note: Mohr circles and their interpretation is not covered by BS1377. These are provided for information only.

Remarks: Correction values: 170kPa=81N, 340kPa=157N, 680kPa=311N.

Signed:

Aleksandra Jurochnik
PL Technical Reviewer
for and on behalf of i2 Analytical Ltd

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TEST CERTIFICATE

Liquid and Plastic Limits

i2 Analytical Ltd
Unit 6 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB



Tested in Accordance with: BS 1377-2: 1990: Clause 4.3 and 5

Client: McAuliffe Group
Client Address: McAuliffe House, Northcott Road,
WV14 0TP

Contact: Matthew Handley
Site Address: Belmont Street

Client Reference: 21-56811
Job Number: 21-56811
Date Sampled: 09/02/2021
Date Received: 10/02/2021
Date Tested: 24/02/2021
Sampled By: i2 - MH

Testing carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland

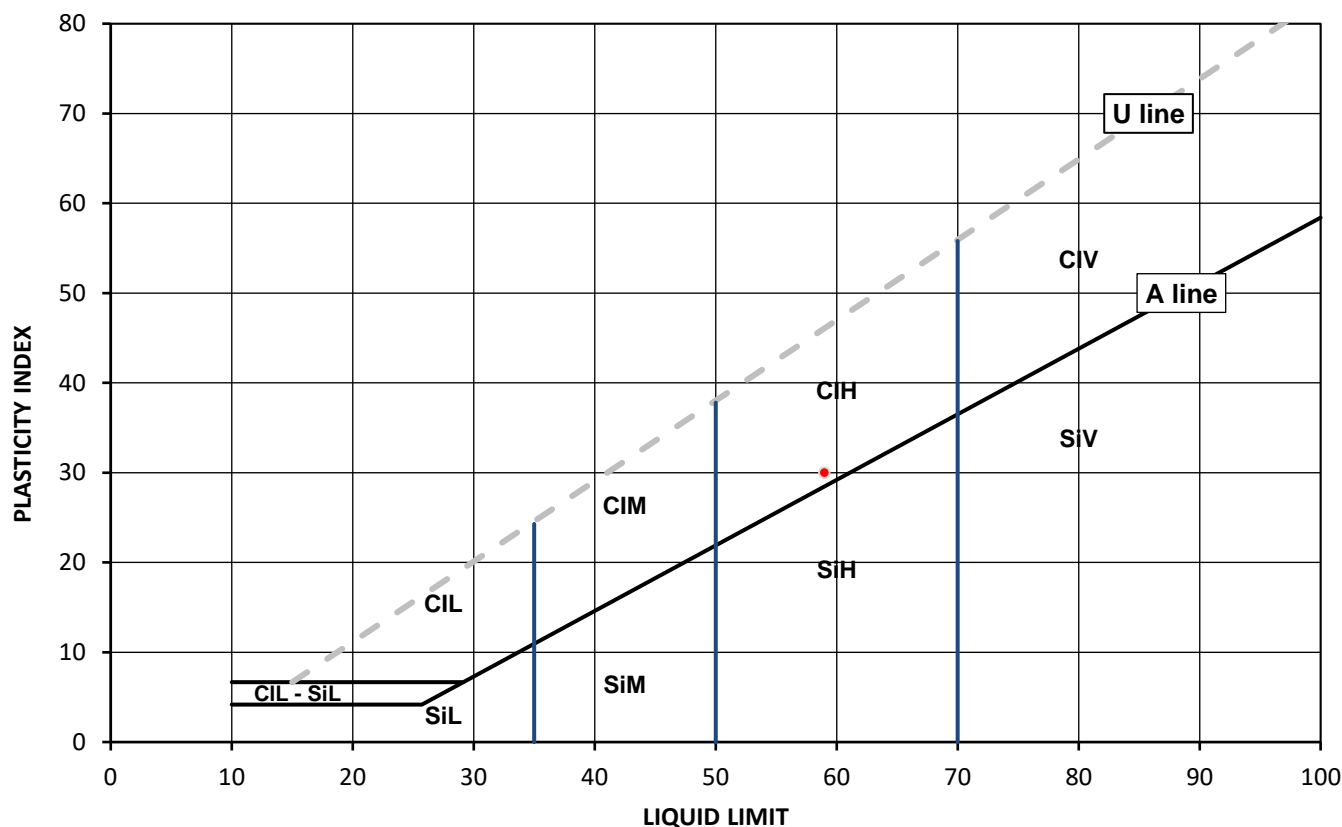
Test Results:

Laboratory Reference: 1770106
Hole No.: BH102
Sample Reference: Not Given
Soil Description: Greyish brown CLAY

Depth Top [m]: 22.50
Depth Base [m]: Not Given
Sample Type: B

Sample Preparation: Tested in natural condition

As Received Moisture Content [W] %	Liquid Limit [WL] %	Plastic Limit [Wp] %	Plasticity Index [Ip] %	% Passing 425µm BS Test Sieve
26	59	29	30	100



Legend, based on BS EN ISO 14688 2:2018 Geotechnical investigation and testing – Identification and classification of soil

	Plasticity	Liquid Limit
Cl	Clay	L Low below 35
Si	Silt	M Medium 35 to 50
	H High 50 to 70	V Very high exceeding 70
	O Organic	append to classification for organic material (eg CIHO)

Note: Moisture Content by BS 1377-2: 1990: Clause 3.2

Remarks:

Signed:

Szczepan Bielatowicz
PL Deputy of Head of Geotechnical Section
for and on behalf of i2 Analytical Ltd

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Tested in Accordance with: BS 1377-2: 1990: Clause 4.3 and 5

Client: McAuliffe Group
Client Address: McAuliffe House, Northcott Road,
WV14 0TP

Contact: Matthew Handley
Site Address: Belmont Street

Client Reference: 21-56811
Job Number: 21-56811
Date Sampled: 09/02/2021
Date Received: 10/02/2021
Date Tested: 24/02/2021
Sampled By: i2 - MH

Testing carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland

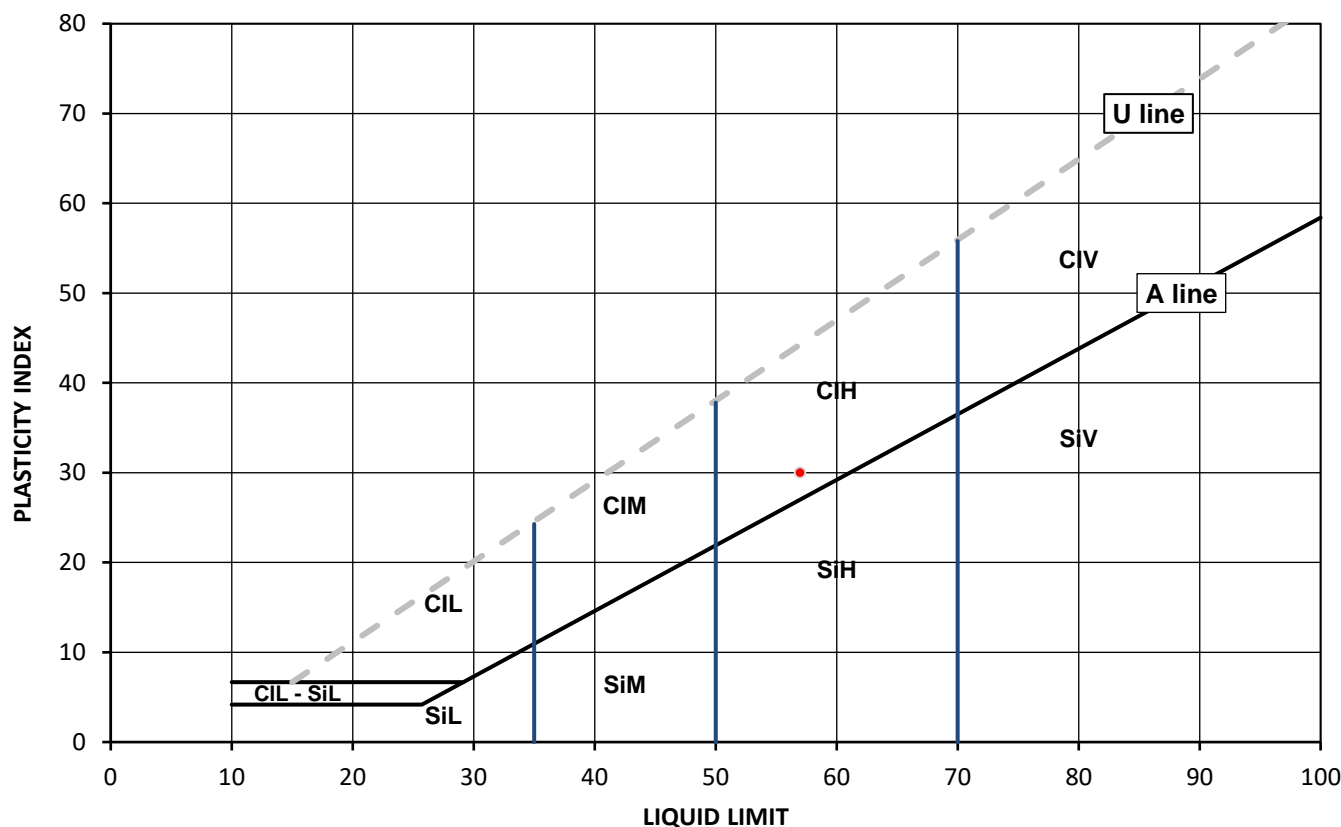
Test Results:

Laboratory Reference: 1770107
Hole No.: BH102
Sample Reference: Not Given
Soil Description: Greyish brown CLAY

Depth Top [m]: 24.00
Depth Base [m]: Not Given
Sample Type: B

Sample Preparation: Tested in natural condition

As Received Moisture Content [W] %	Liquid Limit [WL] %	Plastic Limit [Wp] %	Plasticity Index [Ip] %	% Passing 425µm BS Test Sieve
27	57	27	30	100



Legend, based on BS EN ISO 14688 2:2018 Geotechnical investigation and testing – Identification and classification of soil

	Plasticity	Liquid Limit
Cl Clay	L Low	below 35
Si Silt	M Medium	35 to 50
	H High	50 to 70
	V Very high	exceeding 70
	O Organic	append to classification for organic material (eg CIHO)

Note: Moisture Content by BS 1377-2: 1990: Clause 3.2

Remarks:

Signed:

Szczepan Bielatowicz
PL Deputy of Head of Geotechnical Section
for and on behalf of i2 Analytical Ltd

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Tested in Accordance with: BS 1377-2: 1990: Clause 4.3 and 5

Client: McAuliffe Group
Client Address: McAuliffe House, Northcott Road,
WV14 0TP

Contact: Matthew Handley
Site Address: Belmont Street

Client Reference: 21-56811
Job Number: 21-56811
Date Sampled: 09/02/2021
Date Received: 10/02/2021
Date Tested: 24/02/2021
Sampled By: i2 - MH

Testing carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland

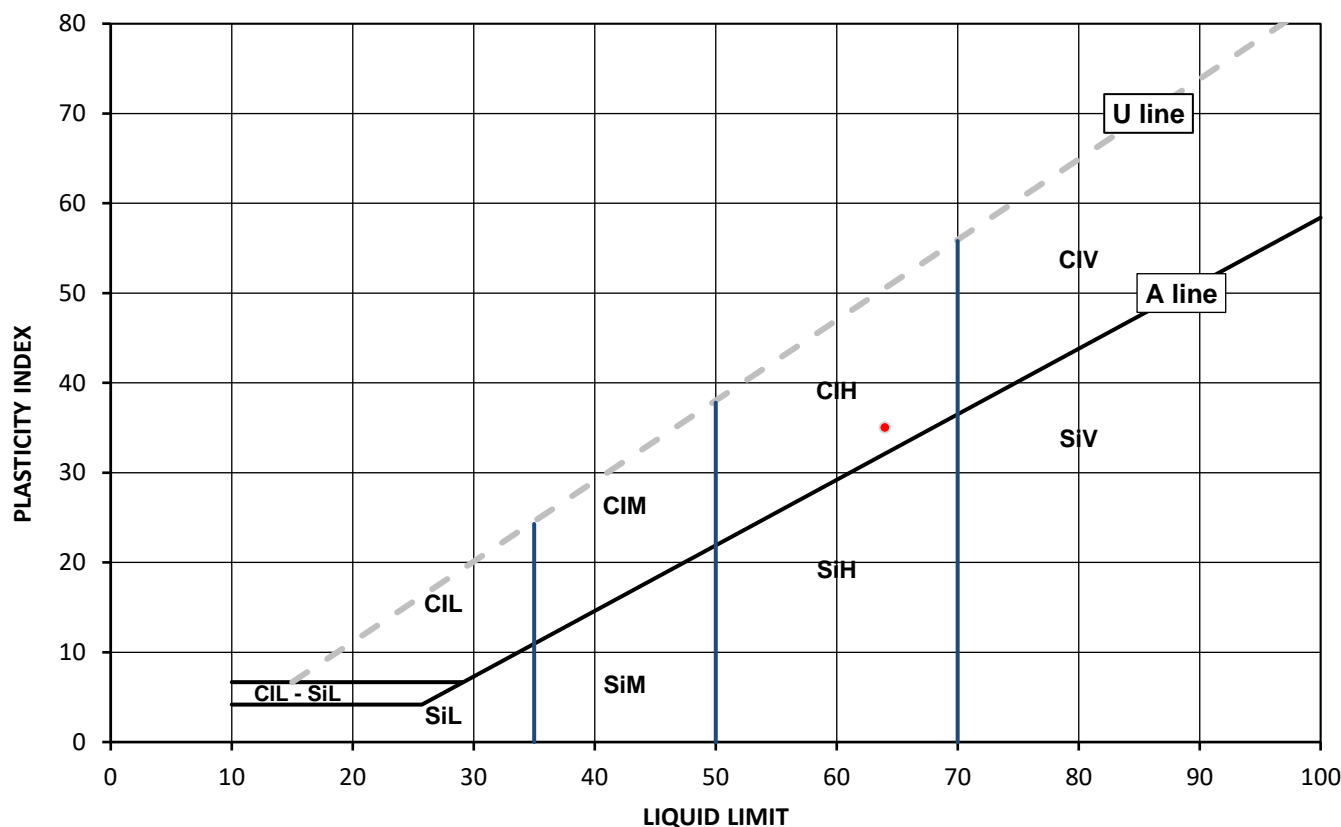
Test Results:

Laboratory Reference: 1770108
Hole No.: BH102
Sample Reference: Not Given
Soil Description: Greyish brown CLAY

Depth Top [m]: 25.50
Depth Base [m]: Not Given
Sample Type: B

Sample Preparation: Tested in natural condition

As Received Moisture Content [W] %	Liquid Limit [WL] %	Plastic Limit [Wp] %	Plasticity Index [Ip] %	% Passing 425µm BS Test Sieve
26	64	29	35	100



Legend, based on BS EN ISO 14688 2:2018 Geotechnical investigation and testing – Identification and classification of soil

	Plasticity	Liquid Limit
Cl	Clay	below 35
Si	Silt	35 to 50
	L	Low
	M	Medium
	H	High
	V	Very high
	O	Organic
		append to classification for organic material (eg CIHO)

Note: Moisture Content by BS 1377-2: 1990: Clause 3.2

Remarks:

Signed:

Szczepan Bielatowicz
PL Deputy of Head of Geotechnical Section
for and on behalf of i2 Analytical Ltd

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TEST CERTIFICATE

Liquid and Plastic Limits

i2 Analytical Ltd
Unit 6 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB



Tested in Accordance with: BS 1377-2: 1990: Clause 4.3 and 5

Client: McAuliffe Group
Client Address: McAuliffe House, Northcott Road,
WV14 0TP

Contact: Matthew Handley
Site Address: Belmont Street

Client Reference: 21-56811
Job Number: 21-56811
Date Sampled: 09/02/2021
Date Received: 10/02/2021
Date Tested: 24/02/2021
Sampled By: i2 - MH

Testing carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland

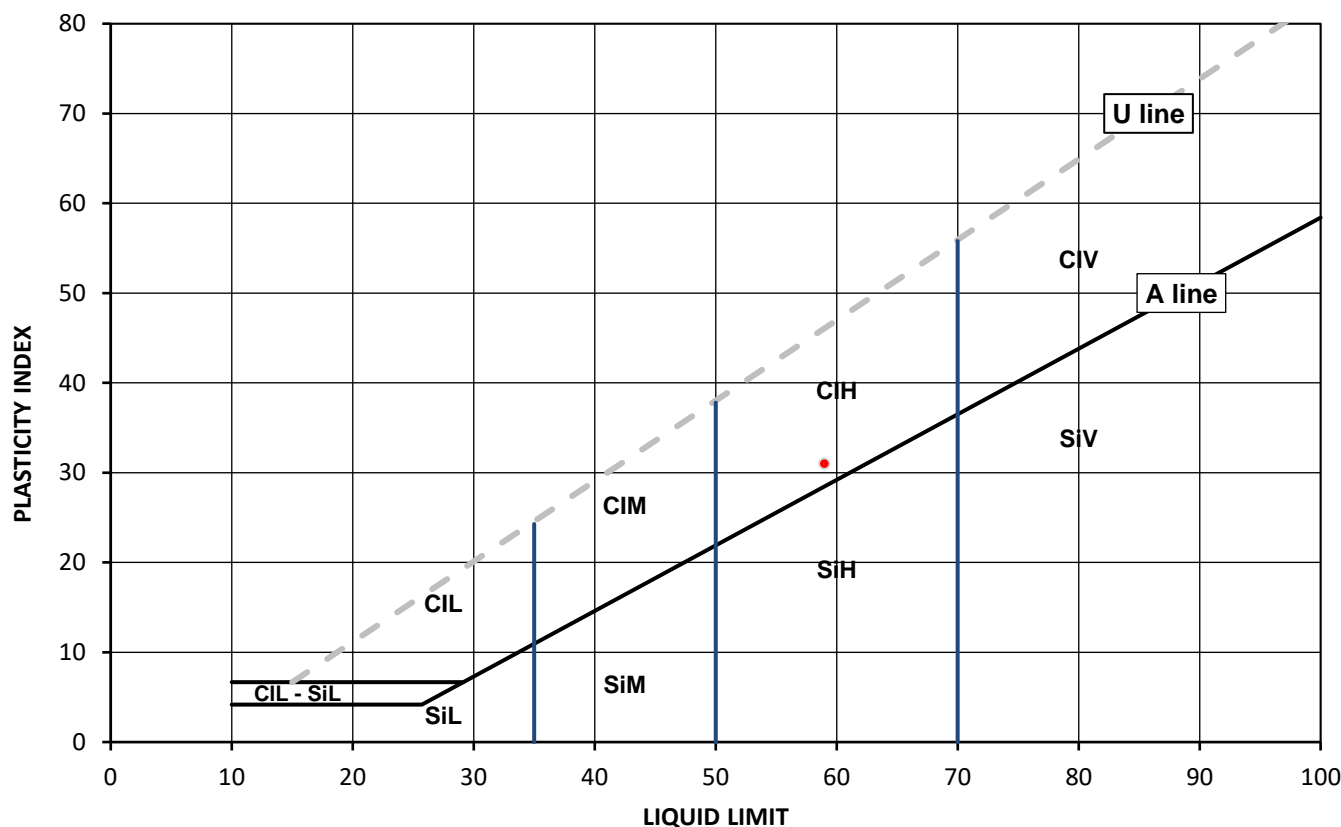
Test Results:

Laboratory Reference: 1770109
Hole No.: BH102
Sample Reference: Not Given
Soil Description: Greyish brown CLAY

Depth Top [m]: 27.00
Depth Base [m]: Not Given
Sample Type: B

Sample Preparation: Tested in natural condition

As Received Moisture Content [W] %	Liquid Limit [WL] %	Plastic Limit [Wp] %	Plasticity Index [Ip] %	% Passing 425µm BS Test Sieve
25	59	28	31	100



Legend, based on BS EN ISO 14688 2:2018 Geotechnical investigation and testing – Identification and classification of soil

	Plasticity	Liquid Limit
Cl Clay	L Low	below 35
Si Silt	M Medium	35 to 50
	H High	50 to 70
	V Very high	exceeding 70
	O Organic	append to classification for organic material (eg CIHO)

Note: Moisture Content by BS 1377-2: 1990: Clause 3.2

Remarks:

Signed:

Szczepan Bielatowicz
PL Deputy of Head of Geotechnical Section
for and on behalf of i2 Analytical Ltd

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Tested in Accordance with: BS 1377-2: 1990: Clause 4.3 and 5

Client: McAuliffe Group
Client Address: McAuliffe House, Northcott Road,
WV14 0TP

Contact: Matthew Handley
Site Address: Belmont Street

Client Reference: 21-56811
Job Number: 21-56811
Date Sampled: 09/02/2021
Date Received: 10/02/2021
Date Tested: 24/02/2021
Sampled By: i2 - MH

Testing carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland

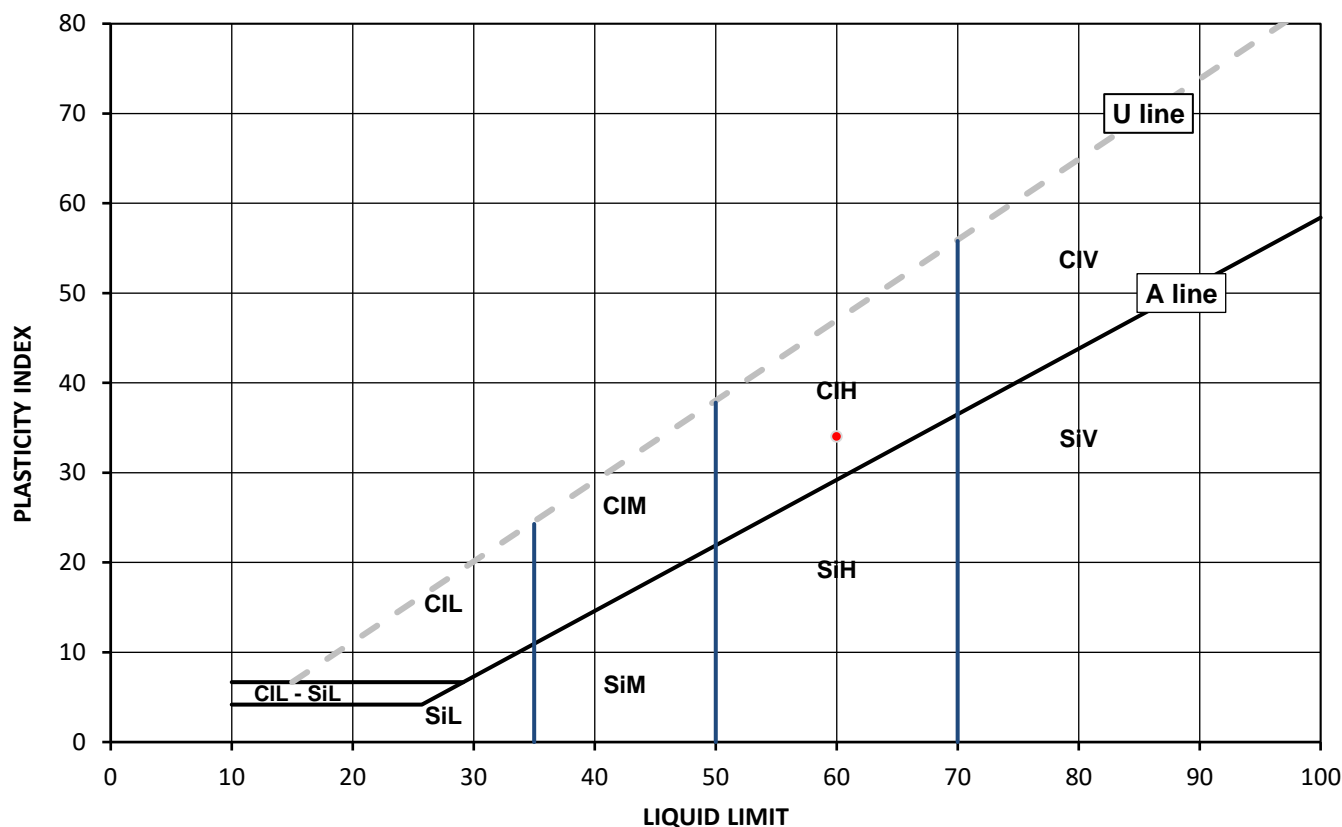
Test Results:

Laboratory Reference: 1770110
Hole No.: BH102
Sample Reference: Not Given
Soil Description: Greyish brown CLAY

Depth Top [m]: 28.50
Depth Base [m]: Not Given
Sample Type: B

Sample Preparation: Tested in natural condition

As Received Moisture Content [W] %	Liquid Limit [WL] %	Plastic Limit [Wp] %	Plasticity Index [Ip] %	% Passing 425µm BS Test Sieve
25	60	26	34	100



Legend, based on BS EN ISO 14688 2:2018 Geotechnical investigation and testing – Identification and classification of soil

	Clay	Silt	Plasticity	Liquid Limit
Cl	Clay		L Low	below 35
Si		Silt	M Medium	35 to 50
			H High	50 to 70
			V Very high	exceeding 70
			O Organic	append to classification for organic material (eg CIHO)

Note: Moisture Content by BS 1377-2: 1990: Clause 3.2

Remarks:

Signed:

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TEST CERTIFICATE

Liquid and Plastic Limits

i2 Analytical Ltd
Unit 6 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB



Tested in Accordance with: BS 1377-2: 1990: Clause 4.3 and 5

Client: McAuliffe Group
Client Address: McAuliffe House, Northcott Road,
WV14 0TP

Contact: Matthew Handley
Site Address: Belmont Street

Client Reference: 21-56811
Job Number: 21-56811
Date Sampled: 10/02/2021
Date Received: 10/02/2021
Date Tested: 24/02/2021
Sampled By: i2 - MH

Testing carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland

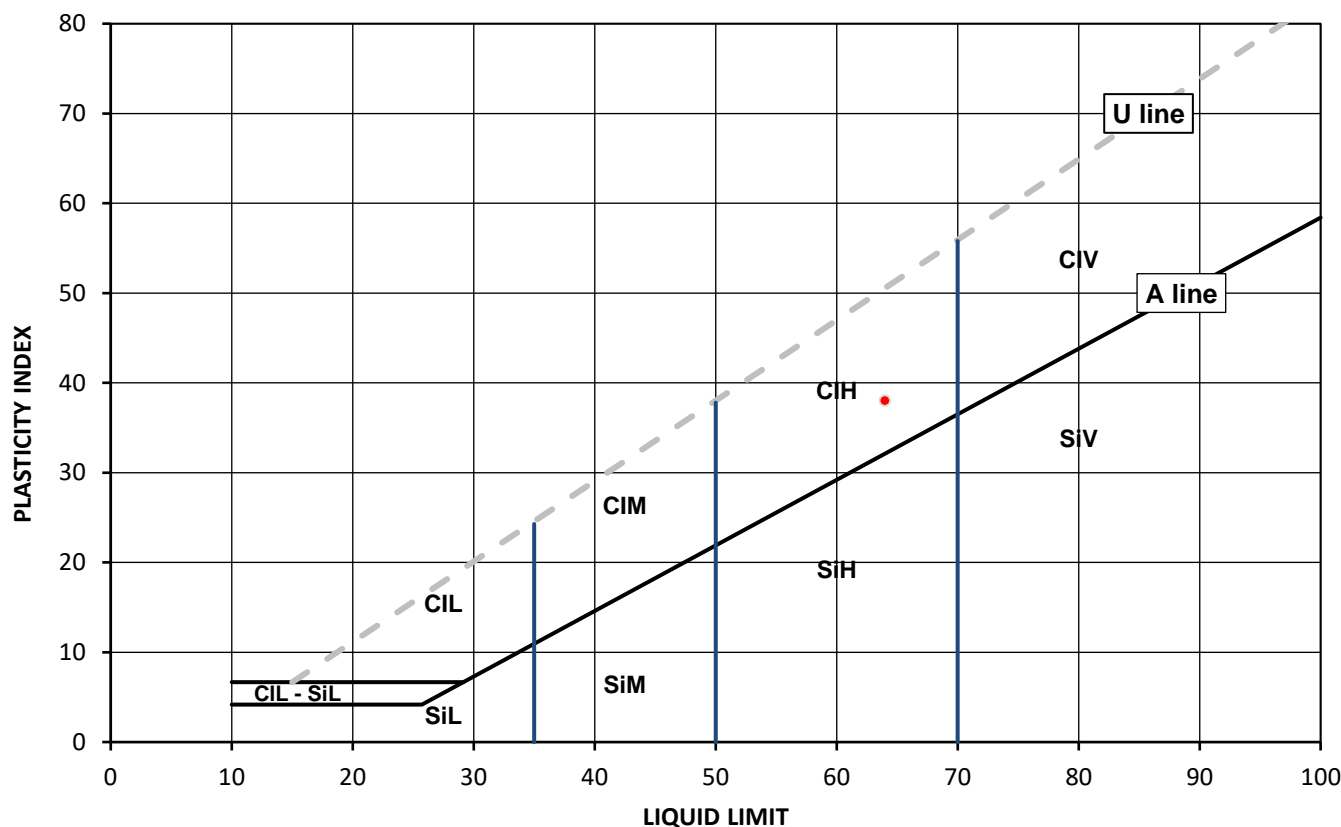
Test Results:

Laboratory Reference: 1770111
Hole No.: BH102
Sample Reference: Not Given
Soil Description: Greyish brown CLAY

Depth Top [m]: 30.00
Depth Base [m]: Not Given
Sample Type: B

Sample Preparation: Tested in natural condition

As Received Moisture Content [W] %	Liquid Limit [WL] %	Plastic Limit [Wp] %	Plasticity Index [Ip] %	% Passing 425µm BS Test Sieve
31	64	26	38	100



Legend, based on BS EN ISO 14688 2:2018 Geotechnical investigation and testing – Identification and classification of soil

	Plasticity	Liquid Limit
Cl Clay	L Low	below 35
Si Silt	M Medium	35 to 50
	H High	50 to 70
	V Very high	exceeding 70
	O Organic	append to classification for organic material (eg CIHO)

Note: Moisture Content by BS 1377-2: 1990: Clause 3.2

Remarks:

Signed:

Szczepan Bielatowicz
PL Deputy of Head of Geotechnical Section
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TEST CERTIFICATE

Liquid and Plastic Limits

i2 Analytical Ltd
Unit 6 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB



Tested in Accordance with: BS 1377-2: 1990: Clause 4.3 and 5

Client: McAuliffe Group
Client Address: McAuliffe House, Northcott Road,
WV14 0TP

Contact: Matthew Handley
Site Address: Belmont Street

Client Reference: 21-56811
Job Number: 21-56811
Date Sampled: 10/02/2021
Date Received: 10/02/2021
Date Tested: 24/02/2021
Sampled By: i2 - MH

Testing carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland

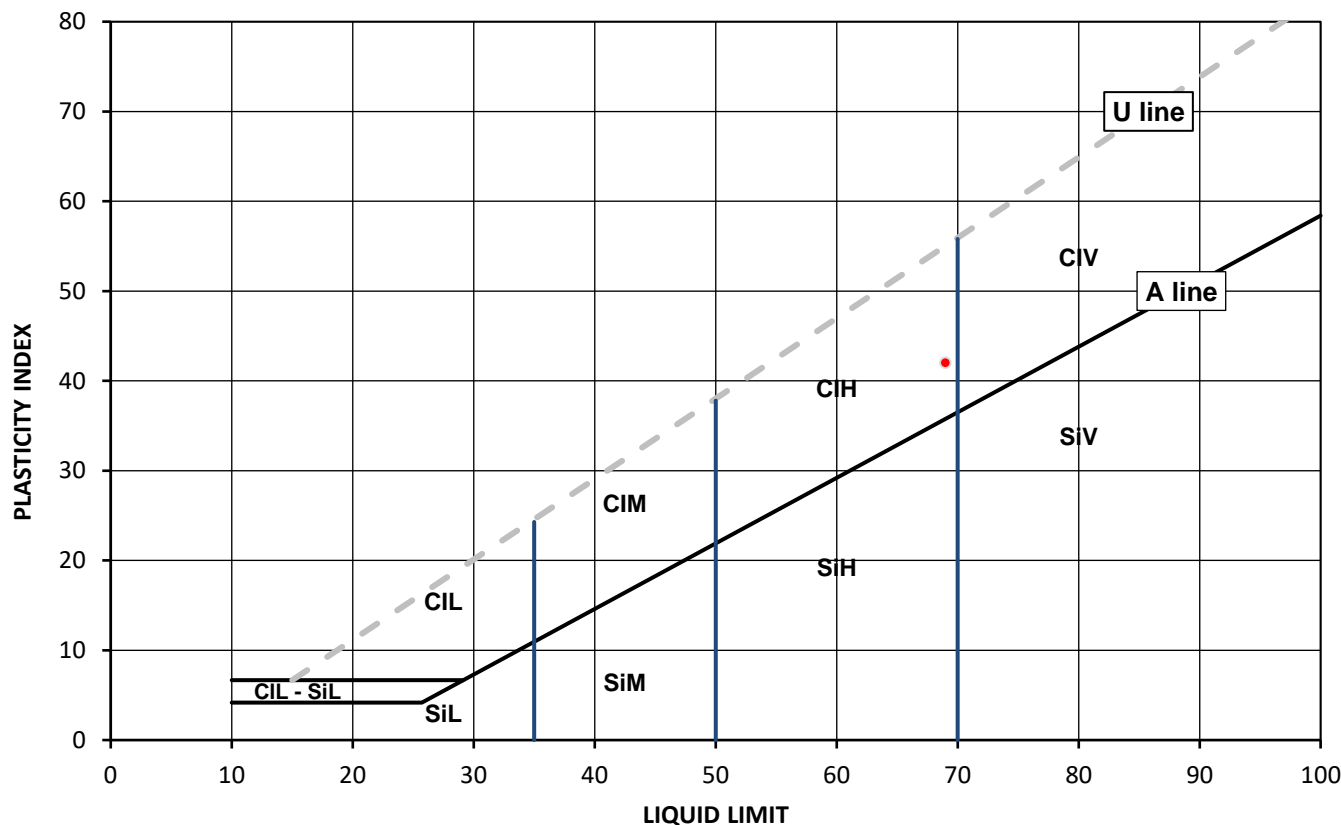
Test Results:

Laboratory Reference: 1770112
Hole No.: BH102
Sample Reference: Not Given
Soil Description: Greyish brown CLAY

Depth Top [m]: 31.50
Depth Base [m]: Not Given
Sample Type: B

Sample Preparation: Tested in natural condition

As Received Moisture Content [W] %	Liquid Limit [WL] %	Plastic Limit [Wp] %	Plasticity Index [Ip] %	% Passing 425µm BS Test Sieve
29	69	27	42	100



Legend, based on BS EN ISO 14688 2:2018 Geotechnical investigation and testing – Identification and classification of soil

	Plasticity	Liquid Limit
Cl Clay	L Low	below 35
Si Silt	M Medium	35 to 50
	H High	50 to 70
	V Very high	exceeding 70
	O Organic	append to classification for organic material (eg CIHO)

Note: Moisture Content by BS 1377-2: 1990: Clause 3.2

Remarks:

Signed:

Szczepan Bielatowicz
PL Deputy of Head of Geotechnical Section
for and on behalf of i2 Analytical Ltd

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Tested in Accordance with: BS 1377-2: 1990: Clause 4.3 and 5

Client: McAuliffe Group
Client Address: McAuliffe House, Northcott Road,
WV14 0TP

Contact: Matthew Handley
Site Address: Belmont Street

Client Reference: 21-56811
Job Number: 21-56811
Date Sampled: 10/02/2021
Date Received: 10/02/2021
Date Tested: 24/02/2021
Sampled By: i2 - MH

Testing carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland

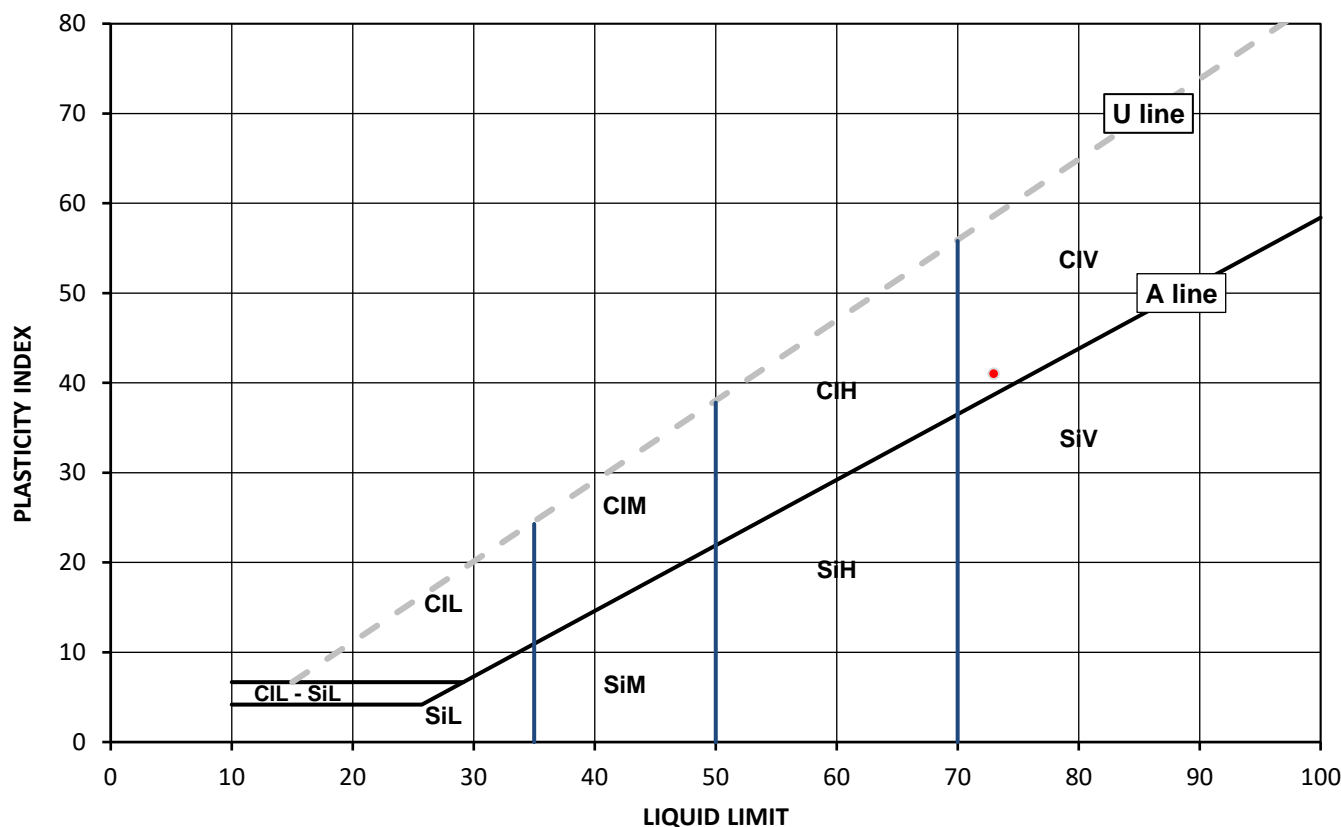
Test Results:

Laboratory Reference: 1770113
Hole No.: BH102
Sample Reference: Not Given
Soil Description: Greyish brown CLAY

Depth Top [m]: 32.80
Depth Base [m]: Not Given
Sample Type: B

Sample Preparation: Tested in natural condition

As Received Moisture Content [W] %	Liquid Limit [WL] %	Plastic Limit [Wp] %	Plasticity Index [Ip] %	% Passing 425µm BS Test Sieve
29	73	32	41	100



Legend, based on BS EN ISO 14688 2:2018 Geotechnical investigation and testing – Identification and classification of soil

	Plasticity	Liquid Limit
Cl	Clay	below 35
Si	Silt	35 to 50
	L	Low
	M	Medium
	H	High
	V	Very high
	O	Organic
		append to classification for organic material (eg CIHO)

Note: Moisture Content by BS 1377-2: 1990: Clause 3.2

Remarks:

Signed:

Szczepan Bielawicz
PL Deputy of Head of Geotechnical Section
for and on behalf of i2 Analytical Ltd

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SUMMARY REPORT

Summary of Classification Test Results

i2 Analytical Ltd
Unit 8 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB



Tested in Accordance with:

Moisture Content by BS 1377-2: 1990: Clause 3.2; Water Content by BS EN 17892-1: 2014; Atterberg by BS 1377-2: 1990: Clause 4.3 (4 Point Test), Clause 4.4 (1 Point Test) and 5; PD by BS 1377-2: 1990: Clause 8.2

Client Reference: 21-56811
Job Number: 21-56811
Date Sampled: 09/02 - 10/02/2021
Date Received: 10/02/2021
Date Tested: 24/02/2021
Sampled By: i2 - MH

Client: McAuliffe Group
Client Address: McAuliffe House, Northcott Road,
WV14 0TP

Contact: Matthew Handley
Site Address: Belmont Street

Testing carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland

Test results

Laboratory Reference	Hole No.	Sample				Description	Remarks	Moisture Content [W]	Water Content [W]	Atterberg				Density			Total Porosity#		
		Reference	Depth Top	Depth Base	Type					% Passing 425um	WL	Wp	Ip	bulk	dry	PD			
			m	m				%	%	%	%	%	%	Mg/m3	Mg/m3	Mg/m3	%		
1770106	BH102	Not Given	22.50	Not Given	B	Greyish brown CLAY	Atterberg 4 Point	26		100	59	29	30						
1770107	BH102	Not Given	24.00	Not Given	B	Greyish brown CLAY	Atterberg 4 Point	27		100	57	27	30						
1770108	BH102	Not Given	25.50	Not Given	B	Greyish brown CLAY	Atterberg 4 Point	26		100	64	29	35						
1770109	BH102	Not Given	27.00	Not Given	B	Greyish brown CLAY	Atterberg 4 Point	25		100	59	28	31						
1770110	BH102	Not Given	28.50	Not Given	B	Greyish brown CLAY	Atterberg 4 Point	25		100	60	26	34						
1770111	BH102	Not Given	30.00	Not Given	B	Greyish brown CLAY	Atterberg 4 Point	31		100	64	26	38						
1770112	BH102	Not Given	31.50	Not Given	B	Greyish brown CLAY	Atterberg 4 Point	29		100	69	27	42						
1770113	BH102	Not Given	32.80	Not Given	B	Greyish brown CLAY	Atterberg 4 Point	29		100	73	32	41						

Note: # Non accredited; NP - Non plastic

Comments:

Signed:

Szczepan Bielatowicz
PL Deputy of Head of Geotechnical Section
for and on behalf of i2 Analytical Ltd

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TEST CERTIFICATE

Particle Size Distribution

i2 Analytical Ltd
Unit 6 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB



Tested in Accordance with: BS 1377-2: 1990

Client: McAuliffe Group
Client Address: McAuliffe House, Northcott Road,
WV14 0TP

Contact: Matthew Handley
Site Address: Belmont Street

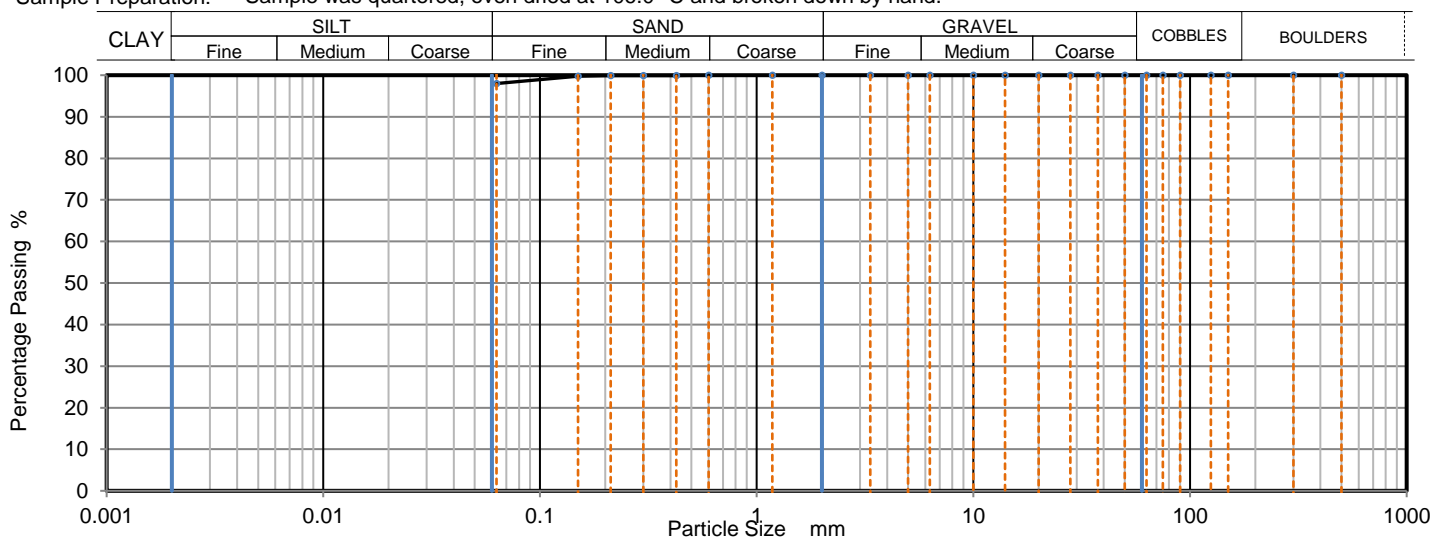
Client Reference: 21-56811
Job Number: 21-56811
Date Sampled: 09/02/2021
Date Received: 10/02/2021
Date Tested: 24/02/2021
Sampled By: i2 - MH

Testing carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland

Test Results:

Laboratory Reference: 1770106
Hole No.: BH102
Sample Reference: Not Given
Sample Description: Greyish brown CLAY
Sample Preparation: Sample was quartered, oven dried at 106.0 °C and broken down by hand.

Depth Top [m]: 22.50
Depth Base [m]: Not Given
Sample Type: B



Sieving		Sedimentation	
Particle Size mm	% Passing	Particle Size mm	% Passing
500	100		
300	100		
150	100		
125	100		
90	100		
75	100		
63	100		
50	100		
37.5	100		
28	100		
20	100		
14	100		
10	100		
6.3	100		
5	100		
3.35	100		
2	100		
1.18	100		
0.6	100		
0.425	100		
0.3	100		
0.212	100		
0.15	100		
0.063	99		

Sample Proportions	% dry mass
Very coarse	0
Gravel	0
Sand	1
Fines <0.063mm	99

Grading Analysis	
D100	mm
D60	mm
D30	mm
D10	mm
Uniformity Coefficient	N/A
Curvature Coefficient	

Uniformity Coefficient and Coefficient of Curvature calculated in accordance with BS EN ISO 14688-2: 2004 + A1: 2013

Note: Tested in Accordance with BS1377:Part 2:1990, clause 9.2

Remarks:

Signed:

Szczepan Bielatowicz
PL Deputy of Head of Geotechnical Section
for and on behalf of i2 Analytical Ltd

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TEST CERTIFICATE

Particle Size Distribution

i2 Analytical Ltd
Unit 6 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB



Tested in Accordance with: BS 1377-2: 1990

Client: McAuliffe Group
Client Address: McAuliffe House, Northcott Road,
WV14 0TP

Contact: Matthew Handley
Site Address: Belmont Street

Client Reference: 21-56811
Job Number: 21-56811
Date Sampled: 09/02/2021
Date Received: 10/02/2021
Date Tested: 24/02/2021
Sampled By: i2 - MH

Testing carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland

Test Results:

Laboratory Reference: 1770107

Hole No.: BH102

Sample Reference: Not Given

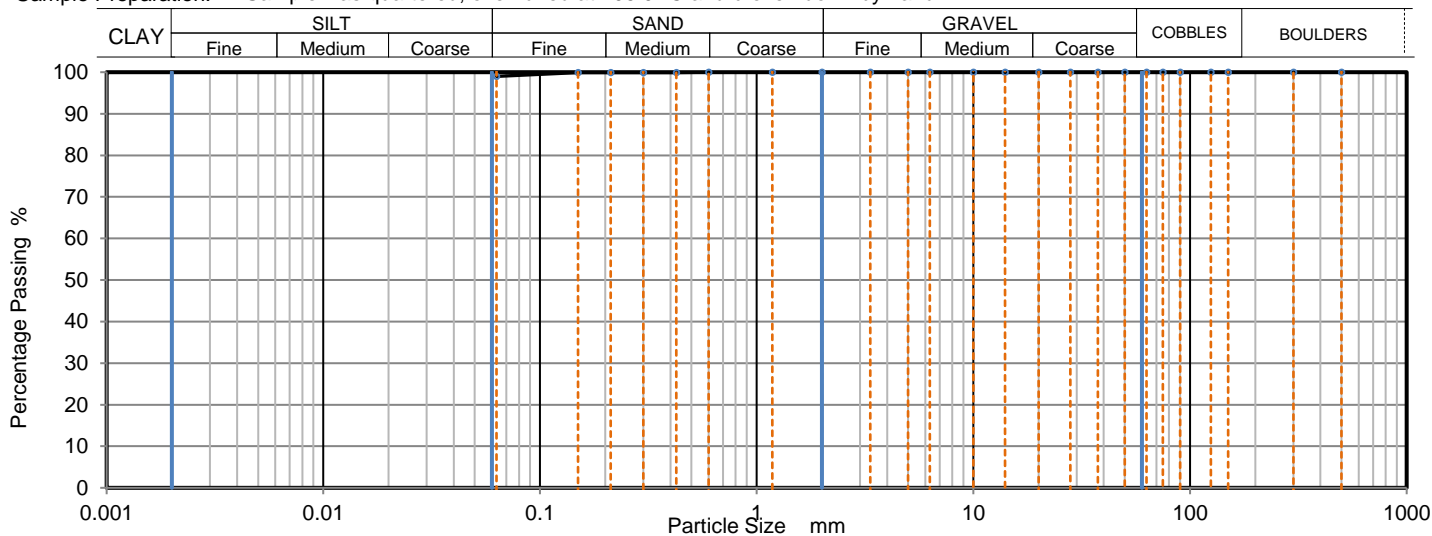
Sample Description: Greyish brown CLAY

Sample Preparation: Sample was quartered, oven dried at 106.0 °C and broken down by hand.

Depth Top [m]: 24.00

Depth Base [m]: Not Given

Sample Type: B



Sieving		Sedimentation	
Particle Size mm	% Passing	Particle Size mm	% Passing
500	100		
300	100		
150	100		
125	100		
90	100		
75	100		
63	100		
50	100		
37.5	100		
28	100		
20	100		
14	100		
10	100		
6.3	100		
5	100		
3.35	100		
2	100		
1.18	100		
0.6	100		
0.425	100		
0.3	100		
0.212	100		
0.15	100		
0.063	100		

Sample Proportions	% dry mass
Very coarse	0
Gravel	0
Sand	0
Fines <0.063mm	100

Grading Analysis	
D100	mm
D60	mm
D30	mm
D10	mm
Uniformity Coefficient	N/A
Curvature Coefficient	

Uniformity Coefficient and Coefficient of Curvature calculated in accordance with BS EN ISO 14688-2: 2004 + A1: 2013

Note: Tested in Accordance with BS1377:Part 2:1990, clause 9.2

Remarks:

Signed:

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PL Deputy of Head of Geotechnical Section
for and on behalf of i2 Analytical Ltd

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TEST CERTIFICATE

Particle Size Distribution

i2 Analytical Ltd
Unit 6 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB



Tested in Accordance with: BS 1377-2: 1990

Client: McAuliffe Group
Client Address: McAuliffe House, Northcott Road,
WV14 0TP

Contact: Matthew Handley
Site Address: Belmont Street

Client Reference: 21-56811
Job Number: 21-56811
Date Sampled: 09/02/2021
Date Received: 10/02/2021
Date Tested: 24/02/2021
Sampled By: i2 - MH

Testing carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland

Test Results:

Laboratory Reference: 1770108

Hole No.: BH102

Sample Reference: Not Given

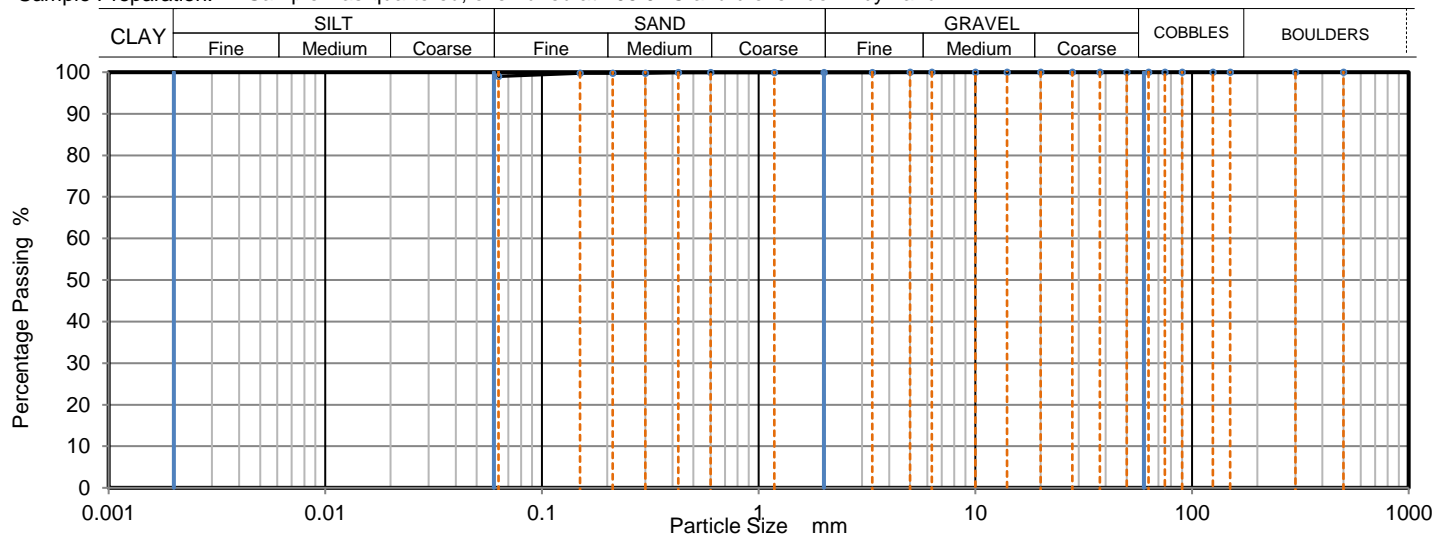
Sample Description: Greyish brown CLAY

Sample Preparation: Sample was quartered, oven dried at 106.0 °C and broken down by hand.

Depth Top [m]: 25.50

Depth Base [m]: Not Given

Sample Type: B



Sieving		Sedimentation	
Particle Size mm	% Passing	Particle Size mm	% Passing
500	100		
300	100		
150	100		
125	100		
90	100		
75	100		
63	100		
50	100		
37.5	100		
28	100		
20	100		
14	100		
10	100		
6.3	100		
5	100		
3.35	100		
2	100		
1.18	100		
0.6	100		
0.425	100		
0.3	100		
0.212	100		
0.15	100		
0.063	99		

Sample Proportions	% dry mass
Very coarse	0
Gravel	0
Sand	1
Fines <0.063mm	99

Grading Analysis	
D100	mm
D60	mm
D30	mm
D10	mm
Uniformity Coefficient	N/A
Curvature Coefficient	

Uniformity Coefficient and Coefficient of Curvature calculated in accordance with BS EN ISO 14688-2: 2004 + A1: 2013

Note: Tested in Accordance with BS1377:Part 2:1990, clause 9.2

Remarks:

Signed:

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TEST CERTIFICATE

Particle Size Distribution

i2 Analytical Ltd
Unit 6 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB



Tested in Accordance with: BS 1377-2: 1990

Client: McAuliffe Group
Client Address: McAuliffe House, Northcott Road,
WV14 0TP

Contact: Matthew Handley
Site Address: Belmont Street

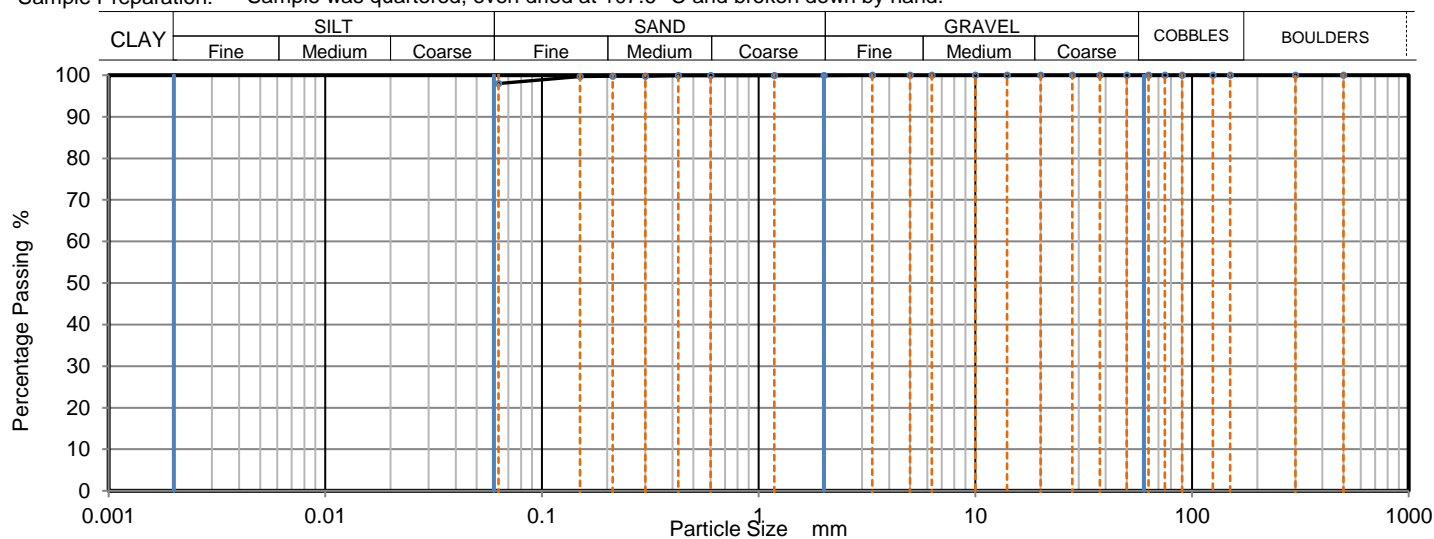
Testing carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland

Client Reference: 21-56811
Job Number: 21-56811
Date Sampled: 09/02/2021
Date Received: 10/02/2021
Date Tested: 24/02/2021
Sampled By: i2 - MH

Test Results:

Laboratory Reference: 1770109
Hole No.: BH102
Sample Reference: Not Given
Sample Description: Greyish brown CLAY
Sample Preparation: Sample was quartered, oven dried at 107.6 °C and broken down by hand.

Depth Top [m]: 27.00
Depth Base [m]: Not Given
Sample Type: B



Sieving		Sedimentation	
Particle Size mm	% Passing	Particle Size mm	% Passing
500	100		
300	100		
150	100		
125	100		
90	100		
75	100		
63	100		
50	100		
37.5	100		
28	100		
20	100		
14	100		
10	100		
6.3	100		
5	100		
3.35	100		
2	100		
1.18	100		
0.6	100		
0.425	100		
0.3	100		
0.212	100		
0.15	100		
0.063	99		

Sample Proportions	% dry mass
Very coarse	0
Gravel	0
Sand	1
Fines <0.063mm	99

Grading Analysis	
D100	mm
D60	mm
D30	mm
D10	mm
Uniformity Coefficient	N/A
Curvature Coefficient	

Uniformity Coefficient and Coefficient of Curvature calculated in accordance with BS EN ISO 14688-2: 2004 + A1: 2013

Note: Tested in Accordance with BS1377:Part 2:1990, clause 9.2

Remarks:

Signed:

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TEST CERTIFICATE

Particle Size Distribution

i2 Analytical Ltd
Unit 6 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB



Tested in Accordance with: BS 1377-2: 1990

Client: McAuliffe Group
Client Address: McAuliffe House, Northcott Road,
WV14 0TP

Contact: Matthew Handley
Site Address: Belmont Street

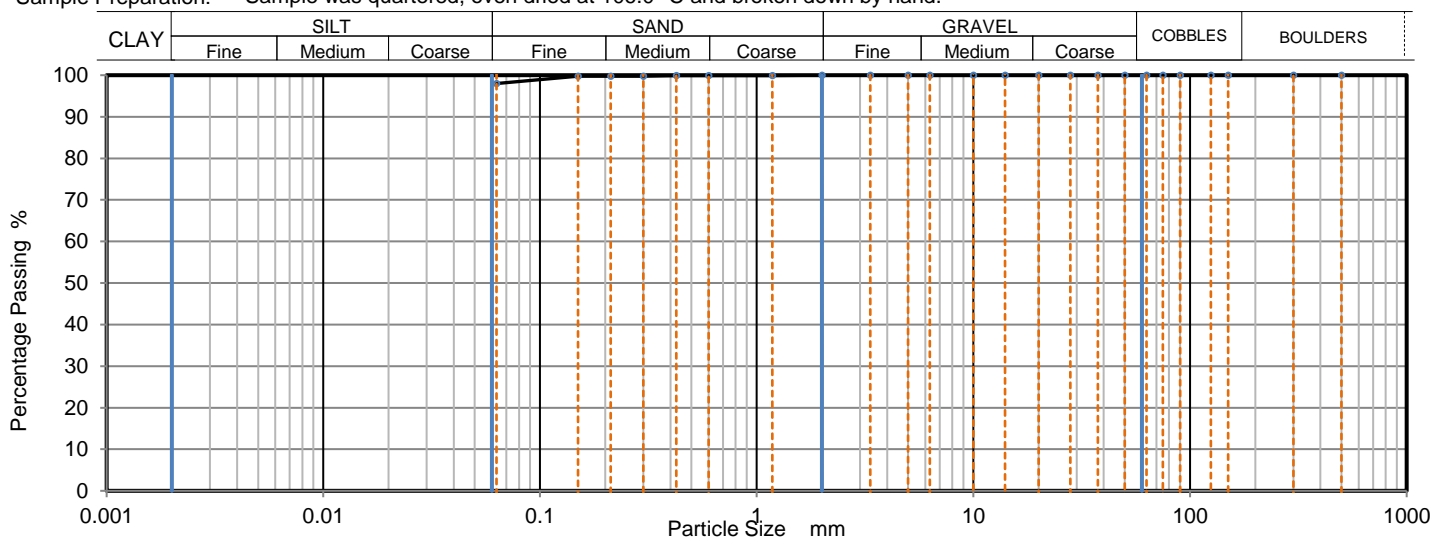
Testing carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland

Client Reference: 21-56811
Job Number: 21-56811
Date Sampled: 09/02/2021
Date Received: 10/02/2021
Date Tested: 24/02/2021
Sampled By: i2 - MH

Test Results:

Laboratory Reference: 1770110
Hole No.: BH102
Sample Reference: Not Given
Sample Description: Greyish brown CLAY
Sample Preparation: Sample was quartered, oven dried at 106.0 °C and broken down by hand.

Depth Top [m]: 28.50
Depth Base [m]: Not Given
Sample Type: B



Sieving		Sedimentation	
Particle Size mm	% Passing	Particle Size mm	% Passing
500	100		
300	100		
150	100		
125	100		
90	100		
75	100		
63	100		
50	100		
37.5	100		
28	100		
20	100		
14	100		
10	100		
6.3	100		
5	100		
3.35	100		
2	100		
1.18	100		
0.6	100		
0.425	100		
0.3	100		
0.212	100		
0.15	100		
0.063	99		

Sample Proportions	% dry mass
Very coarse	0
Gravel	0
Sand	1
Fines <0.063mm	99

Grading Analysis	
D100	mm
D60	mm
D30	mm
D10	mm
Uniformity Coefficient	N/A
Curvature Coefficient	

Uniformity Coefficient and Coefficient of Curvature calculated in accordance with BS EN ISO 14688-2: 2004 + A1: 2013

Note: Tested in Accordance with BS1377:Part 2:1990, clause 9.2

Remarks:

Signed:

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TEST CERTIFICATE

Particle Size Distribution

Tested in Accordance with: BS 1377-2: 1990

i2 Analytical Ltd
Unit 6 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB



Client: McAuliffe Group
Client Address: McAuliffe House, Northcott Road,
WV14 0TP

Contact: Matthew Handley
Site Address: Belmont Street

Testing carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland

Client Reference: 21-56811
Job Number: 21-56811
Date Sampled: 10/02/2021
Date Received: 10/02/2021
Date Tested: 24/02/2021
Sampled By: i2 - MH

Test Results:

Laboratory Reference: 1770111

Hole No.: BH102

Sample Reference: Not Given

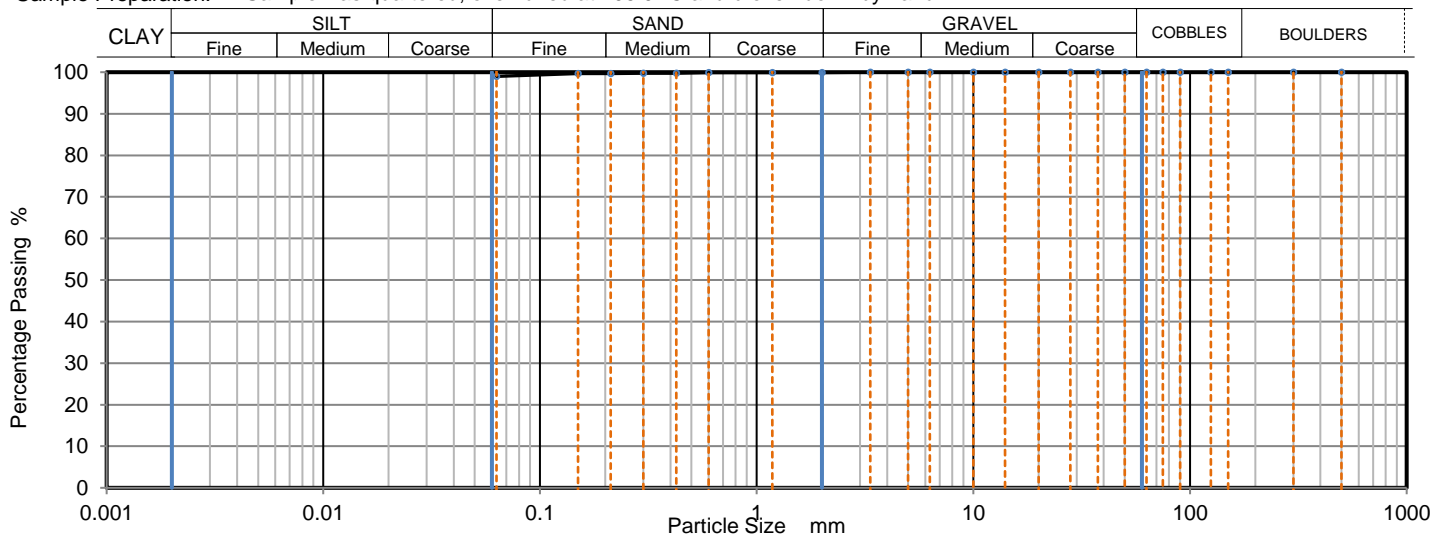
Sample Description: Greyish brown CLAY

Sample Preparation: Sample was quartered, oven dried at 106.0 °C and broken down by hand.

Depth Top [m]: 30.00

Depth Base [m]: Not Given

Sample Type: B



Sieving		Sedimentation	
Particle Size mm	% Passing	Particle Size mm	% Passing
500	100		
300	100		
150	100		
125	100		
90	100		
75	100		
63	100		
50	100		
37.5	100		
28	100		
20	100		
14	100		
10	100		
6.3	100		
5	100		
3.35	100		
2	100		
1.18	100		
0.6	100		
0.425	100		
0.3	100		
0.212	100		
0.15	100		
0.063	99		

Sample Proportions	% dry mass
Very coarse	0
Gravel	0
Sand	1
Fines <0.063mm	99

Grading Analysis	
D100	mm
D60	mm
D30	mm
D10	mm
Uniformity Coefficient	N/A
Curvature Coefficient	

Uniformity Coefficient and Coefficient of Curvature calculated in accordance with BS EN ISO 14688-2: 2004 + A1: 2013

Note: Tested in Accordance with BS1377:Part 2:1990, clause 9.2

Remarks:

Signed:

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TEST CERTIFICATE

Particle Size Distribution

Tested in Accordance with: BS 1377-2: 1990

i2 Analytical Ltd
Unit 6 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB



Client: McAuliffe Group
Client Address: McAuliffe House, Northcott Road,
WV14 0TP

Contact: Matthew Handley
Site Address: Belmont Street

Testing carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland

Client Reference: 21-56811
Job Number: 21-56811
Date Sampled: 10/02/2021
Date Received: 10/02/2021
Date Tested: 24/02/2021
Sampled By: i2 - MH

Test Results:

Laboratory Reference: 1770112

Hole No.: BH102

Sample Reference: Not Given

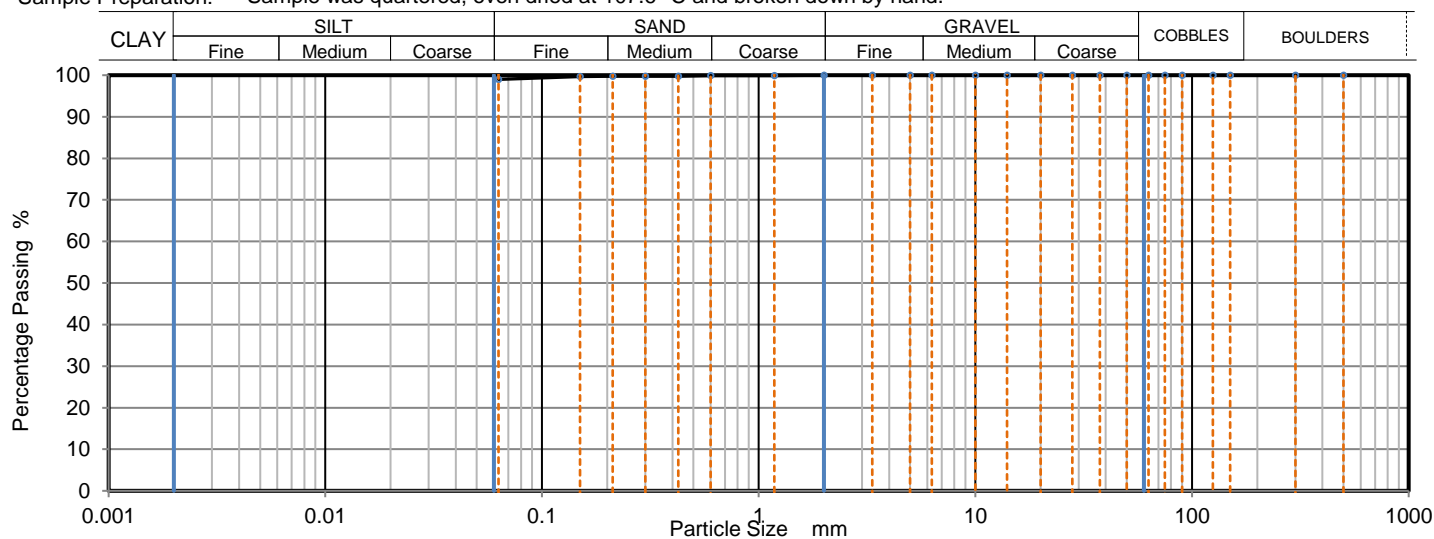
Sample Description: Greyish brown CLAY

Sample Preparation: Sample was quartered, oven dried at 107.6 °C and broken down by hand.

Depth Top [m]: 31.50

Depth Base [m]: Not Given

Sample Type: B



Sieving		Sedimentation	
Particle Size mm	% Passing	Particle Size mm	% Passing
500	100		
300	100		
150	100		
125	100		
90	100		
75	100		
63	100		
50	100		
37.5	100		
28	100		
20	100		
14	100		
10	100		
6.3	100		
5	100		
3.35	100		
2	100		
1.18	100		
0.6	100		
0.425	100		
0.3	100		
0.212	100		
0.15	100		
0.063	99		

Sample Proportions	% dry mass
Very coarse	0
Gravel	0
Sand	1
Fines <0.063mm	99

Grading Analysis	
D100	mm 6.3
D60	mm
D30	mm
D10	mm
Uniformity Coefficient	N/A
Curvature Coefficient	

Uniformity Coefficient and Coefficient of Curvature calculated in accordance with BS EN ISO 14688-2: 2004 + A1: 2013

Note: Tested in Accordance with BS1377:Part 2:1990, clause 9.2

Remarks:

Signed:

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PL Deputy of Head of Geotechnical Section
for and on behalf of i2 Analytical Ltd

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TEST CERTIFICATE

Particle Size Distribution

i2 Analytical Ltd
Unit 6 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB



Tested in Accordance with: BS 1377-2: 1990

Client: McAuliffe Group
Client Address: McAuliffe House, Northcott Road,
WV14 0TP

Contact: Matthew Handley
Site Address: Belmont Street

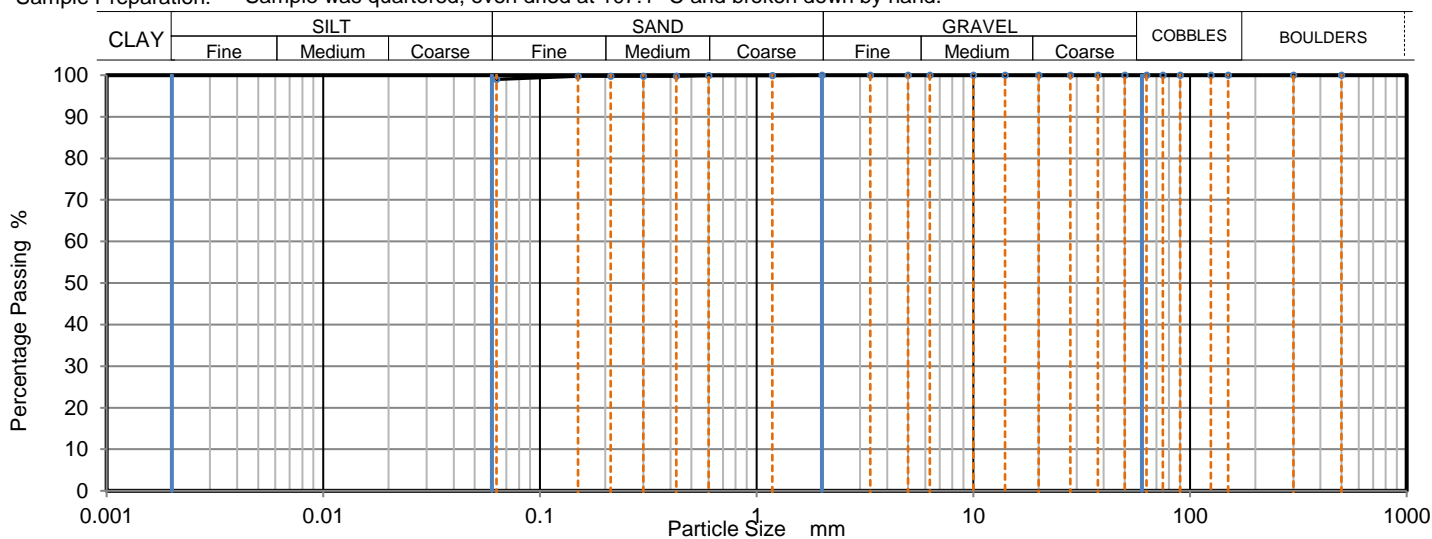
Testing carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland

Client Reference: 21-56811
Job Number: 21-56811
Date Sampled: 10/02/2021
Date Received: 10/02/2021
Date Tested: 24/02/2021
Sampled By: i2 - MH

Test Results:

Laboratory Reference: 1770113
Hole No.: BH102
Sample Reference: Not Given
Sample Description: Greyish brown CLAY
Sample Preparation: Sample was quartered, oven dried at 107.1 °C and broken down by hand.

Depth Top [m]: 32.80
Depth Base [m]: Not Given
Sample Type: B



Sieving		Sedimentation	
Particle Size mm	% Passing	Particle Size mm	% Passing
500	100		
300	100		
150	100		
125	100		
90	100		
75	100		
63	100		
50	100		
37.5	100		
28	100		
20	100		
14	100		
10	100		
6.3	100		
5	100		
3.35	100		
2	100		
1.18	100		
0.6	100		
0.425	100		
0.3	100		
0.212	100		
0.15	100		
0.063	100		

Sample Proportions	% dry mass
Very coarse	0
Gravel	0
Sand	0
Fines <0.063mm	100

Grading Analysis	
D100	mm
D60	mm
D30	mm
D10	mm
Uniformity Coefficient	N/A
Curvature Coefficient	

Uniformity Coefficient and Coefficient of Curvature calculated in accordance with BS EN ISO 14688-2: 2004 + A1: 2013

Note: Tested in Accordance with BS1377:Part 2:1990, clause 9.2

Remarks:

Signed:

Szczepan Bielatowicz
PL Deputy of Head of Geotechnical Section
for and on behalf of i2 Analytical Ltd

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TEST CERTIFICATE

Liquid and Plastic Limits

i2 Analytical Ltd
Unit 6 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB



Tested in Accordance with: BS 1377-2: 1990: Clause 4.3 and 5

Client: McAuliffe Group
Client Address: McAuliffe House, Northcott Road,
WV14 0TP

Contact: Matthew Handley
Site Address: Belmont Street

Client Reference: VISIT3619
Job Number: 21-57186
Date Sampled: 11/02/2021
Date Received: 12/02/2021
Date Tested: 25/02/2021
Sampled By: i2 - MH

Testing carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland

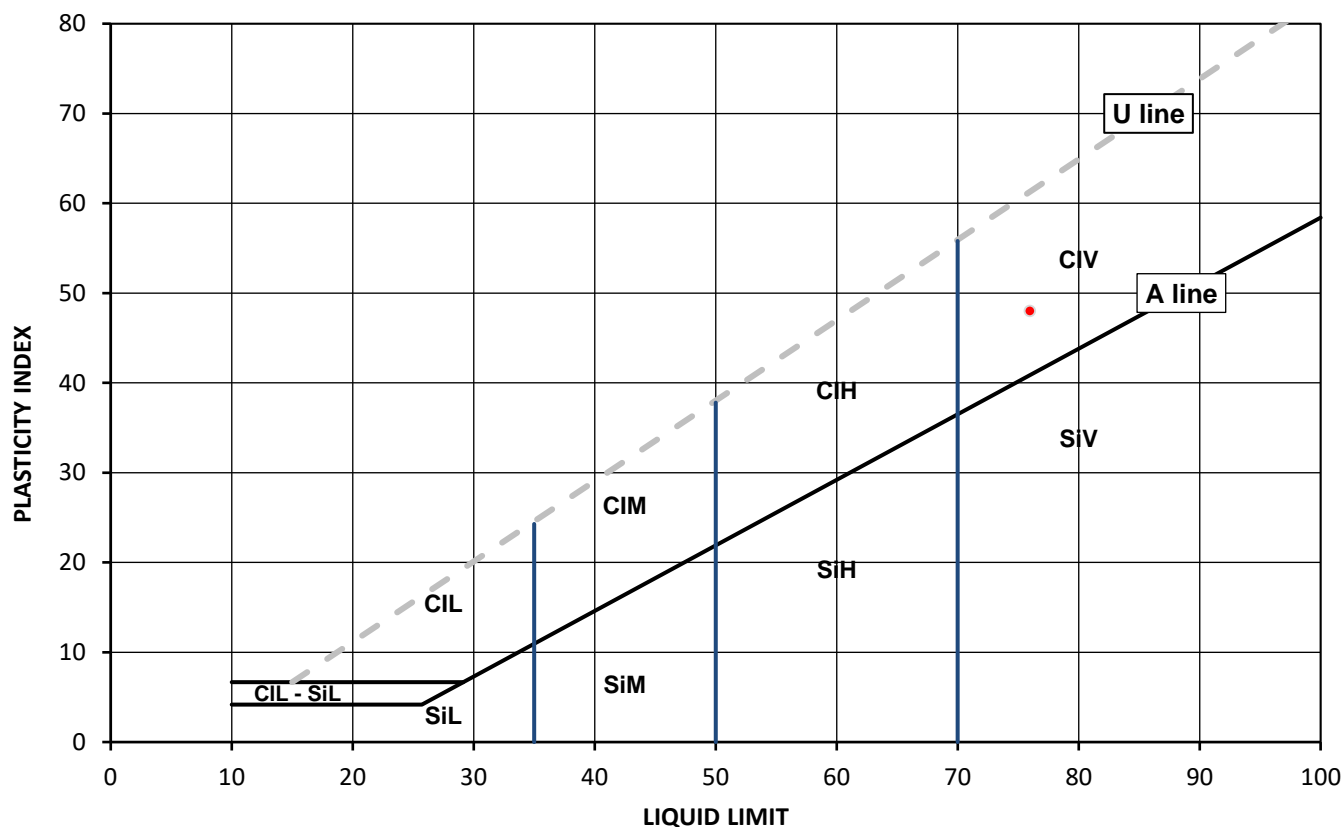
Test Results:

Laboratory Reference: 1772346
Hole No.: BH103
Sample Reference: Not Given
Soil Description: Brown CLAY

Depth Top [m]: 1.80
Depth Base [m]: Not Given
Sample Type: D

Sample Preparation: Tested in natural condition

As Received Moisture Content [W] %	Liquid Limit [WL] %	Plastic Limit [Wp] %	Plasticity Index [Ip] %	% Passing 425µm BS Test Sieve
31	76	28	48	100



Legend, based on BS EN ISO 14688 2:2018 Geotechnical investigation and testing – Identification and classification of soil

	Plasticity	Liquid Limit
Cl Clay	L Low	below 35
Si Silt	M Medium	35 to 50
	H High	50 to 70
	V Very high	exceeding 70
	O Organic	append to classification for organic material (eg CIHO)

Note: Moisture Content by BS 1377-2: 1990: Clause 3.2

Remarks:

Signed:

Szczepan Bielatowicz
PL Deputy of Head of Geotechnical Section
for and on behalf of i2 Analytical Ltd

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Tested in Accordance with: BS 1377-2: 1990: Clause 4.3 and 5

Client: McAuliffe Group
Client Address: McAuliffe House, Northcott Road,
WV14 0TP

Contact: Matthew Handley
Site Address: Belmont Street

Client Reference: VISIT3619
Job Number: 21-57186
Date Sampled: 11/02/2021
Date Received: 12/02/2021
Date Tested: 25/02/2021
Sampled By: i2 - MH

Testing carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland

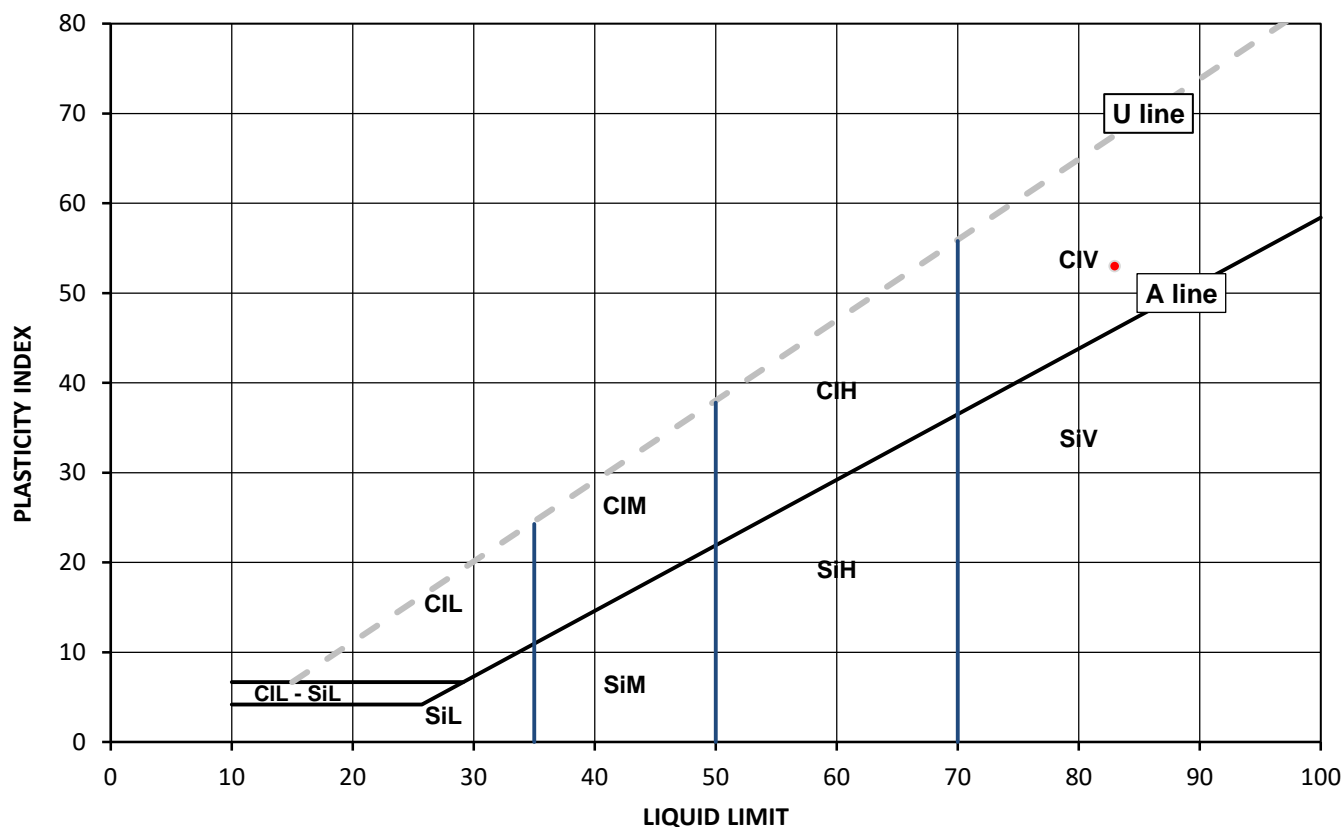
Test Results:

Laboratory Reference: 1772348
Hole No.: BH103
Sample Reference: Not Given
Soil Description: Brown slightly sandy CLAY

Depth Top [m]: 3.50
Depth Base [m]: 4.50
Sample Type: D

Sample Preparation: Tested in natural condition

As Received Moisture Content [W] %	Liquid Limit [WL] %	Plastic Limit [Wp] %	Plasticity Index [Ip] %	% Passing 425µm BS Test Sieve
32	83	30	53	100



Legend, based on BS EN ISO 14688 2:2018 Geotechnical investigation and testing – Identification and classification of soil

	Plasticity	Liquid Limit
Cl	Clay	below 35
Si	Silt	35 to 50
		50 to 70
		exceeding 70
		append to classification for organic material (eg CIHO)

Note: Moisture Content by BS 1377-2: 1990: Clause 3.2

Remarks:

Signed:

Szczepan Bielatowicz
PL Deputy of Head of Geotechnical Section
for and on behalf of i2 Analytical Ltd

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Tested in Accordance with: BS 1377-2: 1990: Clause 4.3 and 5

Client: McAuliffe Group
Client Address: McAuliffe House, Northcott Road,
WV14 0TP

Contact: Matthew Handley
Site Address: Belmont Street

Client Reference: VISIT3619
Job Number: 21-57186
Date Sampled: 11/02/2021
Date Received: 12/02/2021
Date Tested: 25/02/2021
Sampled By: i2 - MH

Testing carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland

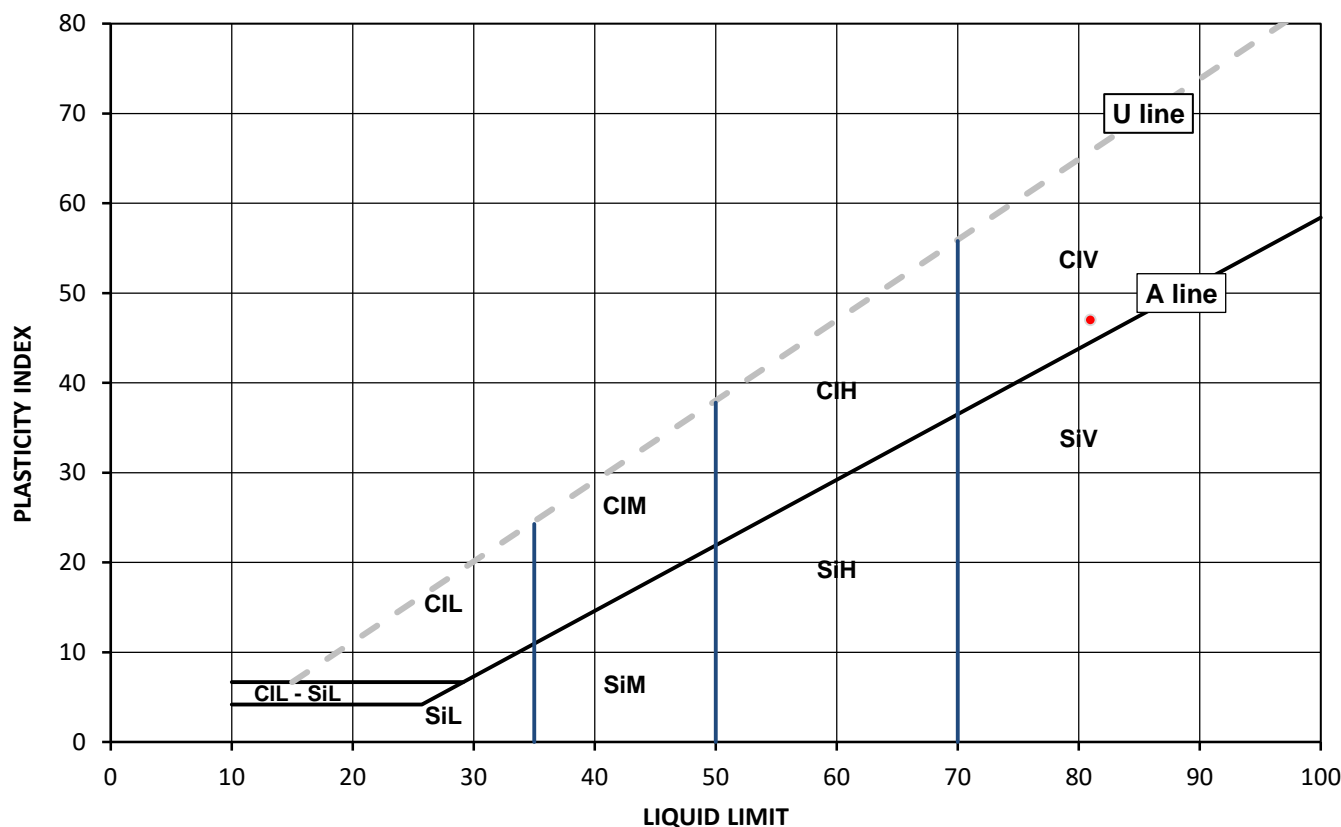
Test Results:

Laboratory Reference: 1772349
Hole No.: BH103
Sample Reference: Not Given
Soil Description: Brown slightly sandy CLAY

Depth Top [m]: 4.50
Depth Base [m]: Not Given
Sample Type: D

Sample Preparation: Tested in natural condition

As Received Moisture Content [W] %	Liquid Limit [WL] %	Plastic Limit [Wp] %	Plasticity Index [Ip] %	% Passing 425µm BS Test Sieve
32	81	34	47	100



Legend, based on BS EN ISO 14688 2:2018 Geotechnical investigation and testing – Identification and classification of soil

	Plasticity	Liquid Limit
Cl Clay	L Low	below 35
Si Silt	M Medium	35 to 50
	H High	50 to 70
	V Very high	exceeding 70
	O Organic	append to classification for organic material (eg CIHO)

Note: Moisture Content by BS 1377-2: 1990: Clause 3.2

Remarks:

Signed:

Szczepan Bielatowicz
PL Deputy of Head of Geotechnical Section
for and on behalf of i2 Analytical Ltd

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TEST CERTIFICATE

Liquid and Plastic Limits

i2 Analytical Ltd
Unit 6 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB



Tested in Accordance with: BS 1377-2: 1990: Clause 4.3 and 5

Client: McAuliffe Group
Client Address: McAuliffe House, Northcott Road,
WV14 0TP

Contact: Matthew Handley
Site Address: Belmont Street

Client Reference: VISIT3619
Job Number: 21-57186
Date Sampled: 11/02/2021
Date Received: 12/02/2021
Date Tested: 25/02/2021
Sampled By: i2 - MH

Testing carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland

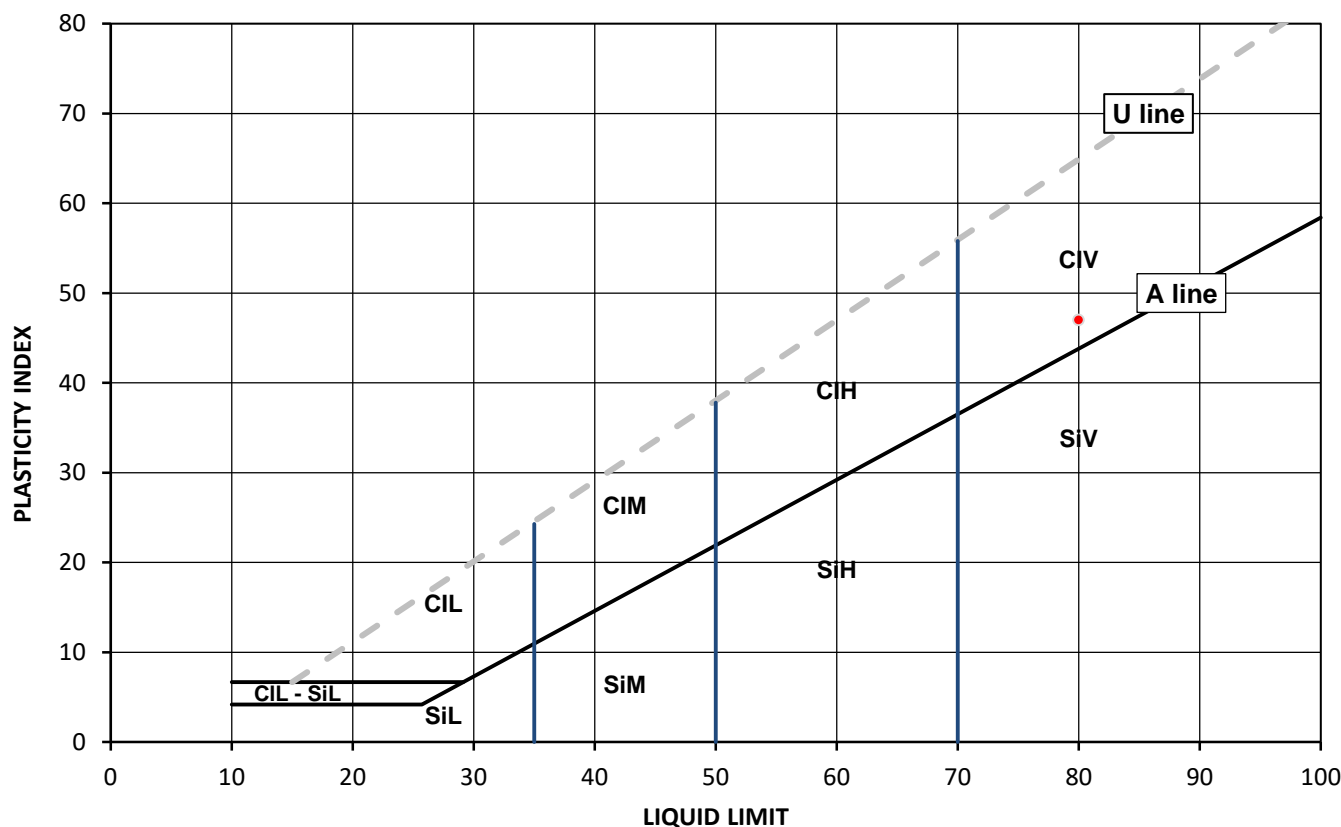
Test Results:

Laboratory Reference: 1772351
Hole No.: BH103
Sample Reference: Not Given
Soil Description: Brown slightly sandy CLAY

Depth Top [m]: 6.00
Depth Base [m]: Not Given
Sample Type: D

Sample Preparation: Tested in natural condition

As Received Moisture Content [W] %	Liquid Limit [WL] %	Plastic Limit [Wp] %	Plasticity Index [Ip] %	% Passing 425µm BS Test Sieve
31	80	33	47	100



Legend, based on BS EN ISO 14688 2:2018 Geotechnical investigation and testing – Identification and classification of soil

		Plasticity	Liquid Limit
Cl	Clay	L Low	below 35
Si	Silt	M Medium	35 to 50
		H High	50 to 70
		V Very high	exceeding 70
		O Organic	append to classification for organic material (eg CIHO)

Note: Moisture Content by BS 1377-2: 1990: Clause 3.2

Remarks:

Signed:

Szczepan Bielatowicz
PL Deputy of Head of Geotechnical Section
for and on behalf of i2 Analytical Ltd

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Tested in Accordance with: BS 1377-2: 1990: Clause 4.3 and 5

Client: McAuliffe Group
Client Address: McAuliffe House, Northcott Road,
WV14 0TP

Contact: Matthew Handley
Site Address: Belmont Street

Client Reference: VISIT3619
Job Number: 21-57186
Date Sampled: 11/02/2021
Date Received: 12/02/2021
Date Tested: 25/02/2021
Sampled By: i2 - MH

Testing carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland

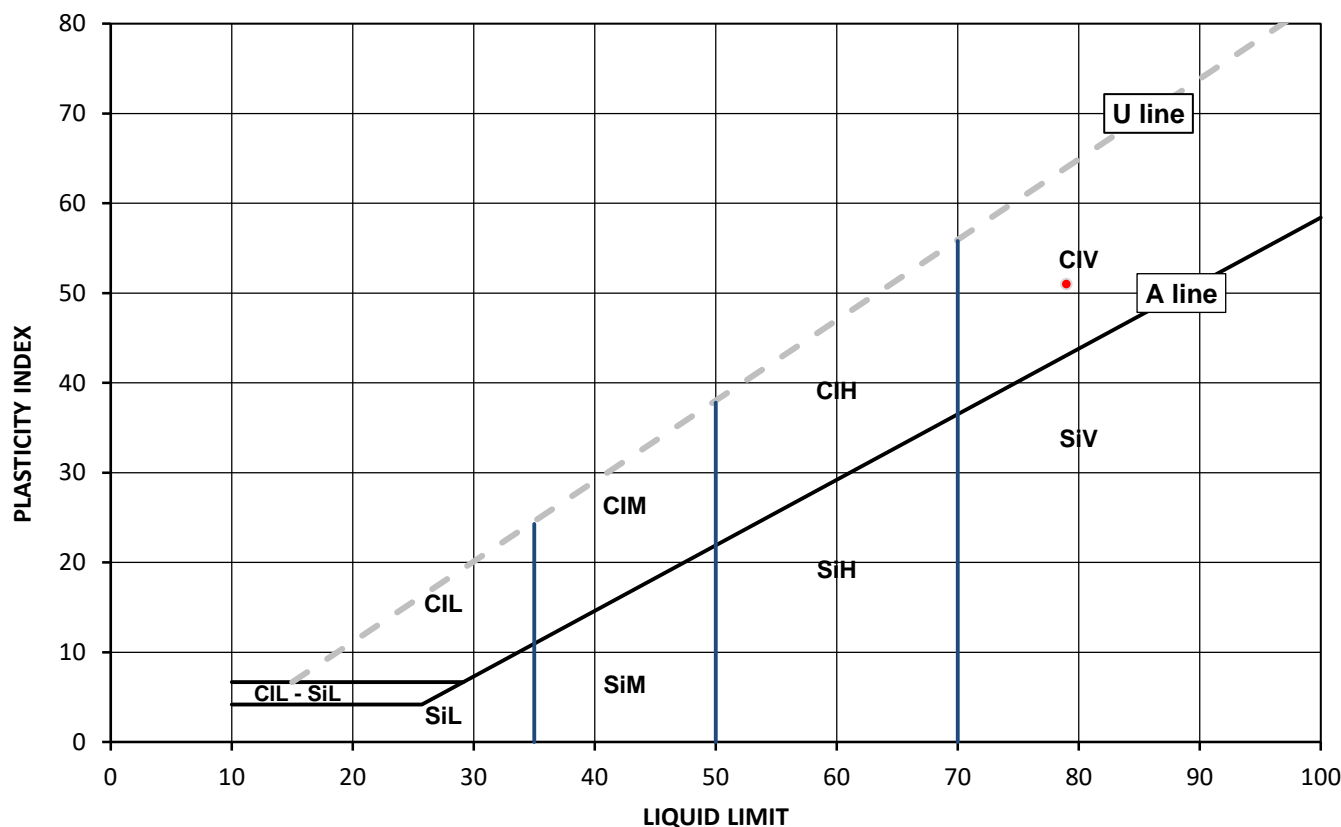
Test Results:

Laboratory Reference: 1772352
Hole No.: BH103
Sample Reference: Not Given
Soil Description: Brown slightly sandy CLAY

Depth Top [m]: 7.50
Depth Base [m]: Not Given
Sample Type: D

Sample Preparation: Tested in natural condition

As Received Moisture Content [W] %	Liquid Limit [WL] %	Plastic Limit [Wp] %	Plasticity Index [Ip] %	% Passing 425µm BS Test Sieve
31	79	28	51	100



Legend, based on BS EN ISO 14688 2:2018 Geotechnical investigation and testing – Identification and classification of soil

	Plasticity	Liquid Limit
Cl	Clay	below 35
Si	Silt	35 to 50
	L Low	50 to 70
	M Medium	exceeding 70
	H High	
	V Very high	
	O Organic	append to classification for organic material (eg CIHO)

Note: Moisture Content by BS 1377-2: 1990: Clause 3.2

Remarks:

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TEST CERTIFICATE

Liquid and Plastic Limits

i2 Analytical Ltd
Unit 6 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB



Tested in Accordance with: BS 1377-2: 1990: Clause 4.3 and 5

Client: McAuliffe Group
Client Address: McAuliffe House, Northcott Road,
WV14 0TP

Contact: Matthew Handley
Site Address: Belmont Street

Client Reference: VISIT3619
Job Number: 21-57186
Date Sampled: 11/02/2021
Date Received: 12/02/2021
Date Tested: 25/02/2021
Sampled By: i2 - MH

Testing carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland

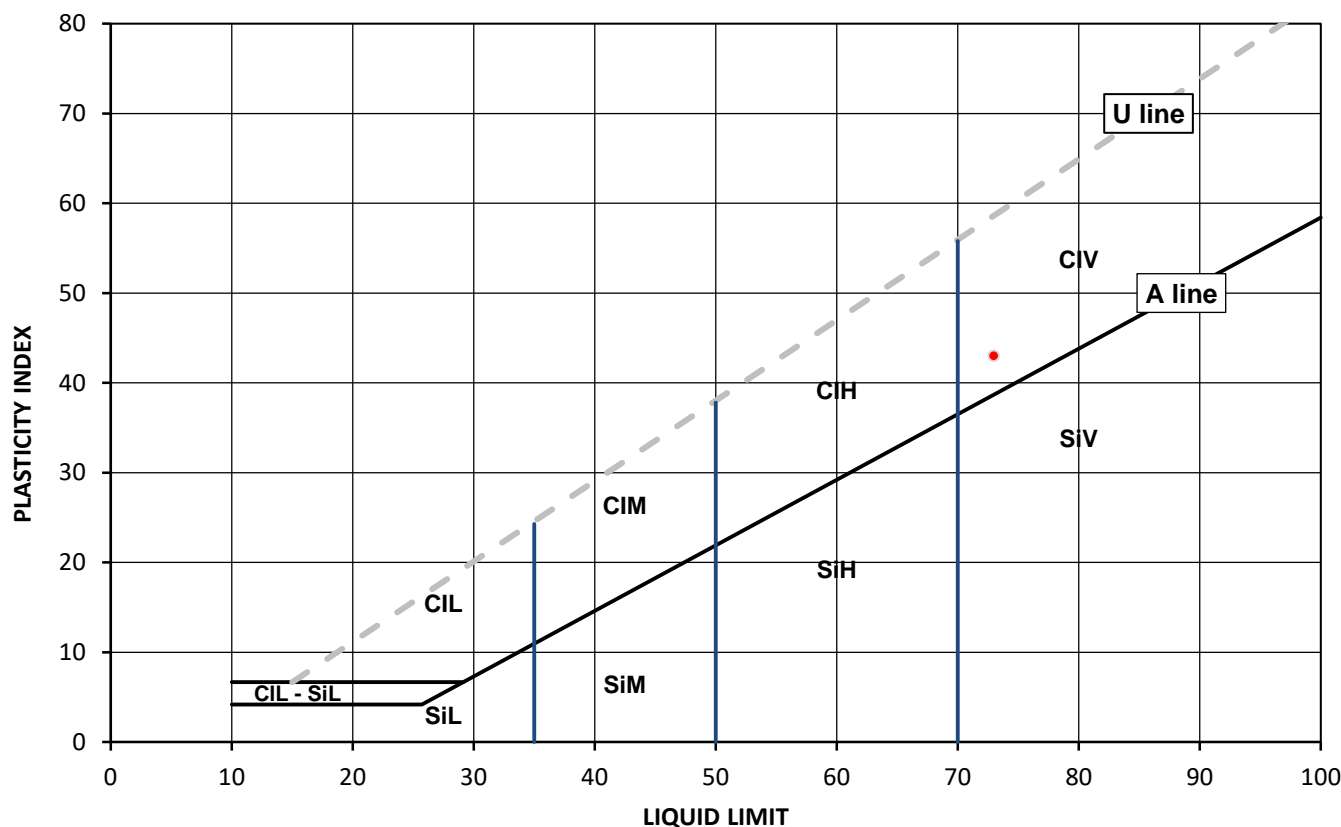
Test Results:

Laboratory Reference: 1772353
Hole No.: BH103
Sample Reference: Not Given
Soil Description: Brown CLAY

Depth Top [m]: 9.00
Depth Base [m]: Not Given
Sample Type: D

Sample Preparation: Tested in natural condition

As Received Moisture Content [W] %	Liquid Limit [WL] %	Plastic Limit [Wp] %	Plasticity Index [Ip] %	% Passing 425µm BS Test Sieve
30	73	30	43	100



Legend, based on BS EN ISO 14688 2:2018 Geotechnical investigation and testing – Identification and classification of soil

	Plasticity	Liquid Limit
Cl	Clay	below 35
Si	Silt	35 to 50
	L Low	50 to 70
	M Medium	exceeding 70
	H High	
	V Very high	
	O Organic	append to classification for organic material (eg CIHO)

Note: Moisture Content by BS 1377-2: 1990: Clause 3.2

Remarks:

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Tested in Accordance with: BS 1377-2: 1990: Clause 4.3 and 5

Client: McAuliffe Group
Client Address: McAuliffe House, Northcott Road,
WV14 0TP

Contact: Matthew Handley
Site Address: Belmont Street

Client Reference: VISIT3619
Job Number: 21-57186
Date Sampled: 11/02/2021
Date Received: 12/02/2021
Date Tested: 25/02/2021
Sampled By: i2 - MH

Testing carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland

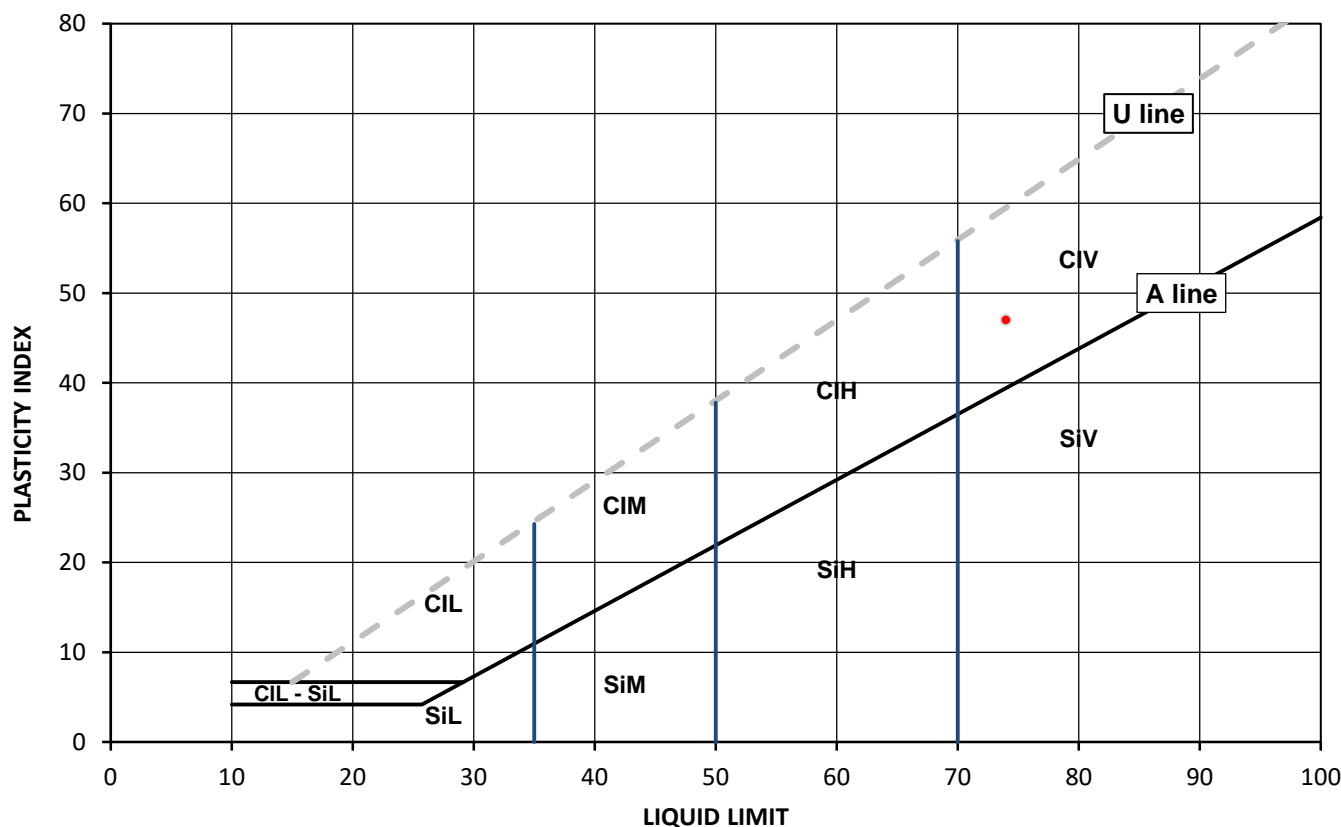
Test Results:

Laboratory Reference: 1772355
Hole No.: BH103
Sample Reference: Not Given
Soil Description: Brown slightly sandy CLAY

Depth Top [m]: 10.50
Depth Base [m]: Not Given
Sample Type: D

Sample Preparation: Tested in natural condition

As Received Moisture Content [W] %	Liquid Limit [WL] %	Plastic Limit [Wp] %	Plasticity Index [Ip] %	% Passing 425µm BS Test Sieve
29	74	27	47	100



Legend, based on BS EN ISO 14688 2:2018 Geotechnical investigation and testing – Identification and classification of soil

	Plasticity	Liquid Limit
Cl Clay	L Low	below 35
Si Silt	M Medium	35 to 50
	H High	50 to 70
	V Very high	exceeding 70
	O Organic	append to classification for organic material (eg CIHO)

Note: Moisture Content by BS 1377-2: 1990: Clause 3.2

Remarks:

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Tested in Accordance with: BS 1377-2: 1990: Clause 4.3 and 5

Client: McAuliffe Group
Client Address: McAuliffe House, Northcott Road,
WV14 0TP

Contact: Matthew Handley
Site Address: Belmont Street

Client Reference: VISIT3619
Job Number: 21-57186
Date Sampled: 11/02/2021
Date Received: 12/02/2021
Date Tested: 25/02/2021
Sampled By: i2 - MH

Testing carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland

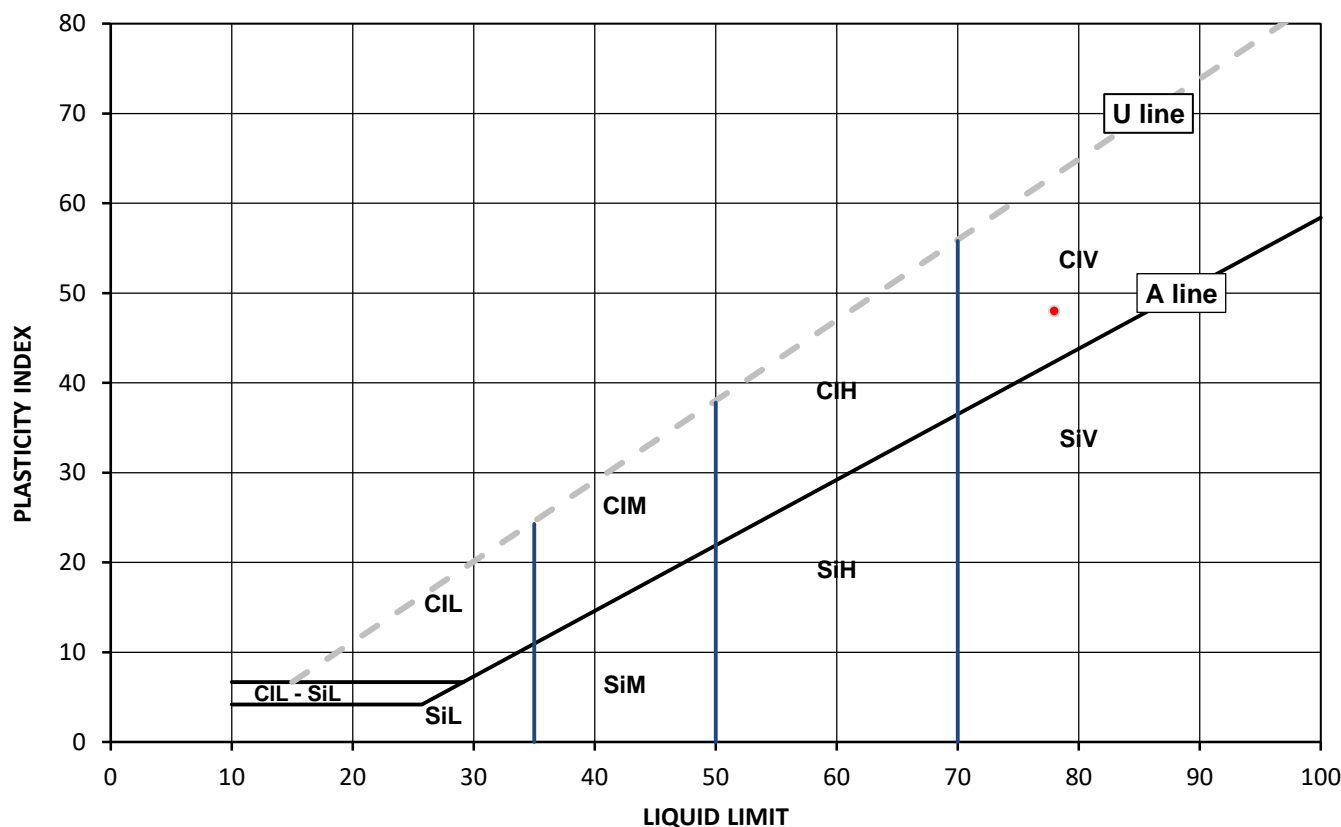
Test Results:

Laboratory Reference: 1772357
Hole No.: BH103
Sample Reference: Not Given
Soil Description: Brown CLAY

Depth Top [m]: 12.00
Depth Base [m]: Not Given
Sample Type: D

Sample Preparation: Tested in natural condition

As Received Moisture Content [W] %	Liquid Limit [WL] %	Plastic Limit [Wp] %	Plasticity Index [Ip] %	% Passing 425µm BS Test Sieve
29	78	30	48	100



Legend, based on BS EN ISO 14688 2:2018 Geotechnical investigation and testing – Identification and classification of soil

	Plasticity	Liquid Limit
Cl Clay	L Low	below 35
Si Silt	M Medium	35 to 50
	H High	50 to 70
	V Very high	exceeding 70
	O Organic	append to classification for organic material (eg CIHO)

Note: Moisture Content by BS 1377-2: 1990: Clause 3.2

Remarks:

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Tested in Accordance with: BS 1377-2: 1990: Clause 4.3 and 5

Client: McAuliffe Group
Client Address: McAuliffe House, Northcott Road,
WV14 0TP

Contact: Matthew Handley
Site Address: Belmont Street

Client Reference: VISIT3619
Job Number: 21-57186
Date Sampled: 11/02/2021
Date Received: 12/02/2021
Date Tested: 25/02/2021
Sampled By: i2 - MH

Testing carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland

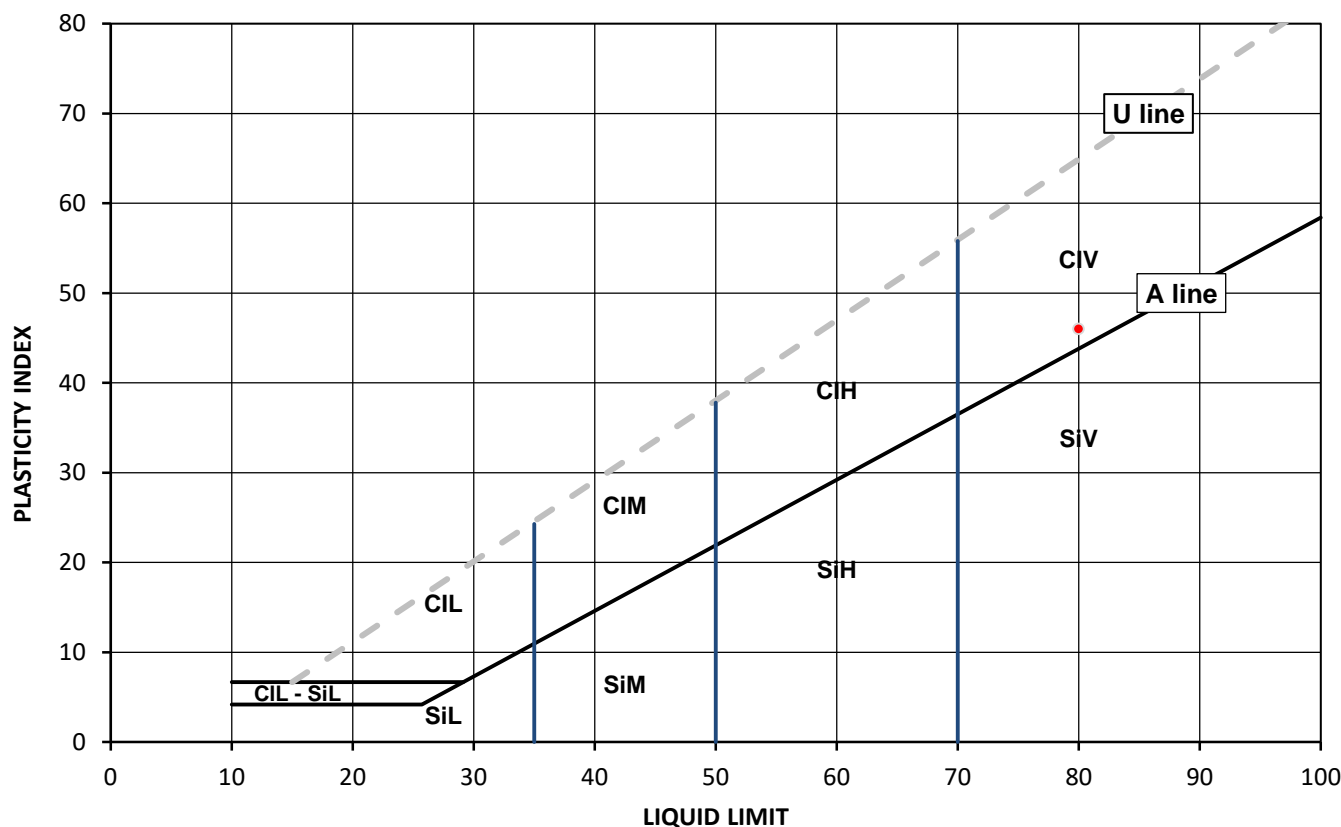
Test Results:

Laboratory Reference: 1772358
Hole No.: BH103
Sample Reference: Not Given
Soil Description: Brown slightly sandy CLAY

Depth Top [m]: 13.50
Depth Base [m]: Not Given
Sample Type: D

Sample Preparation: Tested in natural condition

As Received Moisture Content [W] %	Liquid Limit [WL] %	Plastic Limit [Wp] %	Plasticity Index [Ip] %	% Passing 425µm BS Test Sieve
30	80	34	46	100



Legend, based on BS EN ISO 14688 2:2018 Geotechnical investigation and testing – Identification and classification of soil

	Plasticity	Liquid Limit
Cl	Clay	below 35
Si	Silt	35 to 50
	L	Low
	M	Medium
	H	High
	V	Very high
	O	Organic
		append to classification for organic material (eg CIHO)

Note: Moisture Content by BS 1377-2: 1990: Clause 3.2

Remarks:

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TEST CERTIFICATE

Liquid and Plastic Limits

i2 Analytical Ltd
Unit 6 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB



Tested in Accordance with: BS 1377-2: 1990: Clause 4.3 and 5

Client: McAuliffe Group
Client Address: McAuliffe House, Northcott Road,
WV14 0TP

Contact: Matthew Handley
Site Address: Belmont Street

Client Reference: VISIT3619
Job Number: 21-57186
Date Sampled: 11/02/2021
Date Received: 12/02/2021
Date Tested: 25/02/2021
Sampled By: i2 - MH

Testing carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland

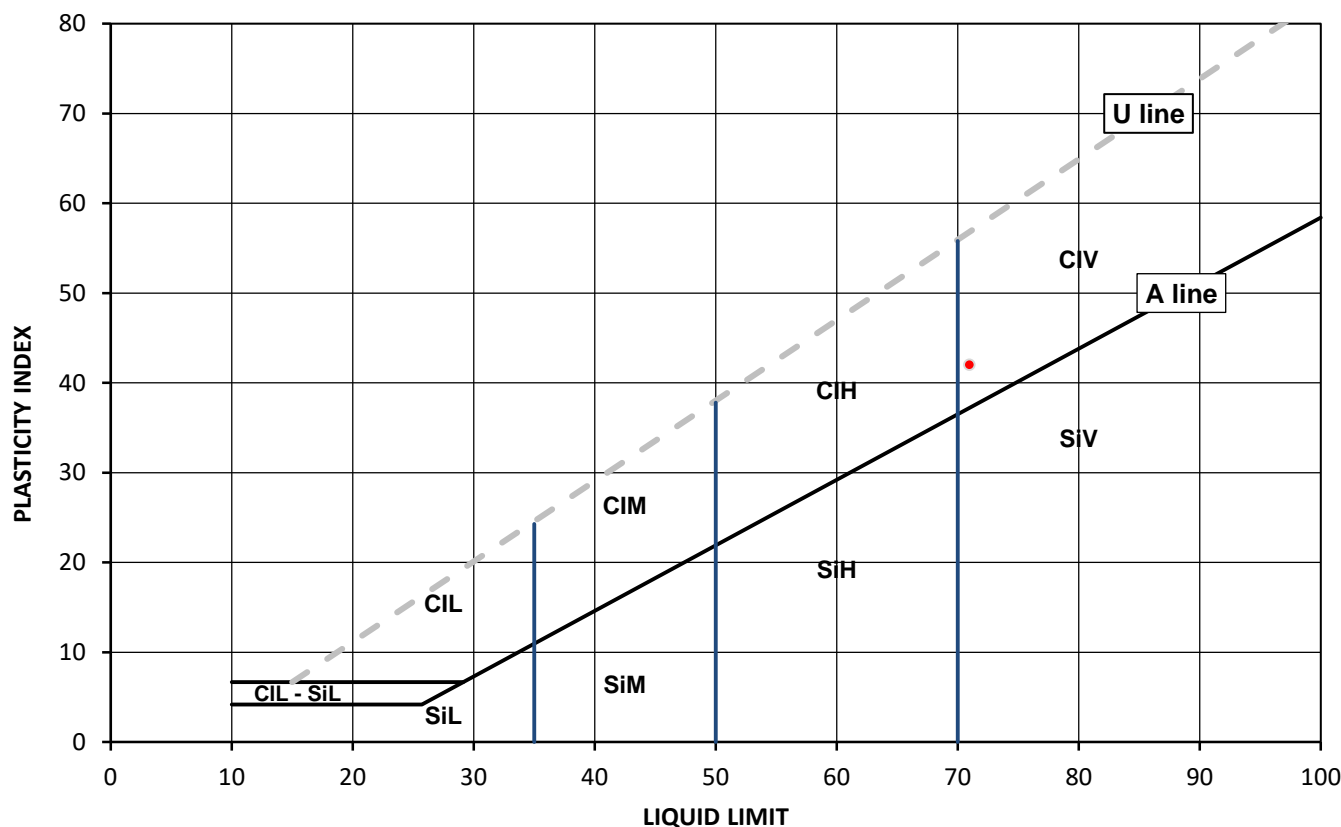
Test Results:

Laboratory Reference: 1772360
Hole No.: BH103
Sample Reference: Not Given
Soil Description: Brown slightly sandy CLAY

Depth Top [m]: 15.00
Depth Base [m]: Not Given
Sample Type: D

Sample Preparation: Tested in natural condition

As Received Moisture Content [W] %	Liquid Limit [WL] %	Plastic Limit [Wp] %	Plasticity Index [Ip] %	% Passing 425µm BS Test Sieve
28	71	29	42	100



Legend, based on BS EN ISO 14688 2:2018 Geotechnical investigation and testing – Identification and classification of soil

	Plasticity	Liquid Limit
Cl	Clay	L Low below 35
Si	Silt	M Medium 35 to 50
	H High 50 to 70	V Very high exceeding 70
	O Organic	append to classification for organic material (eg CIHO)

Note: Moisture Content by BS 1377-2: 1990: Clause 3.2

Remarks:

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TEST CERTIFICATE

Liquid and Plastic Limits

i2 Analytical Ltd
Unit 6 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB



Tested in Accordance with: BS 1377-2: 1990: Clause 4.3 and 5

Client: McAuliffe Group
Client Address: McAuliffe House, Northcott Road,
WV14 0TP

Contact: Matthew Handley
Site Address: Belmont Street

Client Reference: VISIT3619
Job Number: 21-57186
Date Sampled: 11/02/2021
Date Received: 12/02/2021
Date Tested: 25/02/2021
Sampled By: i2 - MH

Testing carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland

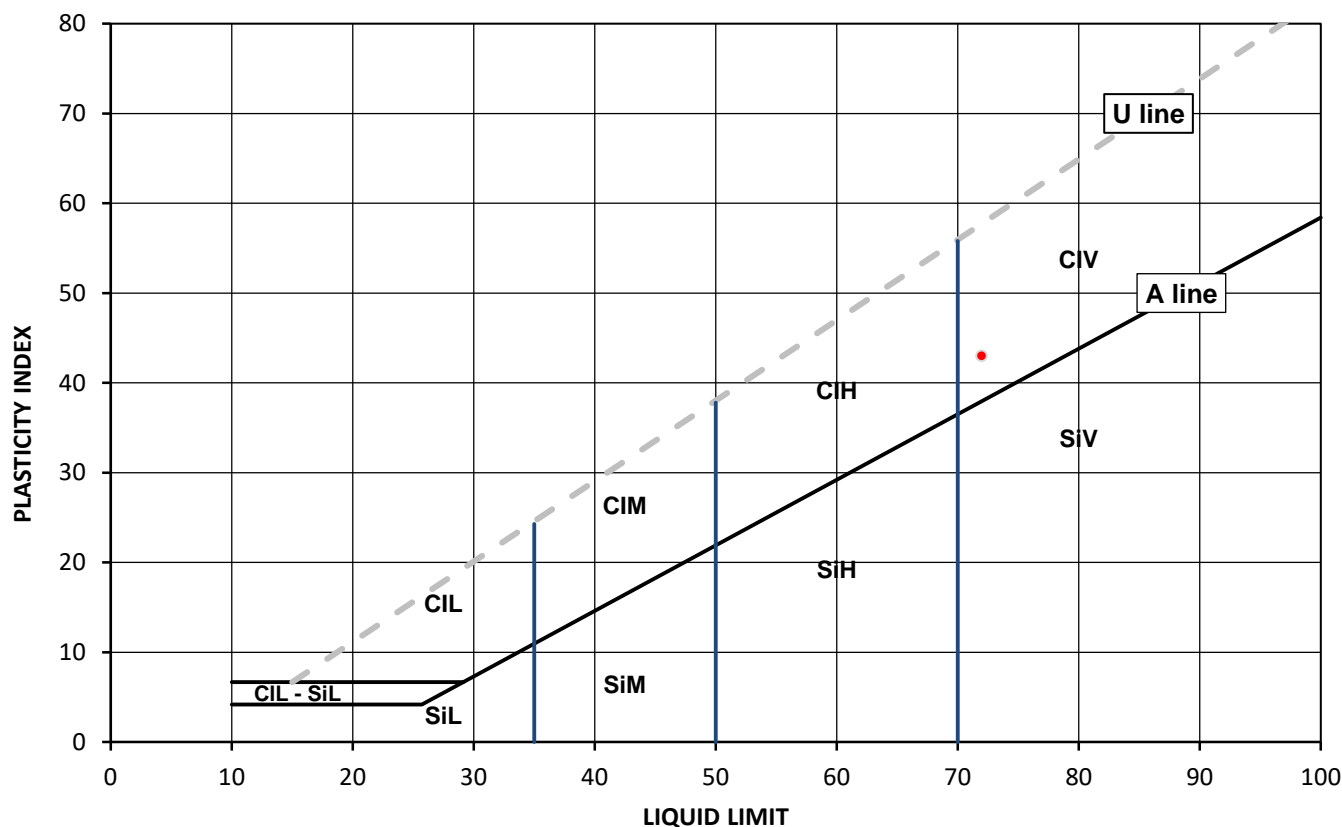
Test Results:

Laboratory Reference: 1772361
Hole No.: BH103
Sample Reference: Not Given
Soil Description: Brown CLAY

Depth Top [m]: 16.50
Depth Base [m]: Not Given
Sample Type: D

Sample Preparation: Tested in natural condition

As Received Moisture Content [W] %	Liquid Limit [WL] %	Plastic Limit [Wp] %	Plasticity Index [Ip] %	% Passing 425µm BS Test Sieve
27	72	29	43	100



Legend, based on BS EN ISO 14688 2:2018 Geotechnical investigation and testing – Identification and classification of soil

		Plasticity	Liquid Limit
Cl	Clay	L Low	below 35
Si	Silt	M Medium	35 to 50
		H High	50 to 70
		V Very high	exceeding 70
		O Organic	append to classification for organic material (eg CIHO)

Note: Moisture Content by BS 1377-2: 1990: Clause 3.2

Remarks:

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TEST CERTIFICATE

Liquid and Plastic Limits

i2 Analytical Ltd
Unit 6 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB



Tested in Accordance with: BS 1377-2: 1990: Clause 4.3 and 5

Client: McAuliffe Group
Client Address: McAuliffe House, Northcott Road,
WV14 0TP

Contact: Matthew Handley
Site Address: Belmont Street

Client Reference: VISIT3619
Job Number: 21-57186
Date Sampled: 11/02/2021
Date Received: 12/02/2021
Date Tested: 25/02/2021
Sampled By: i2 - MH

Testing carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland

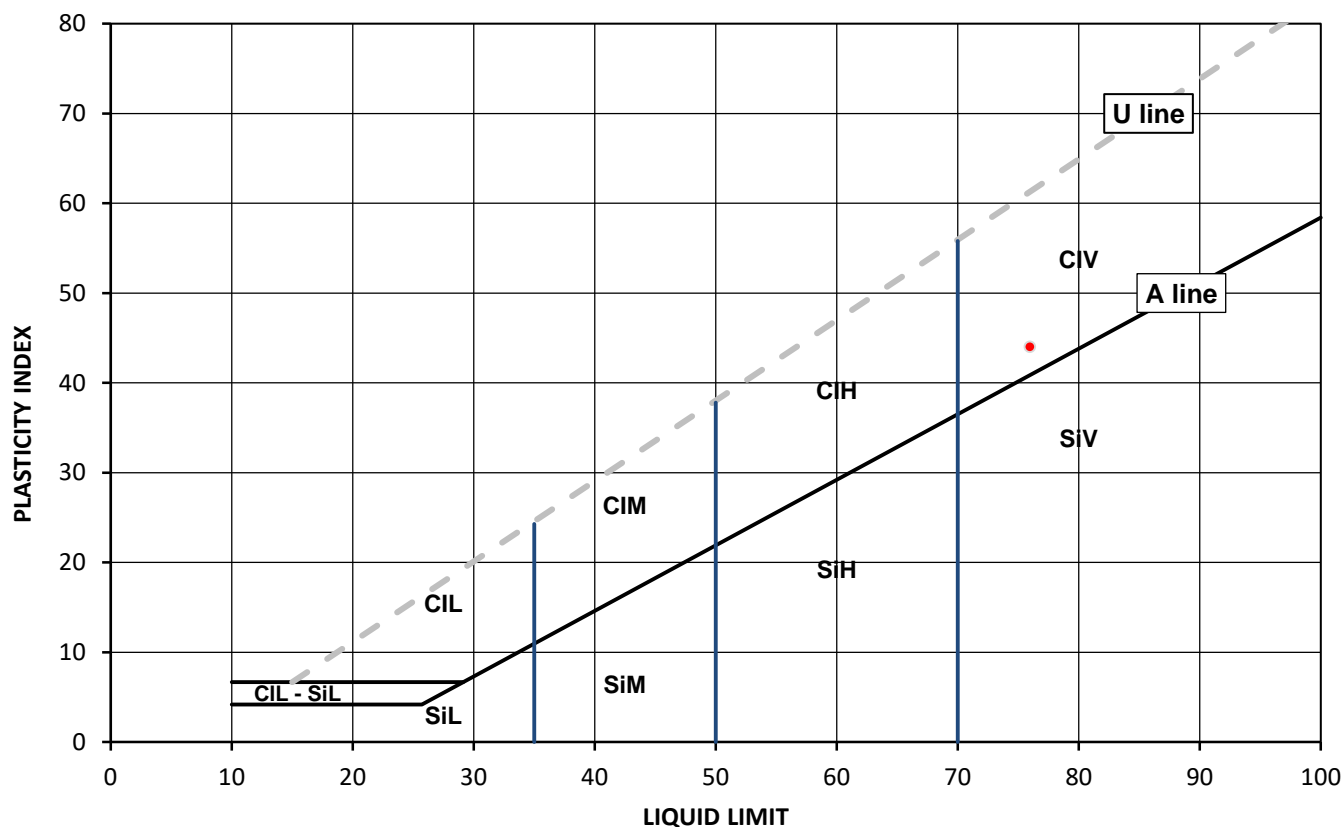
Test Results:

Laboratory Reference: 1772363
Hole No.: BH103
Sample Reference: Not Given
Soil Description: Brown CLAY

Depth Top [m]: 18.00
Depth Base [m]: Not Given
Sample Type: D

Sample Preparation: Tested in natural condition

As Received Moisture Content [W] %	Liquid Limit [WL] %	Plastic Limit [Wp] %	Plasticity Index [Ip] %	% Passing 425µm BS Test Sieve
28	76	32	44	100



Legend, based on BS EN ISO 14688 2:2018 Geotechnical investigation and testing – Identification and classification of soil

	Plasticity	Liquid Limit
Cl Clay	L Low	below 35
Si Silt	M Medium	35 to 50
	H High	50 to 70
	V Very high	exceeding 70
	O Organic	append to classification for organic material (eg CIHO)

Note: Moisture Content by BS 1377-2: 1990: Clause 3.2

Remarks:

Signed:

Szczepan Bielatowicz
PL Deputy of Head of Geotechnical Section
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Tested in Accordance with: BS 1377-2: 1990: Clause 4.3 and 5

Client: McAuliffe Group
Client Address: McAuliffe House, Northcott Road,
WV14 0TP

Contact: Matthew Handley
Site Address: Belmont Street

Client Reference: VISIT3619
Job Number: 21-57186
Date Sampled: 11/02/2021
Date Received: 12/02/2021
Date Tested: 25/02/2021
Sampled By: i2 - MH

Testing carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland

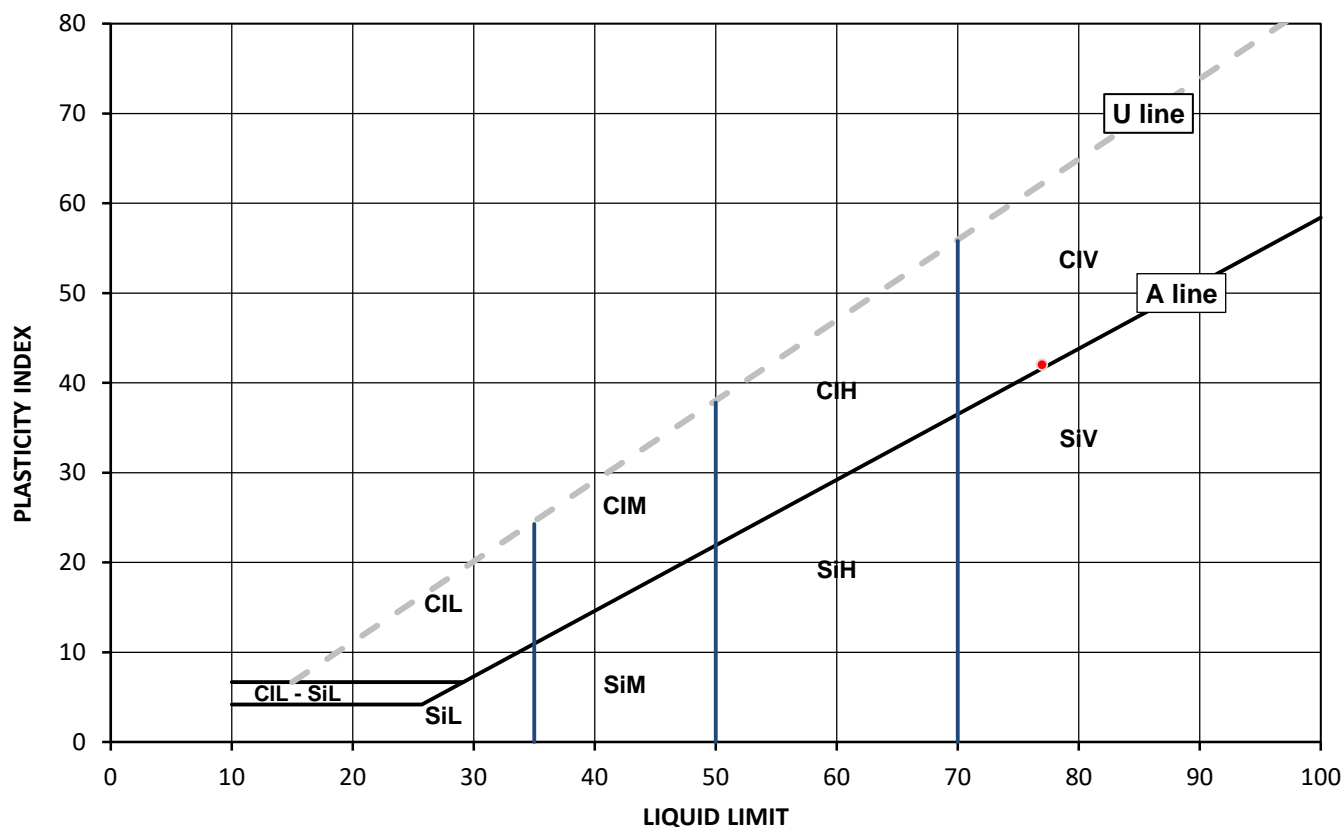
Test Results:

Laboratory Reference: 1772364
Hole No.: BH103
Sample Reference: Not Given
Soil Description: Brown CLAY

Depth Top [m]: 19.50
Depth Base [m]: Not Given
Sample Type: D

Sample Preparation: Tested in natural condition

As Received Moisture Content [W] %	Liquid Limit [WL] %	Plastic Limit [Wp] %	Plasticity Index [Ip] %	% Passing 425µm BS Test Sieve
28	77	35	42	100



Legend, based on BS EN ISO 14688 2:2018 Geotechnical investigation and testing – Identification and classification of soil

	Plasticity	Liquid Limit
Cl Clay	L Low	below 35
Si Silt	M Medium	35 to 50
	H High	50 to 70
	V Very high	exceeding 70
	O Organic	append to classification for organic material (eg CIHO)

Note: Moisture Content by BS 1377-2: 1990: Clause 3.2

Remarks:

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Tested in Accordance with: BS 1377-2: 1990: Clause 4.3 and 5

Client: McAuliffe Group
Client Address: McAuliffe House, Northcott Road,
WV14 0TP

Contact: Matthew Handley
Site Address: Belmont Street

Client Reference: VISIT3619
Job Number: 21-57186
Date Sampled: 11/02/2021
Date Received: 12/02/2021
Date Tested: 25/02/2021
Sampled By: i2 - MH

Testing carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland

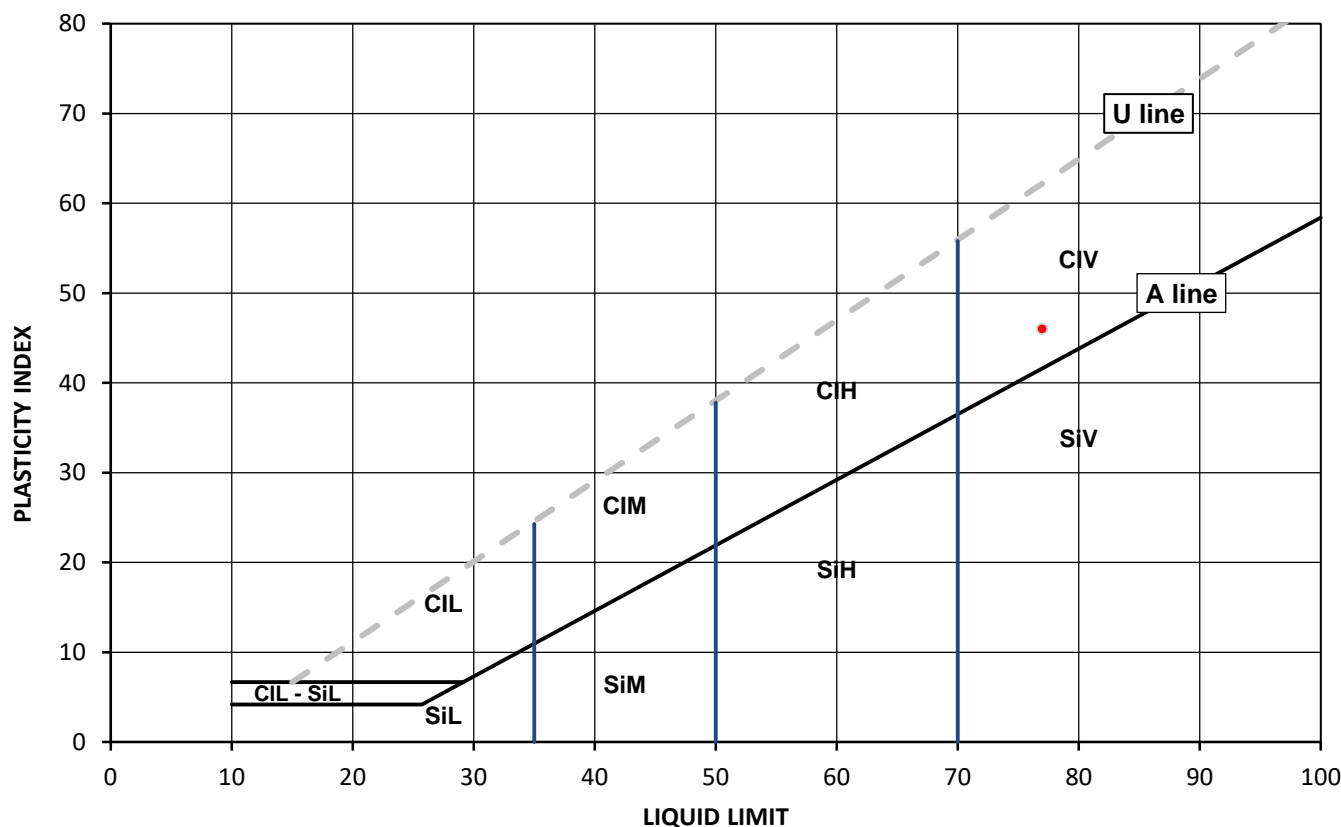
Test Results:

Laboratory Reference: 1772365
Hole No.: BH103
Sample Reference: Not Given
Soil Description: Brown slightly sandy CLAY

Depth Top [m]: 22.50
Depth Base [m]: Not Given
Sample Type: D

Sample Preparation: Tested in natural condition

As Received Moisture Content [W] %	Liquid Limit [WL] %	Plastic Limit [Wp] %	Plasticity Index [Ip] %	% Passing 425µm BS Test Sieve
28	77	31	46	100



Legend, based on BS EN ISO 14688 2:2018 Geotechnical investigation and testing – Identification and classification of soil

	Plasticity	Liquid Limit
Cl	Clay	below 35
Si	Silt	35 to 50
	L Low	50 to 70
	M Medium	exceeding 70
	H High	
	V Very high	
	O Organic	append to classification for organic material (eg CIHO)

Note: Moisture Content by BS 1377-2: 1990: Clause 3.2

Remarks:

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SUMMARY REPORT

Summary of Classification Test Results

i2 Analytical Ltd
Unit 8 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB



Tested in Accordance with:

Client: McAuliffe Group
Client Address: McAuliffe House, Northcott Road,
WV14 0TP

Moisture Content by BS 1377-2: 1990: Clause 3.2; Water Content by BS EN
17892-1: 2014; Atterberg by BS 1377-2: 1990: Clause 4.3 (4 Point Test),
Clause 4.4 (1 Point Test) and 5; PD by BS 1377-2: 1990: Clause 8.2

Client Reference: VISIT3619
Job Number: 21-57186
Date Sampled: 11/02/2021
Date Received: 12/02/2021
Date Tested: 25/02/2021
Sampled By: i2 - MH

Contact: Matthew Handley
Site Address: Belmont Street

Testing carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland

Test results

Laboratory Reference	Hole No.	Sample				Description	Remarks	Moisture Content [W]	Water Content [W]	Atterberg				Density			Total Porosity#		
		Reference	Depth Top	Depth Base	Type					% Passing 425um	WL	Wp	Ip	bulk	dry	PD			
			m	m															
1772346	BH103	Not Given	1.80	Not Given	D	Brown CLAY	Atterberg 4 Point	31		100	76	28	48						
1772348	BH103	Not Given	3.50	4.50	D	Brown slightly sandy CLAY	Atterberg 4 Point	32		100	83	30	53						
1772349	BH103	Not Given	4.50	Not Given	D	Brown slightly sandy CLAY	Atterberg 4 Point	32		100	81	34	47						
1772351	BH103	Not Given	6.00	Not Given	D	Brown slightly sandy CLAY	Atterberg 4 Point	31		100	80	33	47						
1772352	BH103	Not Given	7.50	Not Given	D	Brown slightly sandy CLAY	Atterberg 4 Point	31		100	79	28	51						
1772353	BH103	Not Given	9.00	Not Given	D	Brown CLAY	Atterberg 4 Point	30		100	73	30	43						
1772355	BH103	Not Given	10.50	Not Given	D	Brown slightly sandy CLAY	Atterberg 4 Point	29		100	74	27	47						
1772357	BH103	Not Given	12.00	Not Given	D	Brown CLAY	Atterberg 4 Point	29		100	78	30	48						
1772358	BH103	Not Given	13.50	Not Given	D	Brown slightly sandy CLAY	Atterberg 4 Point	30		100	80	34	46						
1772360	BH103	Not Given	15.00	Not Given	D	Brown slightly sandy CLAY	Atterberg 4 Point	28		100	71	29	42						

Note: # Non accredited; NP - Non plastic

Comments:

Signed:

Szczepan Bielatowicz
PL Deputy of Head of Geotechnical Section
for and on behalf of i2 Analytical Ltd

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SUMMARY REPORT

Summary of Classification Test Results

i2 Analytical Ltd
Unit 8 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB



Tested in Accordance with:

Client: McAuliffe Group
Client Address: McAuliffe House, Northcott Road,
WV14 0TP

Moisture Content by BS 1377-2: 1990: Clause 3.2; Water Content by BS EN
17892-1: 2014; Atterberg by BS 1377-2: 1990: Clause 4.3 (4 Point Test),
Clause 4.4 (1 Point Test) and 5; PD by BS 1377-2: 1990: Clause 8.2

Client Reference: VISIT3619
Job Number: 21-57186
Date Sampled: 11/02/2021
Date Received: 12/02/2021
Date Tested: 25/02/2021
Sampled By: i2 - MH

Contact: Matthew Handley
Site Address: Belmont Street

Testing carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland

Test results

Laboratory Reference	Hole No.	Sample				Description	Remarks	Moisture Content [W]	Water Content [W]	Atterberg				Density			Total Porosity#		
		Reference	Depth Top	Depth Base	Type					% Passing 425um	WL	Wp	Ip	bulk	dry	PD			
			m	m															
1772361	BH103	Not Given	16.50	Not Given	D	Brown CLAY	Atterberg 4 Point	27		100	72	29	43						
1772363	BH103	Not Given	18.00	Not Given	D	Brown CLAY	Atterberg 4 Point	28		100	76	32	44						
1772364	BH103	Not Given	19.50	Not Given	D	Brown CLAY	Atterberg 4 Point	28		100	77	35	42						
1772365	BH103	Not Given	22.50	Not Given	D	Brown slightly sandy CLAY	Atterberg 4 Point	28		100	77	31	46						

Note: # Non accredited; NP - Non plastic

Comments:

Signed:

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PL Deputy of Head of Geotechnical Section
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TEST CERTIFICATE

Particle Size Distribution

Tested in Accordance with: BS 1377-2: 1990

i2 Analytical Ltd
Unit 6 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB



Client: McAuliffe Group
Client Address: McAuliffe House, Northcott Road,
WV14 0TP

Contact: Matthew Handley
Site Address: Belmont Street

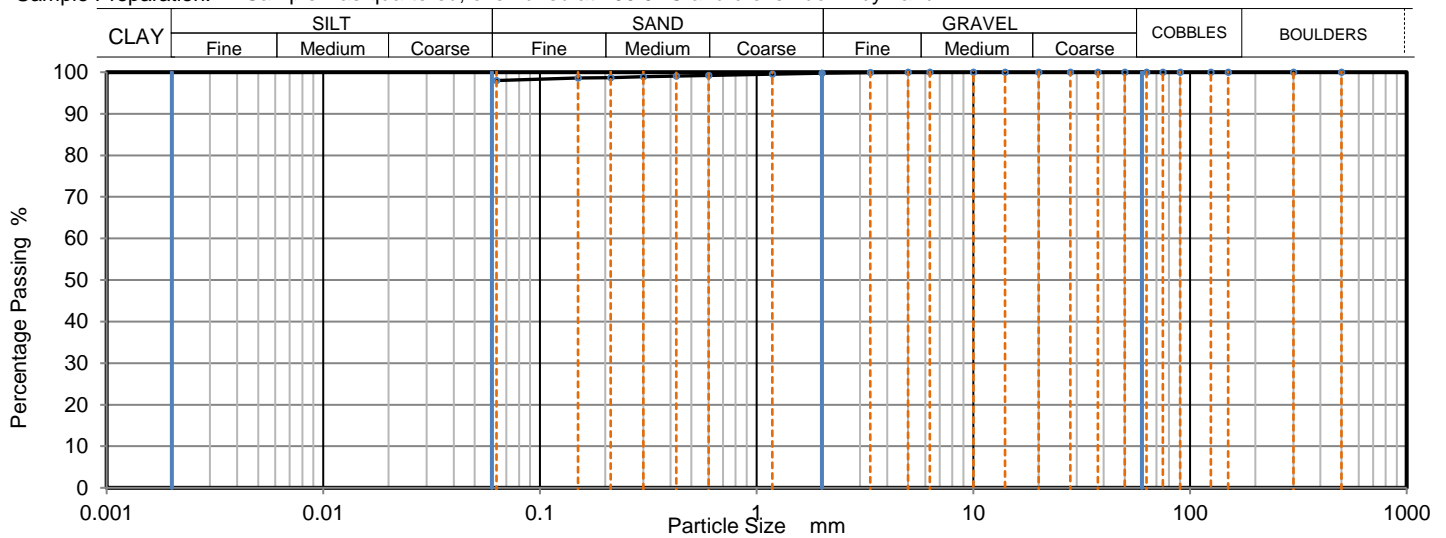
Testing carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland

Client Reference: VISIT3619
Job Number: 21-57186
Date Sampled: 11/02/2021
Date Received: 12/02/2021
Date Tested: 25/02/2021
Sampled By: i2 - MH

Test Results:

Laboratory Reference: 1772346
Hole No.: BH103
Sample Reference: Not Given
Sample Description: Brown CLAY
Sample Preparation: Sample was quartered, oven dried at 106.0 °C and broken down by hand.

Depth Top [m]: 1.80
Depth Base [m]: Not Given
Sample Type: D



Sieving		Sedimentation	
Particle Size mm	% Passing	Particle Size mm	% Passing
500	100		
300	100		
150	100		
125	100		
90	100		
75	100		
63	100		
50	100		
37.5	100		
28	100		
20	100		
14	100		
10	100		
6.3	100		
5	100		
3.35	100		
2	100		
1.18	100		
0.6	99		
0.425	99		
0.3	99		
0.212	99		
0.15	99		
0.063	98		

Sample Proportions	% dry mass
Very coarse	0
Gravel	0
Sand	1
Fines <0.063mm	98

Grading Analysis	
D100	mm
D60	mm
D30	mm
D10	mm
Uniformity Coefficient	N/A
Curvature Coefficient	

Uniformity Coefficient and Coefficient of Curvature calculated in accordance with BS EN ISO 14688-2: 2004 + A1: 2013

Note: Tested in Accordance with BS1377:Part 2:1990, clause 9.2

Remarks:

Signed:

Szczepan Bielatowicz
PL Deputy of Head of Geotechnical Section
for and on behalf of i2 Analytical Ltd

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TEST CERTIFICATE

Particle Size Distribution

i2 Analytical Ltd
Unit 6 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB



Tested in Accordance with: BS 1377-2: 1990

Client: McAuliffe Group
Client Address: McAuliffe House, Northcott Road,
WV14 0TP

Contact: Matthew Handley
Site Address: Belmont Street

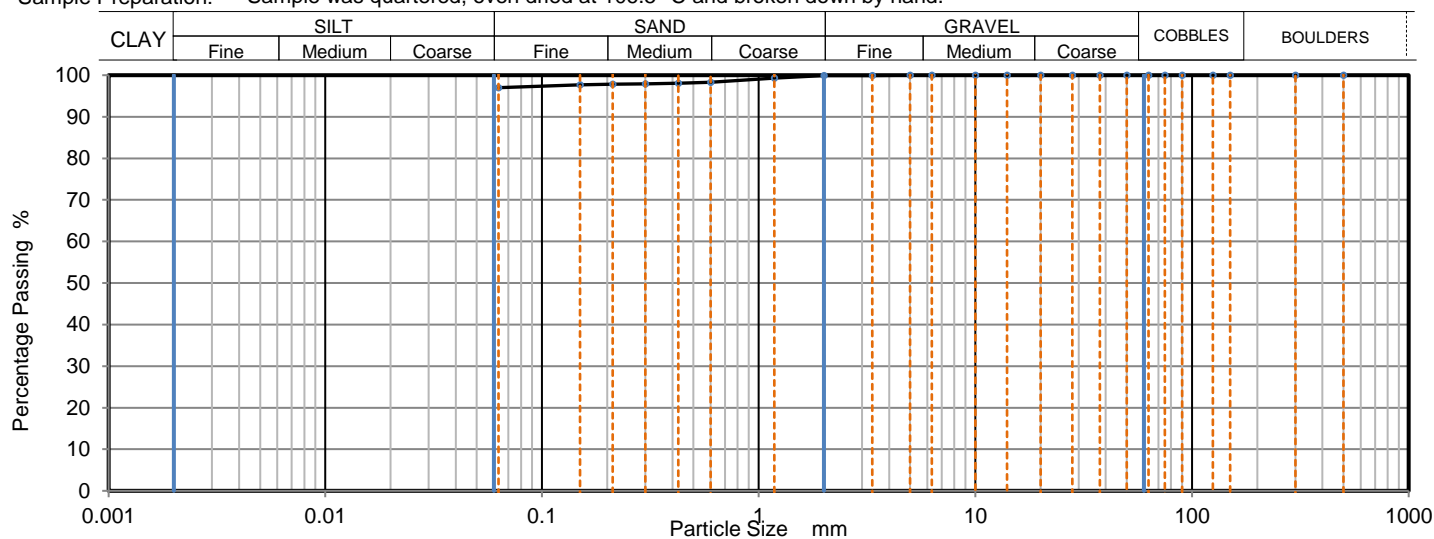
Client Reference: VISIT3619
Job Number: 21-57186
Date Sampled: 11/02/2021
Date Received: 12/02/2021
Date Tested: 25/02/2021
Sampled By: i2 - MH

Testing carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland

Test Results:

Laboratory Reference: 1772348
Hole No.: BH103
Sample Reference: Not Given
Sample Description: Brown slightly sandy CLAY
Sample Preparation: Sample was quartered, oven dried at 106.5 °C and broken down by hand.

Depth Top [m]: 3.50
Depth Base [m]: 4.50
Sample Type: D



Sieving		Sedimentation	
Particle Size mm	% Passing	Particle Size mm	% Passing
500	100		
300	100		
150	100		
125	100		
90	100		
75	100		
63	100		
50	100		
37.5	100		
28	100		
20	100		
14	100		
10	100		
6.3	100		
5	100		
3.35	100		
2	100		
1.18	99		
0.6	98		
0.425	98		
0.3	98		
0.212	98		
0.15	98		
0.063	97		

Sample Proportions	% dry mass
Very coarse	0
Gravel	0
Sand	3
Fines <0.063mm	97

Grading Analysis	
D100	mm
D60	mm
D30	mm
D10	mm
Uniformity Coefficient	N/A
Curvature Coefficient	

Uniformity Coefficient and Coefficient of Curvature calculated in accordance with BS EN ISO 14688-2: 2004 + A1: 2013

Note: Tested in Accordance with BS1377:Part 2:1990, clause 9.2

Remarks:

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Particle Size Distribution

i2 Analytical Ltd
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Northampton NN4 7EB



Tested in Accordance with: BS 1377-2: 1990

Client: McAuliffe Group
Client Address: McAuliffe House, Northcott Road,
WV14 0TP

Contact: Matthew Handley
Site Address: Belmont Street

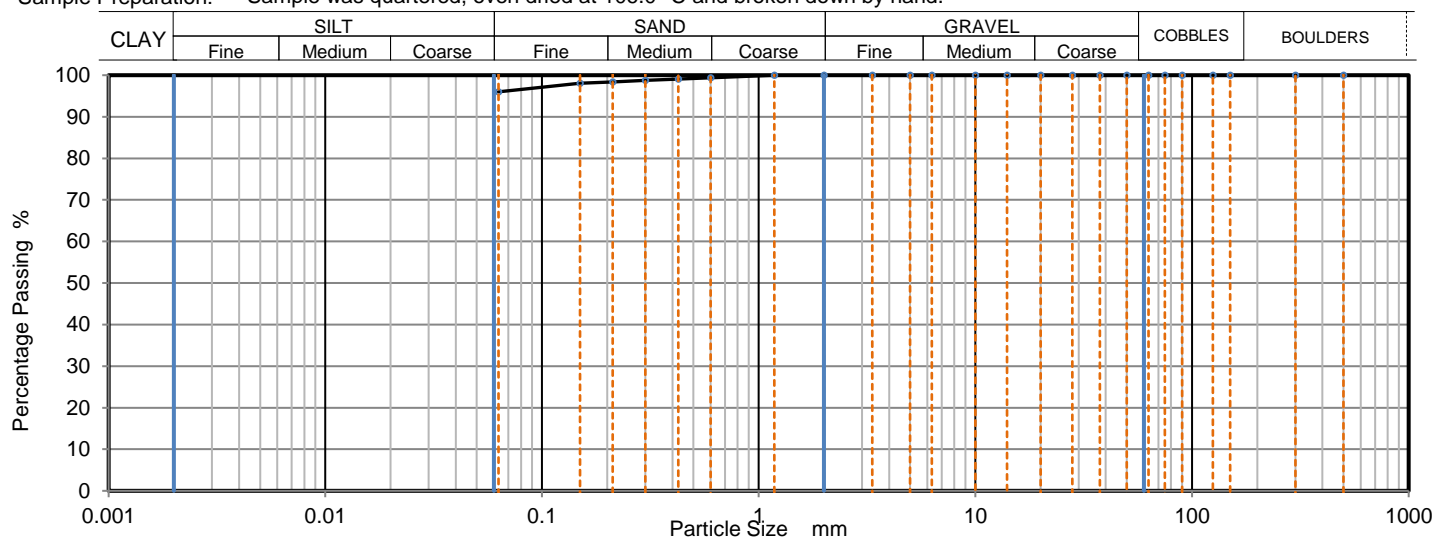
Client Reference: VISIT3619
Job Number: 21-57186
Date Sampled: 11/02/2021
Date Received: 12/02/2021
Date Tested: 25/02/2021
Sampled By: i2 - MH

Testing carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland

Test Results:

Laboratory Reference: 1772349
Hole No.: BH103
Sample Reference: Not Given
Sample Description: Brown slightly sandy CLAY
Sample Preparation: Sample was quartered, oven dried at 106.0 °C and broken down by hand.

Depth Top [m]: 4.50
Depth Base [m]: Not Given
Sample Type: D



Sieving		Sedimentation	
Particle Size mm	% Passing	Particle Size mm	% Passing
500	100		
300	100		
150	100		
125	100		
90	100		
75	100		
63	100		
50	100		
37.5	100		
28	100		
20	100		
14	100		
10	100		
6.3	100		
5	100		
3.35	100		
2	100		
1.18	100		
0.6	99		
0.425	99		
0.3	99		
0.212	98		
0.15	98		
0.063	97		

Sample Proportions	% dry mass
Very coarse	0
Gravel	0
Sand	3
Fines <0.063mm	97

Grading Analysis	
D100	mm
D60	mm
D30	mm
D10	mm
Uniformity Coefficient	N/A
Curvature Coefficient	

Uniformity Coefficient and Coefficient of Curvature calculated in accordance with BS EN ISO 14688-2: 2004 + A1: 2013

Note: Tested in Accordance with BS1377:Part 2:1990, clause 9.2

Remarks:

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Particle Size Distribution

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Northampton NN4 7EB



Tested in Accordance with: BS 1377-2: 1990

Client: McAuliffe Group
Client Address: McAuliffe House, Northcott Road,
WV14 0TP

Contact: Matthew Handley
Site Address: Belmont Street

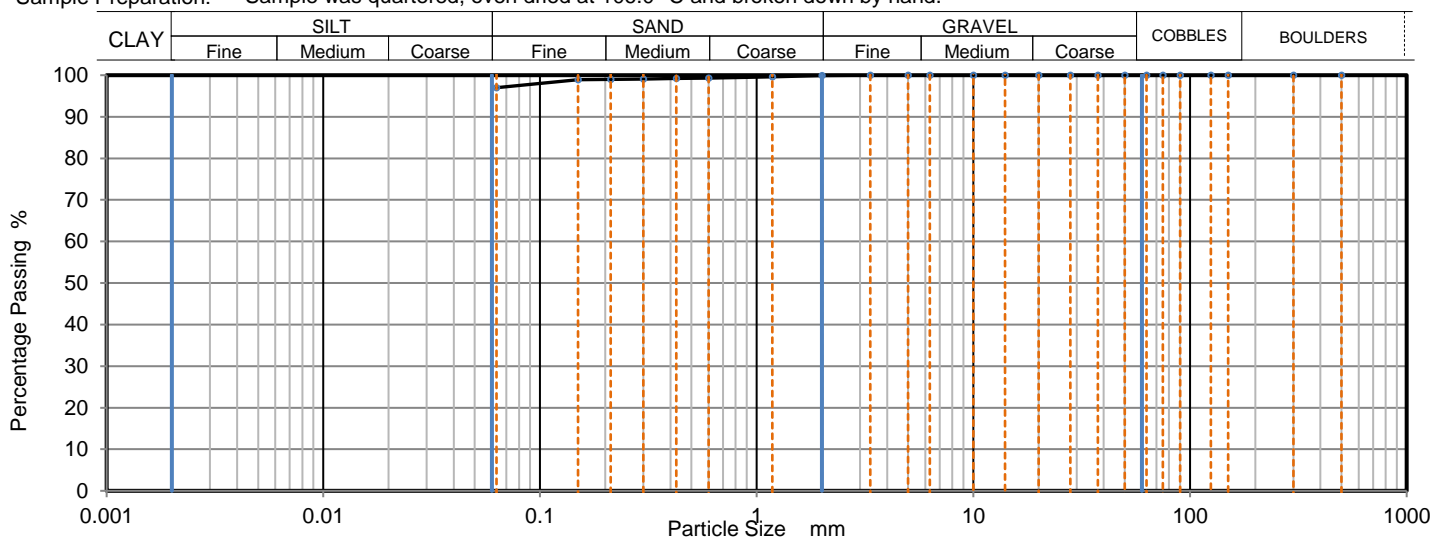
Client Reference: VISIT3619
Job Number: 21-57186
Date Sampled: 11/02/2021
Date Received: 12/02/2021
Date Tested: 25/02/2021
Sampled By: i2 - MH

Testing carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland

Test Results:

Laboratory Reference: 1772351
Hole No.: BH103
Sample Reference: Not Given
Sample Description: Brown slightly sandy CLAY
Sample Preparation: Sample was quartered, oven dried at 106.0 °C and broken down by hand.

Depth Top [m]: 6.00
Depth Base [m]: Not Given
Sample Type: D



Sieving		Sedimentation	
Particle Size mm	% Passing	Particle Size mm	% Passing
500	100		
300	100		
150	100		
125	100		
90	100		
75	100		
63	100		
50	100		
37.5	100		
28	100		
20	100		
14	100		
10	100		
6.3	100		
5	100		
3.35	100		
2	100		
1.18	100		
0.6	99		
0.425	99		
0.3	99		
0.212	99		
0.15	99		
0.063	98		

Sample Proportions	% dry mass
Very coarse	0
Gravel	0
Sand	2
Fines <0.063mm	98

Grading Analysis	
D100	mm
D60	mm
D30	mm
D10	mm
Uniformity Coefficient	N/A
Curvature Coefficient	

Uniformity Coefficient and Coefficient of Curvature calculated in accordance with BS EN ISO 14688-2: 2004 + A1: 2013

Note: Tested in Accordance with BS1377:Part 2:1990, clause 9.2

Remarks:

Signed:

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Particle Size Distribution

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Northampton NN4 7EB



Tested in Accordance with: BS 1377-2: 1990

Client: McAuliffe Group
Client Address: McAuliffe House, Northcott Road,
WV14 0TP

Contact: Matthew Handley
Site Address: Belmont Street

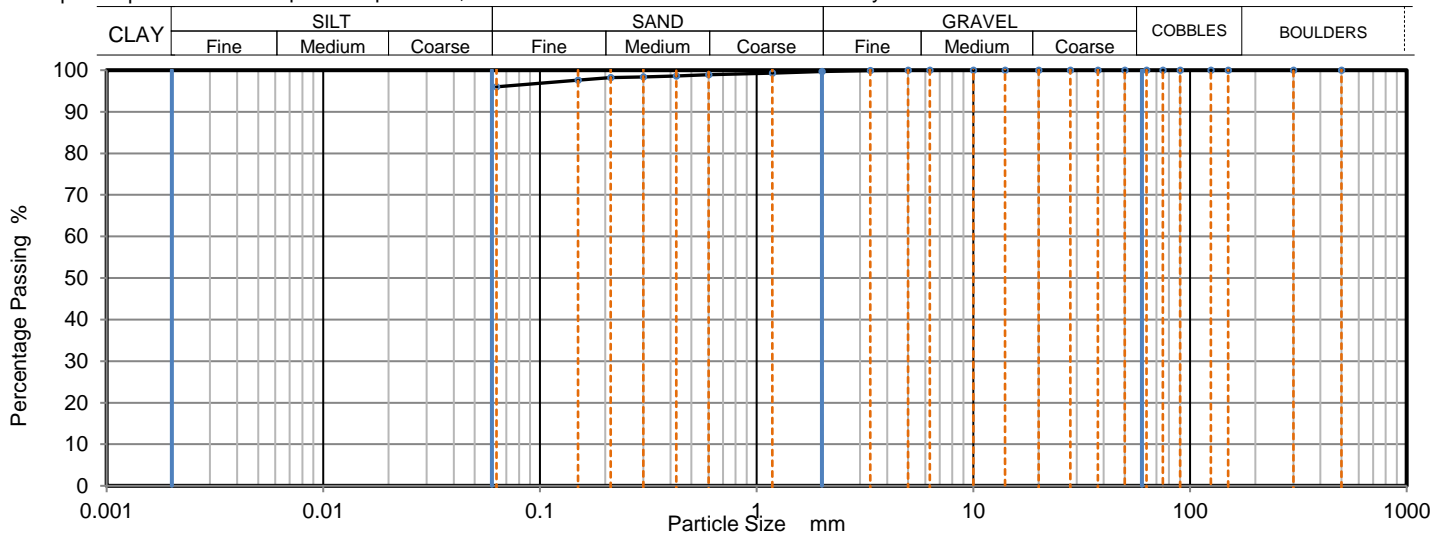
Client Reference: VISIT3619
Job Number: 21-57186
Date Sampled: 11/02/2021
Date Received: 12/02/2021
Date Tested: 25/02/2021
Sampled By: i2 - MH

Testing carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland

Test Results:

Laboratory Reference: 1772352
Hole No.: BH103
Sample Reference: Not Given
Sample Description: Brown slightly sandy CLAY
Sample Preparation: Sample was quartered, oven dried at 106.5 °C and broken down by hand.

Depth Top [m]: 7.50
Depth Base [m]: Not Given
Sample Type: D



Sieving		Sedimentation	
Particle Size mm	% Passing	Particle Size mm	% Passing
500	100		
300	100		
150	100		
125	100		
90	100		
75	100		
63	100		
50	100		
37.5	100		
28	100		
20	100		
14	100		
10	100		
6.3	100		
5	100		
3.35	100		
2	100		
1.18	99		
0.6	99		
0.425	99		
0.3	98		
0.212	98		
0.15	98		
0.063	96		

Sample Proportions	% dry mass
Very coarse	0
Gravel	0
Sand	3
Fines <0.063mm	96

Grading Analysis	
D100	mm
D60	mm
D30	mm
D10	mm
Uniformity Coefficient	N/A
Curvature Coefficient	

Uniformity Coefficient and Coefficient of Curvature calculated in accordance with BS EN ISO 14688-2: 2004 + A1: 2013

Note: Tested in Accordance with BS1377:Part 2:1990, clause 9.2

Remarks:

Signed:

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Particle Size Distribution

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Brackmills Industrial Estate
Northampton NN4 7EB



Tested in Accordance with: BS 1377-2: 1990

Client: McAuliffe Group
Client Address: McAuliffe House, Northcott Road,
WV14 0TP

Contact: Matthew Handley
Site Address: Belmont Street

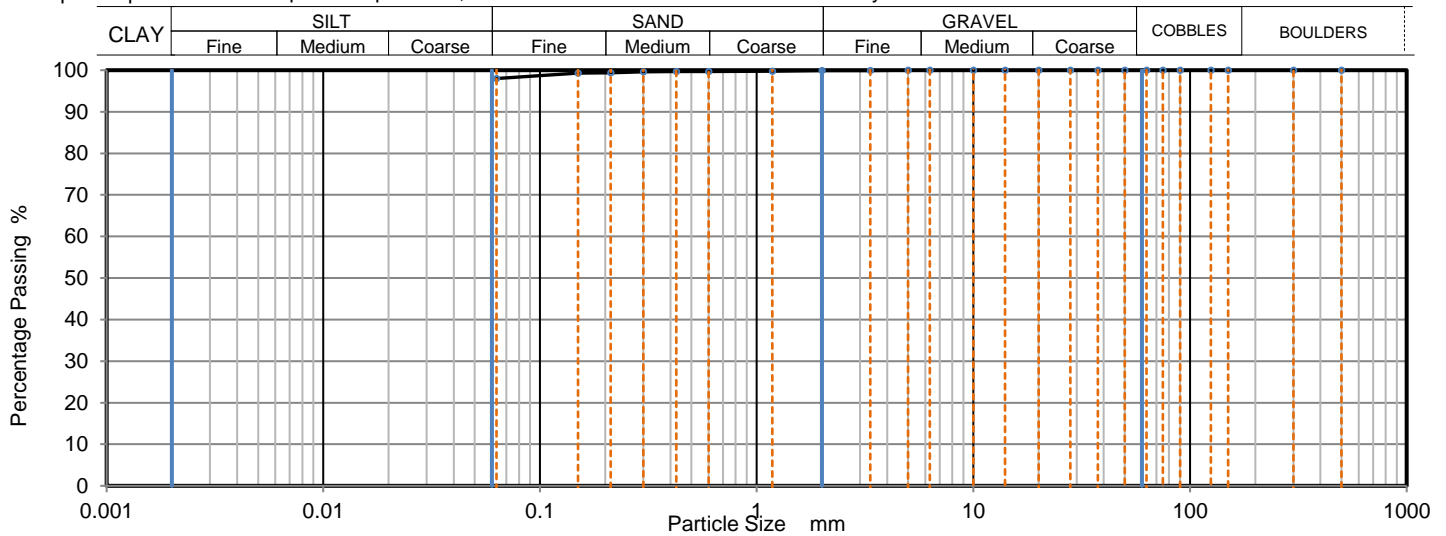
Client Reference: VISIT3619
Job Number: 21-57186
Date Sampled: 11/02/2021
Date Received: 12/02/2021
Date Tested: 25/02/2021
Sampled By: i2 - MH

Testing carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland

Test Results:

Laboratory Reference: 1772353
Hole No.: BH103
Sample Reference: Not Given
Sample Description: Brown CLAY
Sample Preparation: Sample was quartered, oven dried at 106.1 °C and broken down by hand.

Depth Top [m]: 9.00
Depth Base [m]: Not Given
Sample Type: D



Sieving		Sedimentation	
Particle Size mm	% Passing	Particle Size mm	% Passing
500	100		
300	100		
150	100		
125	100		
90	100		
75	100		
63	100		
50	100		
37.5	100		
28	100		
20	100		
14	100		
10	100		
6.3	100		
5	100		
3.35	100		
2	100		
1.18	100		
0.6	100		
0.425	100		
0.3	100		
0.212	99		
0.15	99		
0.063	99		

Sample Proportions	% dry mass
Very coarse	0
Gravel	0
Sand	1
Fines <0.063mm	99

Grading Analysis	
D100	mm
D60	mm
D30	mm
D10	mm
Uniformity Coefficient	N/A
Curvature Coefficient	

Uniformity Coefficient and Coefficient of Curvature calculated in accordance with BS EN ISO 14688-2: 2004 + A1: 2013

Note: Tested in Accordance with BS1377:Part 2:1990, clause 9.2

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Particle Size Distribution

i2 Analytical Ltd
Unit 6 Harrowden Road
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Northampton NN4 7EB



Tested in Accordance with: BS 1377-2: 1990

Client: McAuliffe Group
Client Address: McAuliffe House, Northcott Road,
WV14 0TP

Contact: Matthew Handley
Site Address: Belmont Street

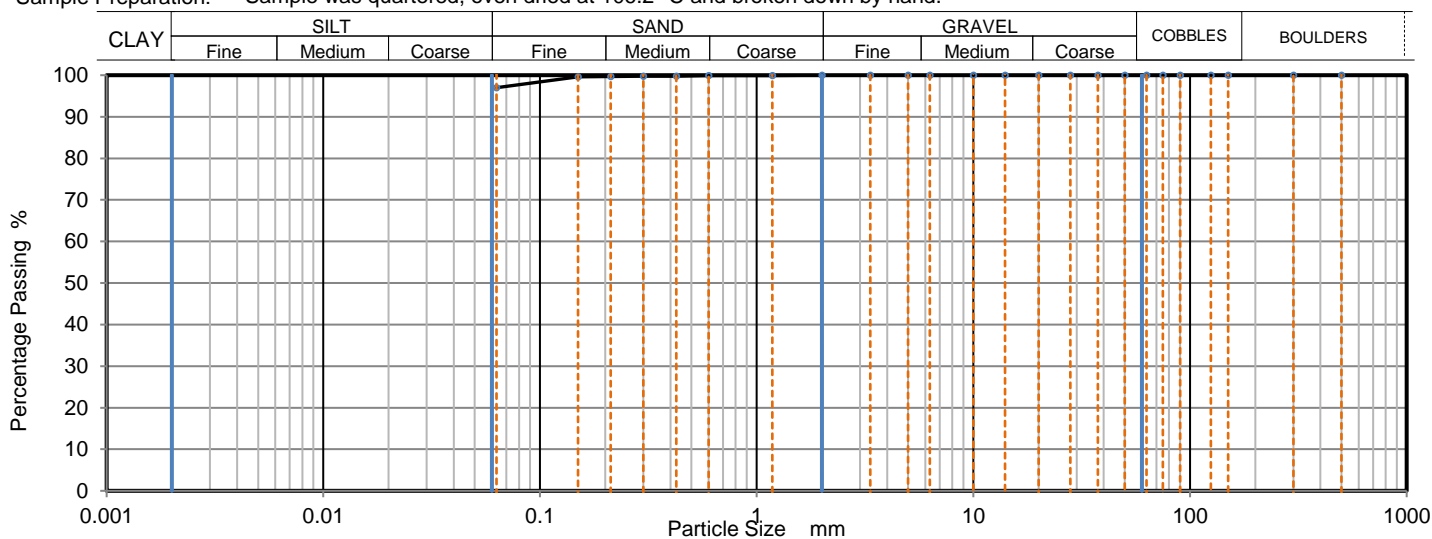
Testing carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland

Client Reference: VISIT3619
Job Number: 21-57186
Date Sampled: 11/02/2021
Date Received: 12/02/2021
Date Tested: 25/02/2021
Sampled By: i2 - MH

Test Results:

Laboratory Reference: 1772355
Hole No.: BH103
Sample Reference: Not Given
Sample Description: Brown slightly sandy CLAY
Sample Preparation: Sample was quartered, oven dried at 106.2 °C and broken down by hand.

Depth Top [m]: 10.50
Depth Base [m]: Not Given
Sample Type: D



Sieving		Sedimentation	
Particle Size mm	% Passing	Particle Size mm	% Passing
500	100		
300	100		
150	100		
125	100		
90	100		
75	100		
63	100		
50	100		
37.5	100		
28	100		
20	100		
14	100		
10	100		
6.3	100		
5	100		
3.35	100		
2	100		
1.18	100		
0.6	100		
0.425	100		
0.3	100		
0.212	100		
0.15	100		
0.063	98		

Sample Proportions	% dry mass
Very coarse	0
Gravel	0
Sand	3
Fines <0.063mm	97

Grading Analysis	
D100	mm
D60	mm
D30	mm
D10	mm
Uniformity Coefficient	N/A
Curvature Coefficient	

Uniformity Coefficient and Coefficient of Curvature calculated in accordance with BS EN ISO 14688-2: 2004 + A1: 2013

Note: Tested in Accordance with BS1377:Part 2:1990, clause 9.2

Remarks:

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TEST CERTIFICATE

Particle Size Distribution

Tested in Accordance with: BS 1377-2: 1990

i2 Analytical Ltd
Unit 6 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB



Client: McAuliffe Group
Client Address: McAuliffe House, Northcott Road,
WV14 0TP

Contact: Matthew Handley
Site Address: Belmont Street

Testing carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland

Client Reference: VISIT3619
Job Number: 21-57186
Date Sampled: 11/02/2021
Date Received: 12/02/2021
Date Tested: 25/02/2021
Sampled By: i2 - MH

Test Results:

Laboratory Reference: 1772357

Hole No.: BH103

Sample Reference: Not Given

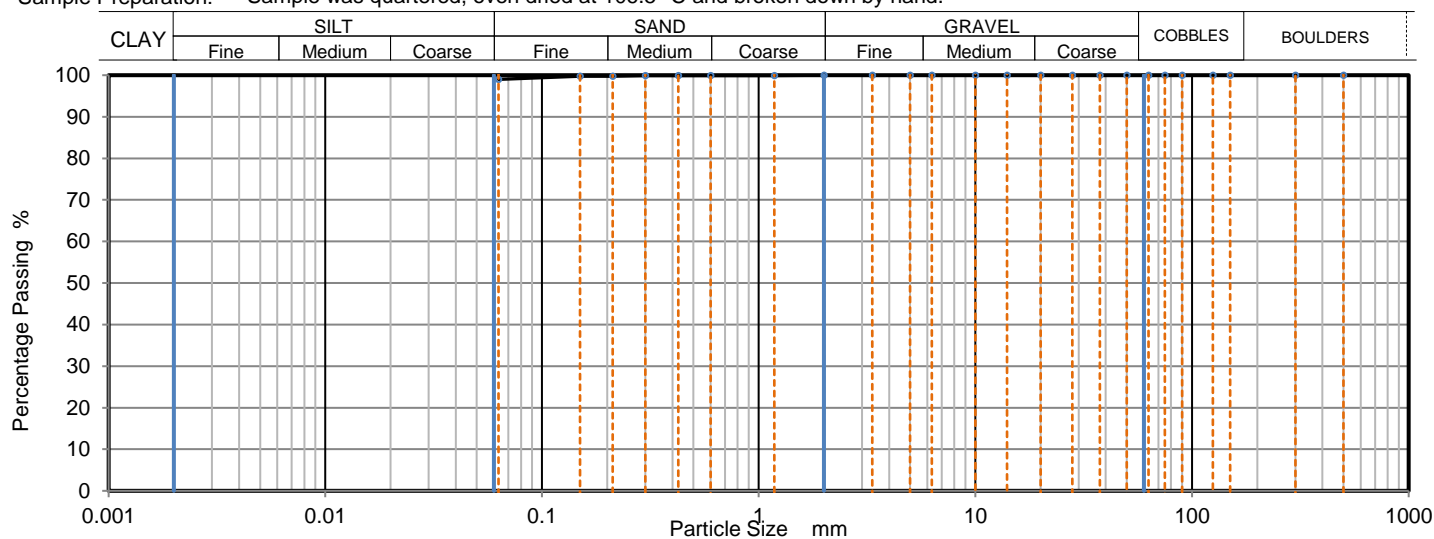
Sample Description: Brown CLAY

Sample Preparation: Sample was quartered, oven dried at 106.5 °C and broken down by hand.

Depth Top [m]: 12.00

Depth Base [m]: Not Given

Sample Type: D



Sieving		Sedimentation	
Particle Size mm	% Passing	Particle Size mm	% Passing
500	100		
300	100		
150	100		
125	100		
90	100		
75	100		
63	100		
50	100		
37.5	100		
28	100		
20	100		
14	100		
10	100		
6.3	100		
5	100		
3.35	100		
2	100		
1.18	100		
0.6	100		
0.425	100		
0.3	100		
0.212	100		
0.15	100		
0.063	100		

Sample Proportions	% dry mass
Very coarse	0
Gravel	0
Sand	0
Fines <0.063mm	100

Grading Analysis	
D100	mm
D60	mm
D30	mm
D10	mm
Uniformity Coefficient	N/A
Curvature Coefficient	

Uniformity Coefficient and Coefficient of Curvature calculated in accordance with BS EN ISO 14688-2: 2004 + A1: 2013

Note: Tested in Accordance with BS1377:Part 2:1990, clause 9.2

Remarks:

Signed:

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TEST CERTIFICATE

Particle Size Distribution

i2 Analytical Ltd
Unit 6 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB



Tested in Accordance with: BS 1377-2: 1990

Client: McAuliffe Group
Client Address: McAuliffe House, Northcott Road,
WV14 0TP

Contact: Matthew Handley
Site Address: Belmont Street

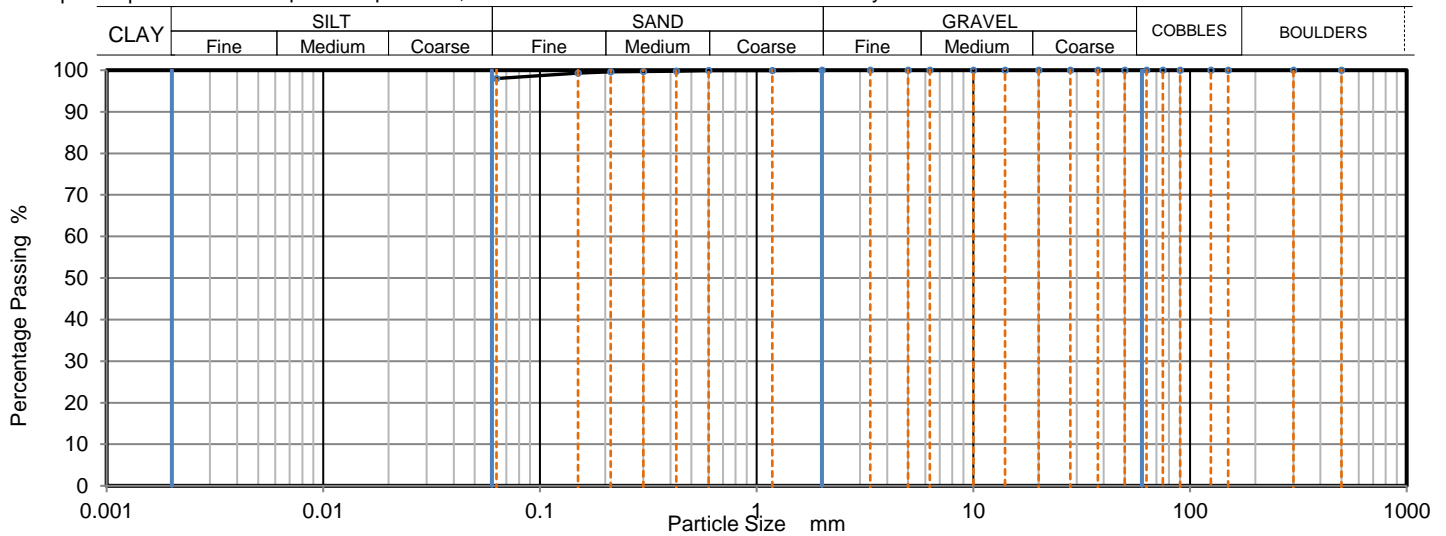
Client Reference: VISIT3619
Job Number: 21-57186
Date Sampled: 11/02/2021
Date Received: 12/02/2021
Date Tested: 25/02/2021
Sampled By: i2 - MH

Testing carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland

Test Results:

Laboratory Reference: 1772358
Hole No.: BH103
Sample Reference: Not Given
Sample Description: Brown slightly sandy CLAY
Sample Preparation: Sample was quartered, oven dried at 106.0 °C and broken down by hand.

Depth Top [m]: 13.50
Depth Base [m]: Not Given
Sample Type: D



Sieving		Sedimentation	
Particle Size mm	% Passing	Particle Size mm	% Passing
500	100		
300	100		
150	100		
125	100		
90	100		
75	100		
63	100		
50	100		
37.5	100		
28	100		
20	100		
14	100		
10	100		
6.3	100		
5	100		
3.35	100		
2	100		
1.18	100		
0.6	100		
0.425	100		
0.3	100		
0.212	100		
0.15	99		
0.063	98		

Sample Proportions	% dry mass
Very coarse	0
Gravel	0
Sand	2
Fines <0.063mm	98

Grading Analysis	
D100	mm
D60	mm
D30	mm
D10	mm
Uniformity Coefficient	N/A
Curvature Coefficient	

Uniformity Coefficient and Coefficient of Curvature calculated in accordance with BS EN ISO 14688-2: 2004 + A1: 2013

Note: Tested in Accordance with BS1377:Part 2:1990, clause 9.2

Remarks:

Signed:

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TEST CERTIFICATE

Particle Size Distribution

i2 Analytical Ltd
Unit 6 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB



Tested in Accordance with: BS 1377-2: 1990

Client: McAuliffe Group
Client Address: McAuliffe House, Northcott Road,
WV14 0TP

Contact: Matthew Handley
Site Address: Belmont Street

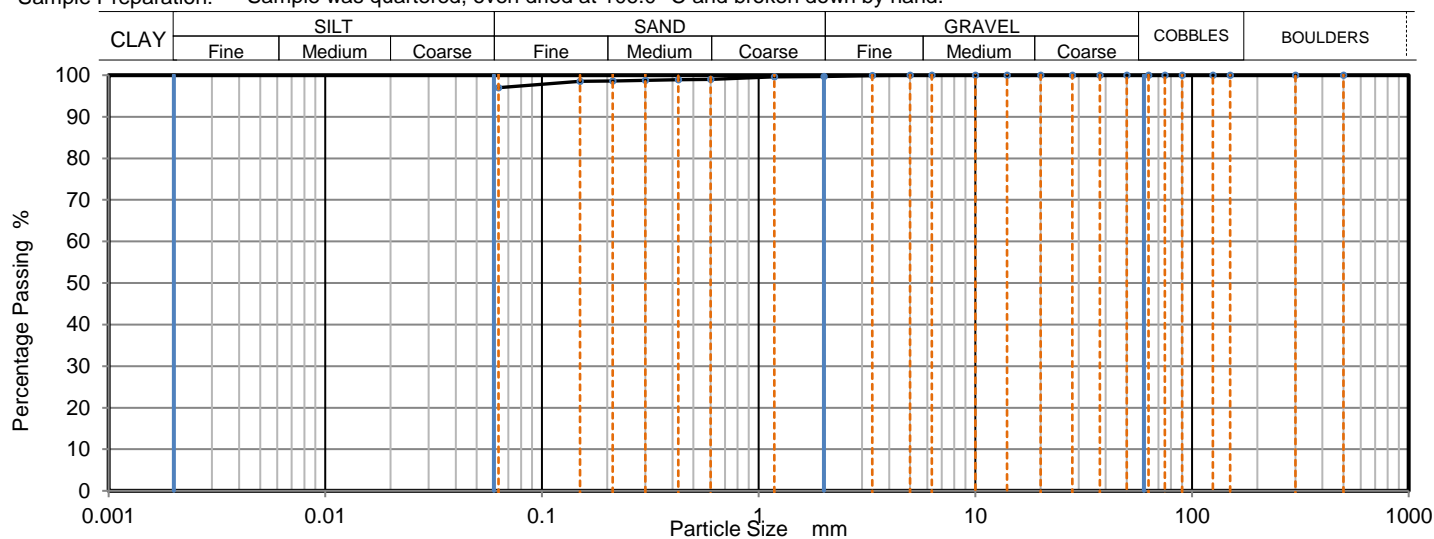
Client Reference: VISIT3619
Job Number: 21-57186
Date Sampled: 11/02/2021
Date Received: 12/02/2021
Date Tested: 25/02/2021
Sampled By: i2 - MH

Testing carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland

Test Results:

Laboratory Reference: 1772360
Hole No.: BH103
Sample Reference: Not Given
Sample Description: Brown slightly sandy CLAY
Sample Preparation: Sample was quartered, oven dried at 106.0 °C and broken down by hand.

Depth Top [m]: 15.00
Depth Base [m]: Not Given
Sample Type: D



Sieving		Sedimentation	
Particle Size mm	% Passing	Particle Size mm	% Passing
500	100		
300	100		
150	100		
125	100		
90	100		
75	100		
63	100		
50	100		
37.5	100		
28	100		
20	100		
14	100		
10	100		
6.3	100		
5	100		
3.35	100		
2	100		
1.18	100		
0.6	99		
0.425	99		
0.3	99		
0.212	99		
0.15	99		
0.063	97		

Sample Proportions	% dry mass
Very coarse	0
Gravel	0
Sand	3
Fines <0.063mm	97

Grading Analysis	
D100	mm
D60	mm
D30	mm
D10	mm
Uniformity Coefficient	N/A
Curvature Coefficient	

Uniformity Coefficient and Coefficient of Curvature calculated in accordance with BS EN ISO 14688-2: 2004 + A1: 2013

Note: Tested in Accordance with BS1377:Part 2:1990, clause 9.2

Remarks:

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TEST CERTIFICATE

Particle Size Distribution

Tested in Accordance with: BS 1377-2: 1990

i2 Analytical Ltd
Unit 6 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB



Client: McAuliffe Group
Client Address: McAuliffe House, Northcott Road,
WV14 0TP

Contact: Matthew Handley
Site Address: Belmont Street

Testing carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland

Client Reference: VISIT3619
Job Number: 21-57186
Date Sampled: 11/02/2021
Date Received: 12/02/2021
Date Tested: 25/02/2021
Sampled By: i2 - MH

Test Results:

Laboratory Reference: 1772361

Hole No.: BH103

Sample Reference: Not Given

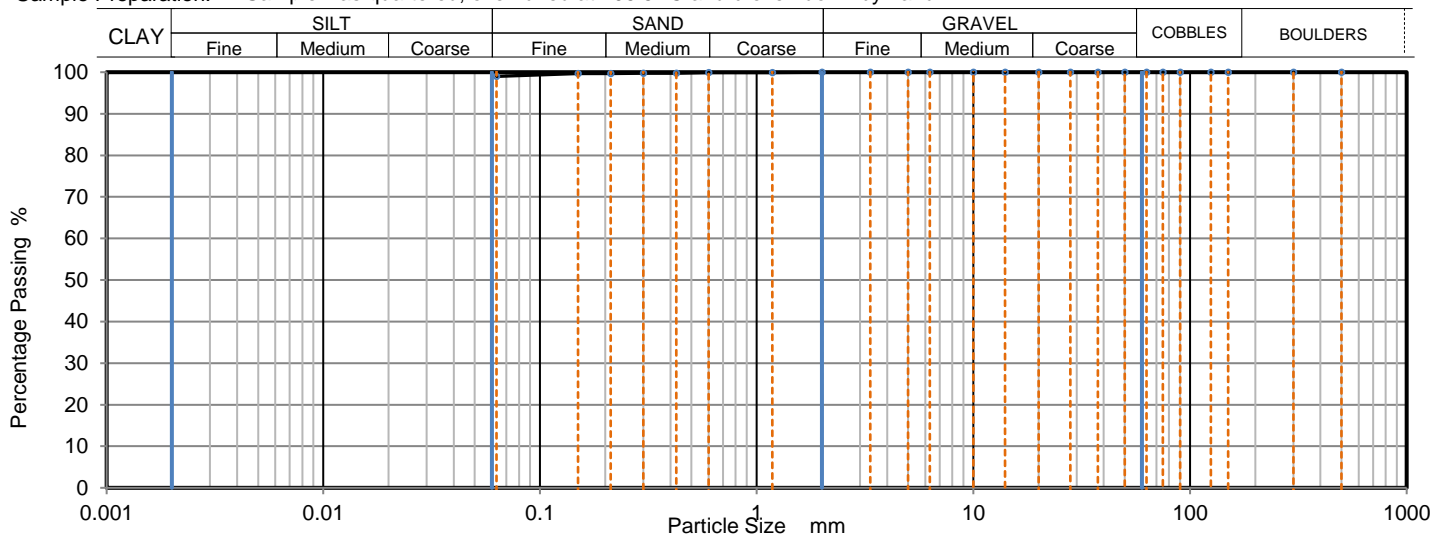
Sample Description: Brown CLAY

Sample Preparation: Sample was quartered, oven dried at 106.5 °C and broken down by hand.

Depth Top [m]: 16.50

Depth Base [m]: Not Given

Sample Type: D



Sieving		Sedimentation	
Particle Size mm	% Passing	Particle Size mm	% Passing
500	100		
300	100		
150	100		
125	100		
90	100		
75	100		
63	100		
50	100		
37.5	100		
28	100		
20	100		
14	100		
10	100		
6.3	100		
5	100		
3.35	100		
2	100		
1.18	100		
0.6	100		
0.425	100		
0.3	100		
0.212	100		
0.15	100		
0.063	100		

Sample Proportions	% dry mass
Very coarse	0
Gravel	0
Sand	0
Fines <0.063mm	99

Grading Analysis	
D100	mm
D60	mm
D30	mm
D10	mm
Uniformity Coefficient	N/A
Curvature Coefficient	

Uniformity Coefficient and Coefficient of Curvature calculated in accordance with BS EN ISO 14688-2: 2004 + A1: 2013

Note: Tested in Accordance with BS1377:Part 2:1990, clause 9.2

Remarks:

Signed:

Szczepan Bielatowicz
PL Deputy of Head of Geotechnical Section
for and on behalf of i2 Analytical Ltd

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TEST CERTIFICATE

Particle Size Distribution

Tested in Accordance with: BS 1377-2: 1990

i2 Analytical Ltd
Unit 6 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB



Client: McAuliffe Group
Client Address: McAuliffe House, Northcott Road,
WV14 0TP

Contact: Matthew Handley
Site Address: Belmont Street

Testing carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland

Client Reference: VISIT3619
Job Number: 21-57186
Date Sampled: 11/02/2021
Date Received: 12/02/2021
Date Tested: 25/02/2021
Sampled By: i2 - MH

Test Results:

Laboratory Reference: 1772363

Hole No.: BH103

Sample Reference: Not Given

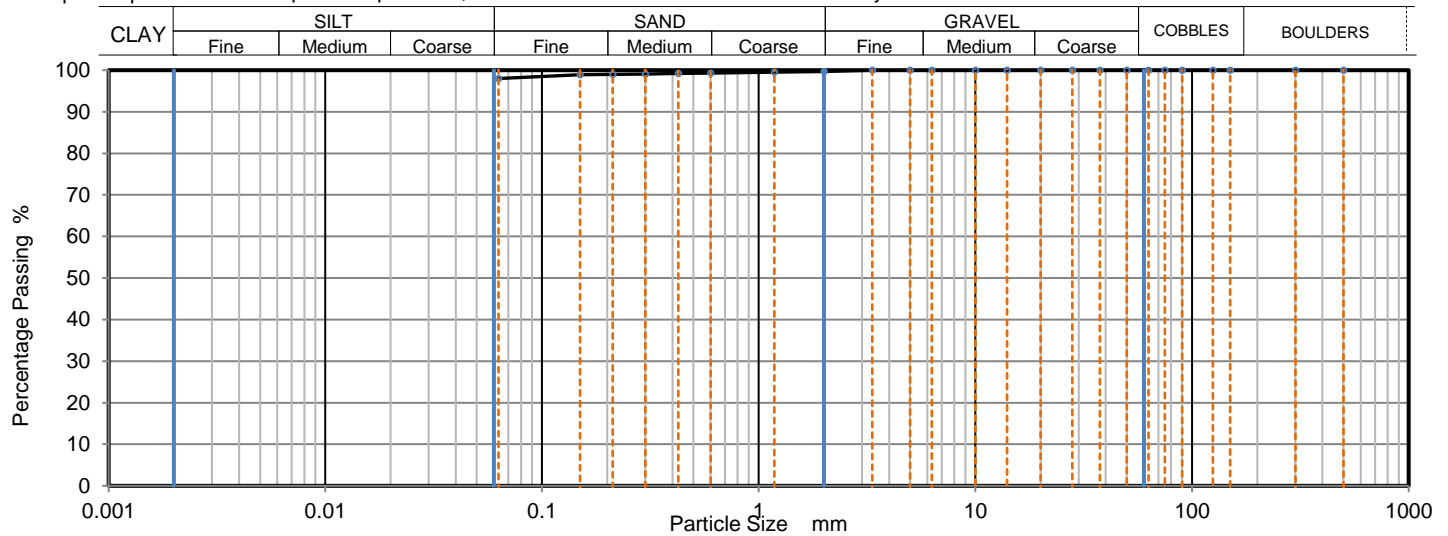
Sample Description: Brown CLAY

Sample Preparation: Sample was quartered, oven dried at 106.5 °C and broken down by hand.

Depth Top [m]: 18.00

Depth Base [m]: Not Given

Sample Type: D



Sieving		Sedimentation	
Particle Size mm	% Passing	Particle Size mm	% Passing
500	100		
300	100		
150	100		
125	100		
90	100		
75	100		
63	100		
50	100		
37.5	100		
28	100		
20	100		
14	100		
10	100		
6.3	100		
5	100		
3.35	100		
2	100		
1.18	100		
0.6	99		
0.425	99		
0.3	99		
0.212	99		
0.15	99		
0.063	99		

Sample Proportions	% dry mass
Very coarse	0
Gravel	0
Sand	1
Fines <0.063mm	99

Grading Analysis	
D100	mm
D60	mm
D30	mm
D10	mm
Uniformity Coefficient	N/A
Curvature Coefficient	

Uniformity Coefficient and Coefficient of Curvature calculated in accordance with BS EN ISO 14688-2: 2004 + A1: 2013

Note: Tested in Accordance with BS1377:Part 2:1990, clause 9.2

Remarks:

Signed:

Szczepan Bielatowicz
PL Deputy of Head of Geotechnical Section
for and on behalf of i2 Analytical Ltd

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TEST CERTIFICATE

Particle Size Distribution

Tested in Accordance with: BS 1377-2: 1990

i2 Analytical Ltd
Unit 6 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB



Client: McAuliffe Group
Client Address: McAuliffe House, Northcott Road,
WV14 0TP

Contact: Matthew Handley
Site Address: Belmont Street

Testing carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland

Client Reference: VISIT3619
Job Number: 21-57186
Date Sampled: 11/02/2021
Date Received: 12/02/2021
Date Tested: 25/02/2021
Sampled By: i2 - MH

Test Results:

Laboratory Reference: 1772364

Hole No.: BH103

Sample Reference: Not Given

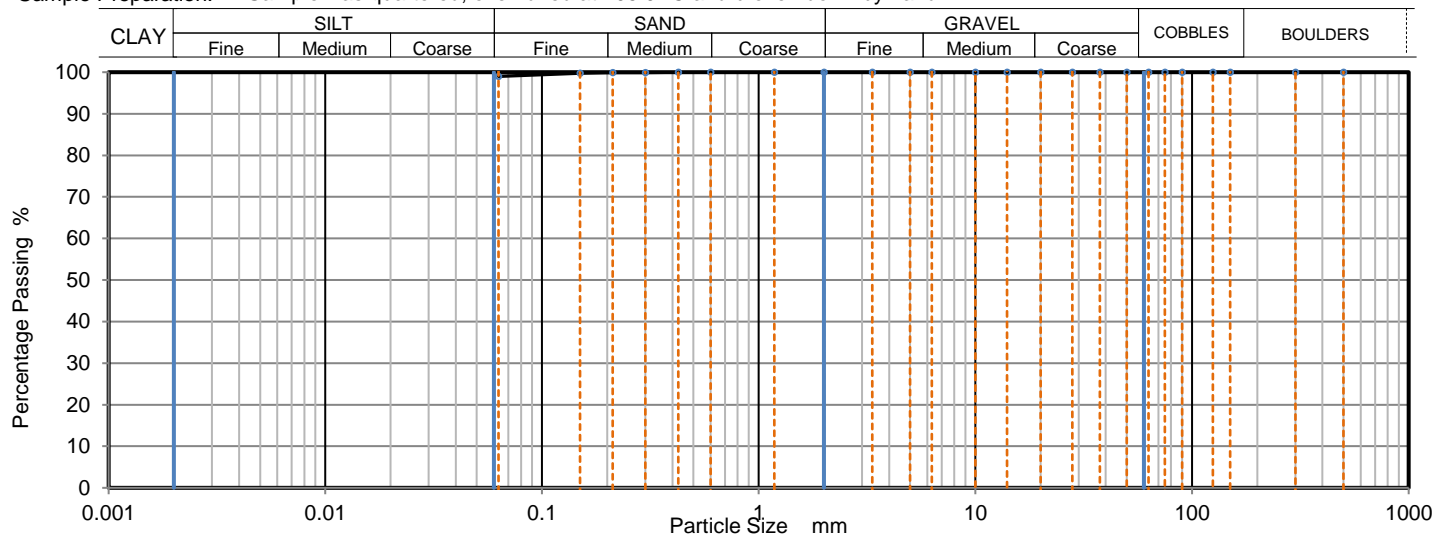
Sample Description: Brown CLAY

Sample Preparation: Sample was quartered, oven dried at 106.0 °C and broken down by hand.

Depth Top [m]: 19.50

Depth Base [m]: Not Given

Sample Type: D



Sieving		Sedimentation	
Particle Size mm	% Passing	Particle Size mm	% Passing
500	100		
300	100		
150	100		
125	100		
90	100		
75	100		
63	100		
50	100		
37.5	100		
28	100		
20	100		
14	100		
10	100		
6.3	100		
5	100		
3.35	100		
2	100		
1.18	100		
0.6	100		
0.425	100		
0.3	100		
0.212	100		
0.15	100		
0.063	100		

Sample Proportions	% dry mass
Very coarse	0
Gravel	0
Sand	0
Fines <0.063mm	100

Grading Analysis	
D100	mm
D60	mm
D30	mm
D10	mm
Uniformity Coefficient	N/A
Curvature Coefficient	

Uniformity Coefficient and Coefficient of Curvature calculated in accordance with BS EN ISO 14688-2: 2004 + A1: 2013

Note: Tested in Accordance with BS1377:Part 2:1990, clause 9.2

Remarks:

Signed:

Szczepan Bielatowicz
PL Deputy of Head of Geotechnical Section
for and on behalf of i2 Analytical Ltd

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TEST CERTIFICATE

Particle Size Distribution

i2 Analytical Ltd
Unit 6 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB



Tested in Accordance with: BS 1377-2: 1990

Client: McAuliffe Group
Client Address: McAuliffe House, Northcott Road,
WV14 0TP

Contact: Matthew Handley
Site Address: Belmont Street

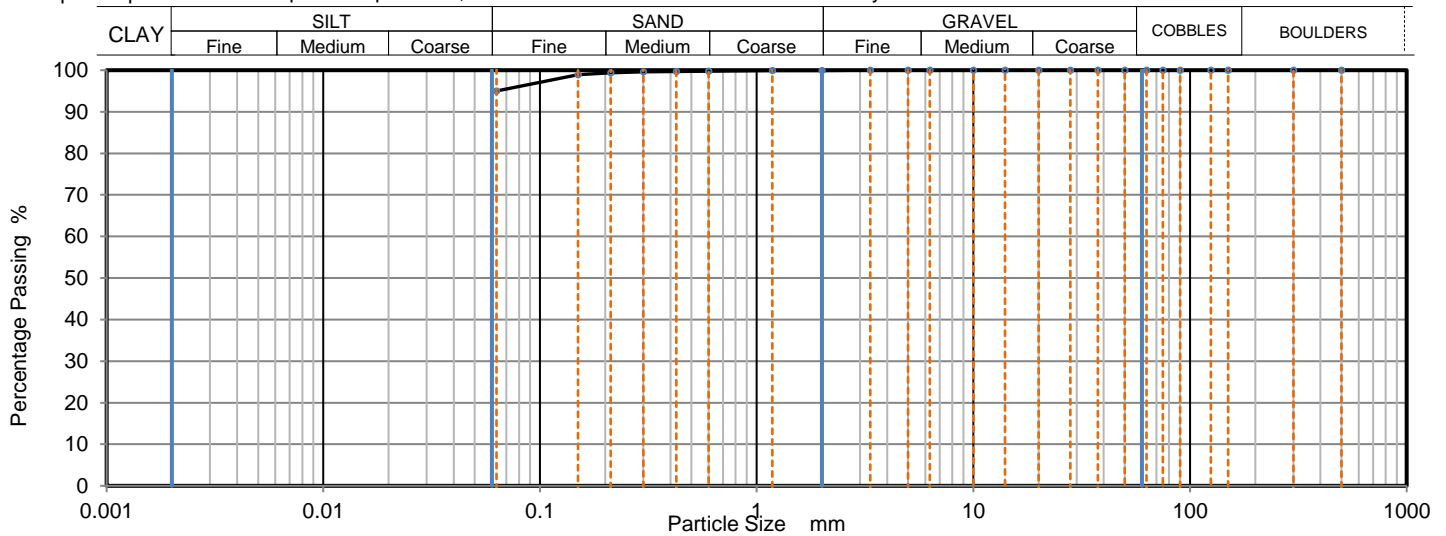
Client Reference: VISIT3619
Job Number: 21-57186
Date Sampled: 11/02/2021
Date Received: 12/02/2021
Date Tested: 25/02/2021
Sampled By: i2 - MH

Testing carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland

Test Results:

Laboratory Reference: 1772365
Hole No.: BH103
Sample Reference: Not Given
Sample Description: Brown slightly sandy CLAY
Sample Preparation: Sample was quartered, oven dried at 106.0 °C and broken down by hand.

Depth Top [m]: 22.50
Depth Base [m]: Not Given
Sample Type: D



Sieving		Sedimentation	
Particle Size mm	% Passing	Particle Size mm	% Passing
500	100		
300	100		
150	100		
125	100		
90	100		
75	100		
63	100		
50	100		
37.5	100		
28	100		
20	100		
14	100		
10	100		
6.3	100		
5	100		
3.35	100		
2	100		
1.18	100		
0.6	100		
0.425	100		
0.3	100		
0.212	99		
0.15	99		
0.063	95		

Sample Proportions	% dry mass
Very coarse	0
Gravel	0
Sand	5
Fines <0.063mm	95

Grading Analysis	
D100	mm
D60	mm
D30	mm
D10	mm
Uniformity Coefficient	N/A
Curvature Coefficient	

Uniformity Coefficient and Coefficient of Curvature calculated in accordance with BS EN ISO 14688-2: 2004 + A1: 2013

Note: Tested in Accordance with BS1377:Part 2:1990, clause 9.2

Remarks:

Signed:

Szczepan Bielatowicz
PL Deputy of Head of Geotechnical Section
for and on behalf of i2 Analytical Ltd

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TEST CERTIFICATE

Unconsolidated Undrained

Triaxial Compression

Tested in Accordance with:
BS 1377-7: 1990: Clause 8

i2 Analytical Ltd
Unit 6 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB



Client: McAuliffe Group
Client Address: McAuliffe House, Northcott Road,
WV14 0TP

Contact: Matthew Handley
Site Address: Belmont Street

Client Reference: VISIT3619
Job Number: 21-57186
Date Sampled: 11/02/2021
Date Received: 12/02/2021
Date Tested: 20/02/2021
Sampled By: i2 - MH

Testing carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland

Test Results:

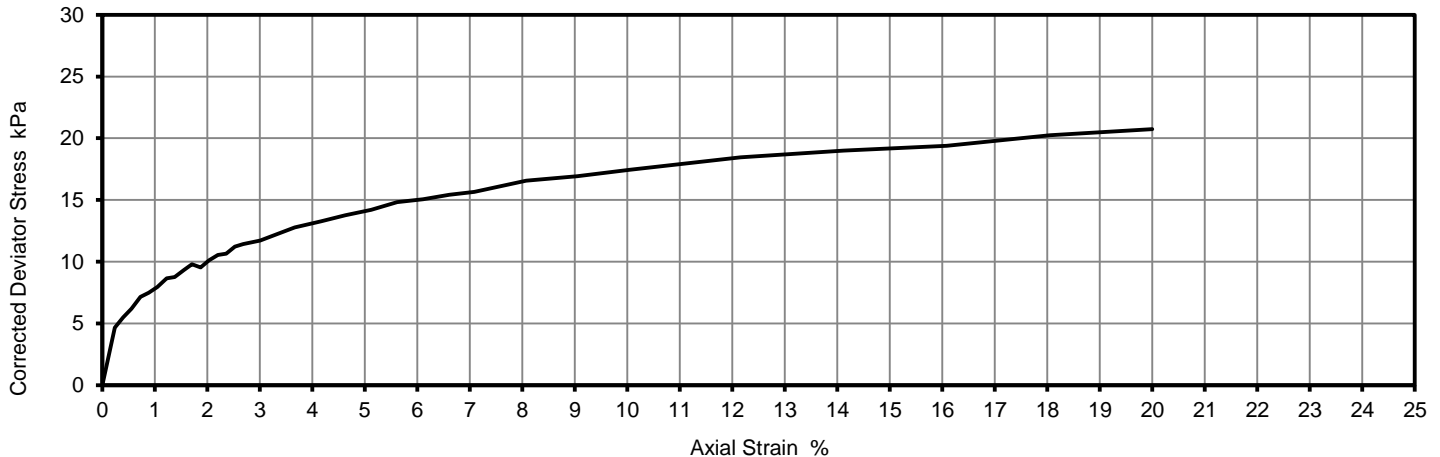
Laboratory Reference: 1772345
Hole No.: BH103
Sample Reference: Not Given
Sample Description: Brown CLAY

Depth Top [m]: 1.20
Depth Base [m]: 1.65
Sample Type: D

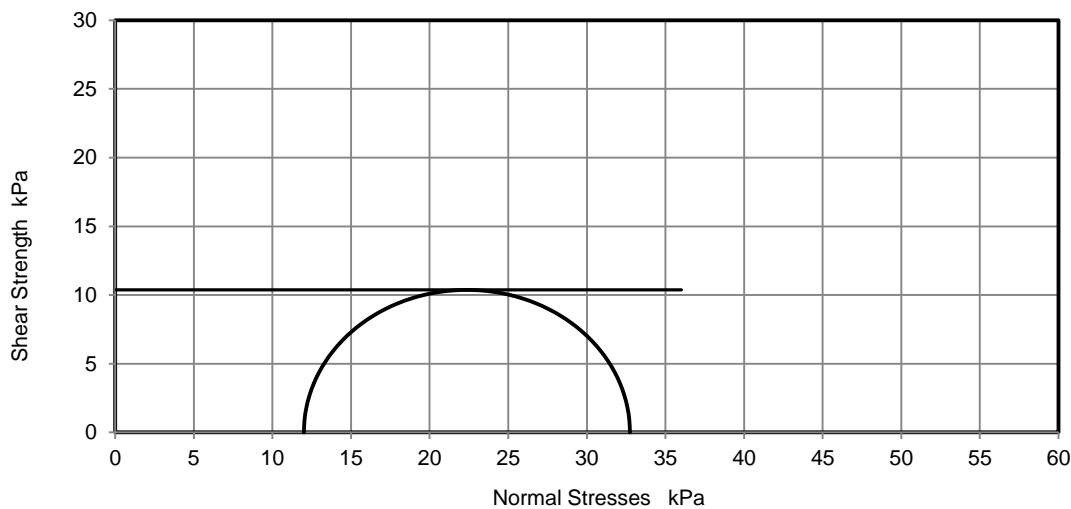
Test Number	1
Length	201.88 mm
Diameter	101.71 mm
Bulk Density	1.89 Mg/m ³
Moisture Content	43 %
Dry Density	1.32 Mg/m ³
Membrane Correction	1.02 kPa

Rate of Strain	1.98 %/min
Cell Pressure	12 kPa
Axial Strain at failure	20.0 %
Deviator Stress, ($\sigma_1 - \sigma_3$) _f	21 kPa
Undrained Shear Strength, c_u	10 kPa $\frac{1}{2}(\sigma_1 - \sigma_3)_f$
Mode of Failure	Plastic
Membrane thickness	0.27 mm

Deviator Stress v Axial Strain



Mohr Circles



Position within sample



Note: Deviator stress corrected for area change and membrane effects. Mohr circles and their interpretation is not covered by BS1377.
This is provided for information only.

Remarks: Sample failed at first stage. Unable to achieve multistage. Reported as a single stage.

Signed:

Szczepan Bielatowicz
PL Deputy of Head of Geotechnical Section
for and on behalf of i2 Analytical Ltd

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TEST CERTIFICATE

Unconsolidated Undrained

Triaxial Compression

Tested in Accordance with:
BS 1377-7: 1990: Clause 8

i2 Analytical Ltd
Unit 6 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB



Client: McAuliffe Group
Client Address: McAuliffe House, Northcott Road,
WV14 0TP

Contact: Matthew Handley
Site Address: Belmont Street

Testing carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland

Client Reference: VISIT3619
Job Number: 21-57186
Date Sampled: 11/02/2021
Date Received: 12/02/2021
Date Tested: 20/02/2021
Sampled By: i2 - MH

Test Results:

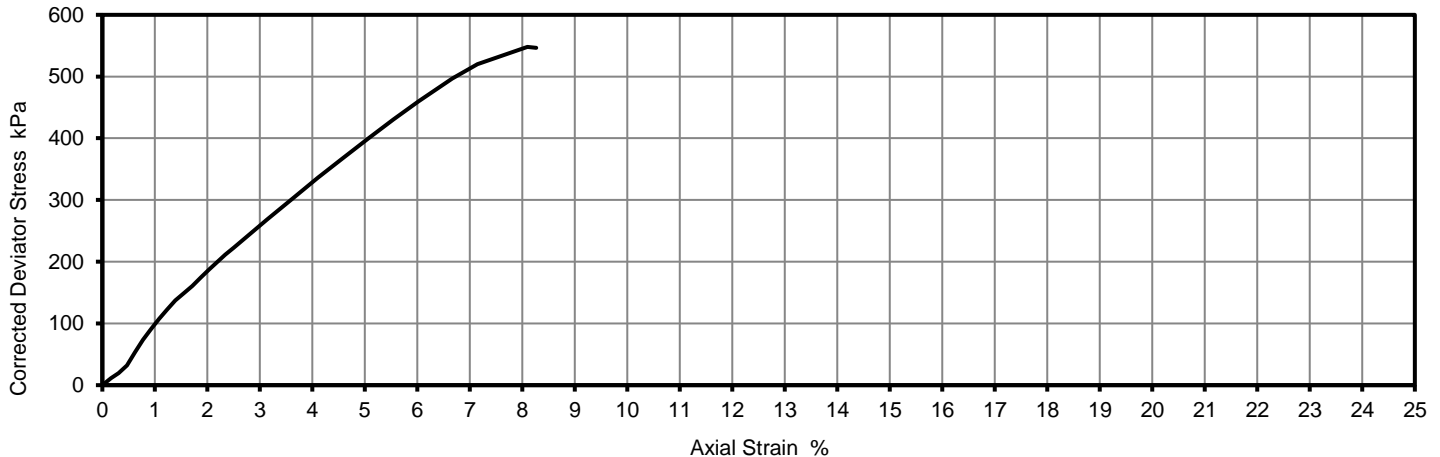
Laboratory Reference: 1772362
Hole No.: BH103
Sample Reference: Not Given
Sample Description: Greyish brown CLAY

Depth Top [m]: 17.00
Depth Base [m]: 17.45
Sample Type: D

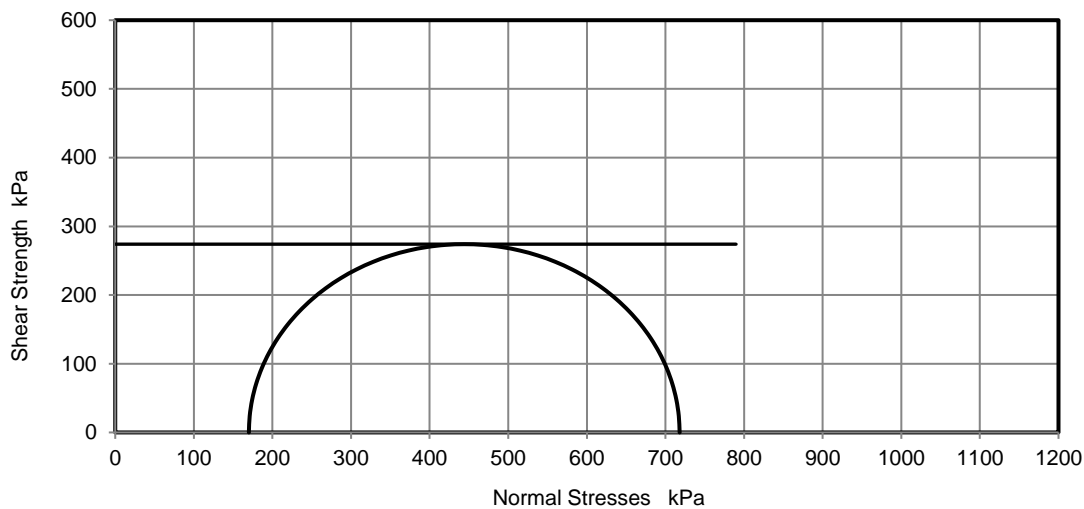
Test Number	1
Length	203.41 mm
Diameter	102.77 mm
Bulk Density	1.98 Mg/m ³
Moisture Content	29 %
Dry Density	1.53 Mg/m ³
Membrane Correction	0.54 kPa

Rate of Strain	1.97 %/min
Cell Pressure	170 kPa
Axial Strain at failure	8.1 %
Deviator Stress, ($\sigma_1 - \sigma_3$) _f	548 kPa
Undrained Shear Strength, c_u	274 kPa $\frac{1}{2}(\sigma_1 - \sigma_3)_f$
Mode of Failure	Brittle
Membrane thickness	0.29 mm

Deviator Stress v Axial Strain



Mohr Circles



Position within sample



Note: Deviator stress corrected for area change and membrane effects. Mohr circles and their interpretation is not covered by BS1377.
This is provided for information only.

Remarks: Sample failed at first stage. Unable to achieve multistage. Reported as a single stage.

Signed:

Szczepan Bielatowicz
PL Deputy of Head of Geotechnical Section
for and on behalf of i2 Analytical Ltd

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Tested in Accordance with: BS 1377-7: 1990: Clause 9

Client: McAuliffe Group
Client Address: McAuliffe House, Northcott Road,
WV14 0TP

Contact: Matthew Handley
Site Address: Belmont Street

Client Reference: VISIT3619
Job Number: 21-57186
Date Sampled: 11/02/2021
Date Received: 12/02/2021
Date Tested: 20/02/2021
Sampled By: i2 - MH

Testing carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland

Test Results:

Laboratory Reference: 1772347
Hole No.: BH103
Sample Reference: Not Given
Sample Description: Brown CLAY

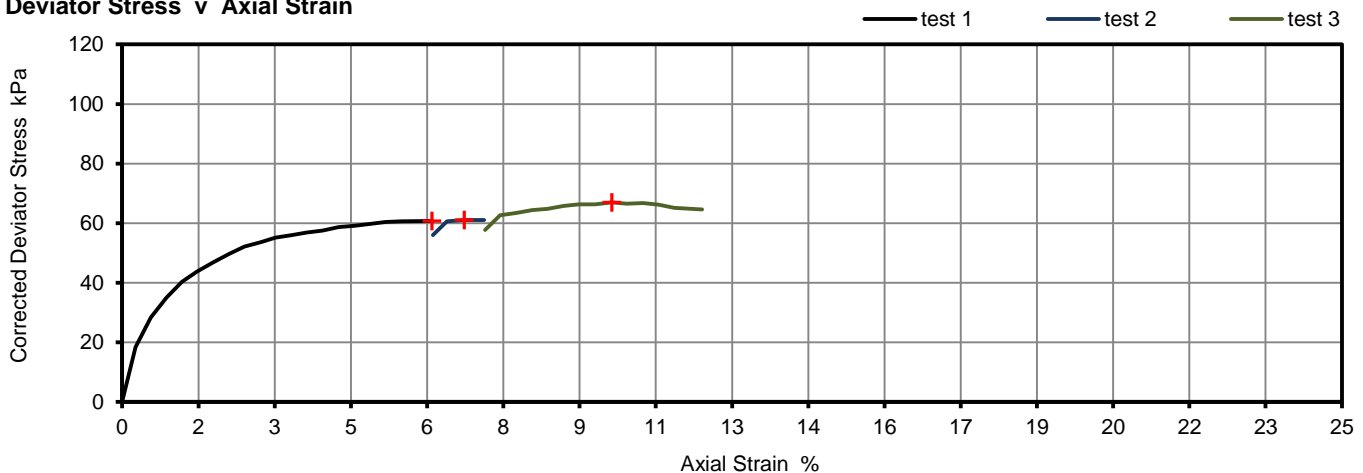
Depth Top [m]: 3.00
Depth Base [m]: 3.45
Sample Type: D

Length	203.47	mm
Diameter	102.24	mm
Bulk Density	1.83	Mg/m ³
Moisture Content	40	%
Dry Density	1.31	Mg/m ³
Membrane thickness	0.26	mm

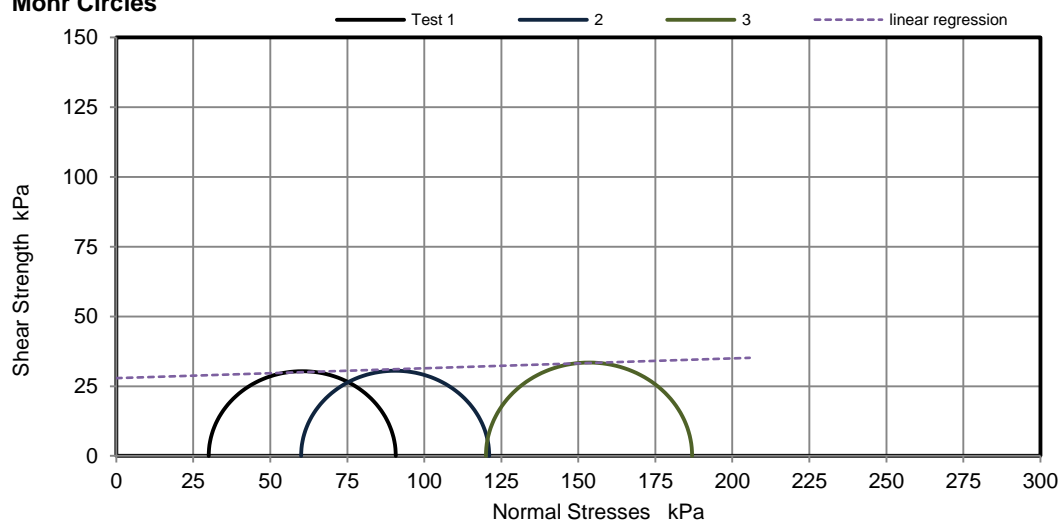
Rate of Strain
Stage Number
Cell Pressure
Axial Strain at failure
Deviator Stress, ($\sigma_1 - \sigma_3$) f
Shear strength, cu
Mode of failure
Membrane Correction

1.97			%/min
1	2	3	
30	60	120	kPa
6.3	7.0	10.0	%
61	61	67	kPa
30	31	33	kPa
Compound			
0.42	0.44	0.57	kPa

Deviator Stress v Axial Strain



Mohr Circles



Position within sample



Linear Regression
 ϕ_u 2.0 °
cu 28 kPa

Note: Mohr circles and their interpretation is not covered by BS1377. These are provided for information only.

Remarks: Correction values: 30kPa=22N, 60kPa=36N, 120kPa=59N.

Signed:

Szczepan Bielatowicz
PL Deputy of Head of Geotechnical Section
for and on behalf of i2 Analytical Ltd

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Tested in Accordance with: BS 1377-7: 1990: Clause 9

Client: McAuliffe Group
Client Address: McAuliffe House, Northcott Road,
WV14 0TP

Contact: Matthew Handley
Site Address: Belmont Street

Client Reference: VISIT3619
Job Number: 21-57186
Date Sampled: 11/02/2021
Date Received: 12/02/2021
Date Tested: 20/02/2021
Sampled By: i2 - MH

Testing carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland

Test Results:

Laboratory Reference: 1772350
Hole No.: B103
Sample Reference: Not Given
Sample Description: Brown CLAY

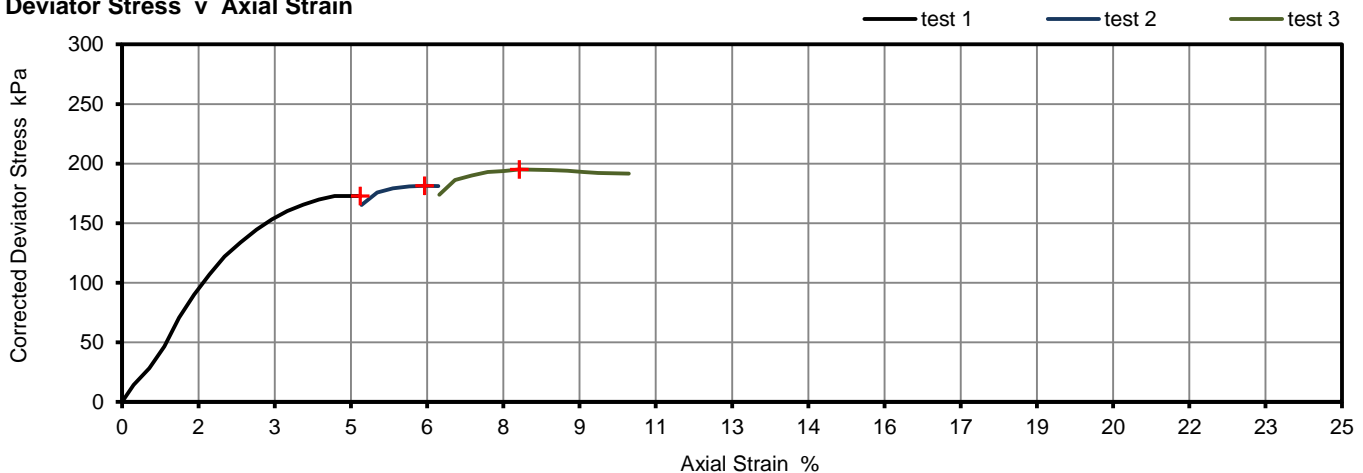
Depth Top [m]: 5.00
Depth Base [m]: 5.45
Sample Type: D

Length	203.86	mm
Diameter	102.69	mm
Bulk Density	1.91	Mg/m ³
Moisture Content	33	%
Dry Density	1.43	Mg/m ³
Membrane thickness	0.25	mm

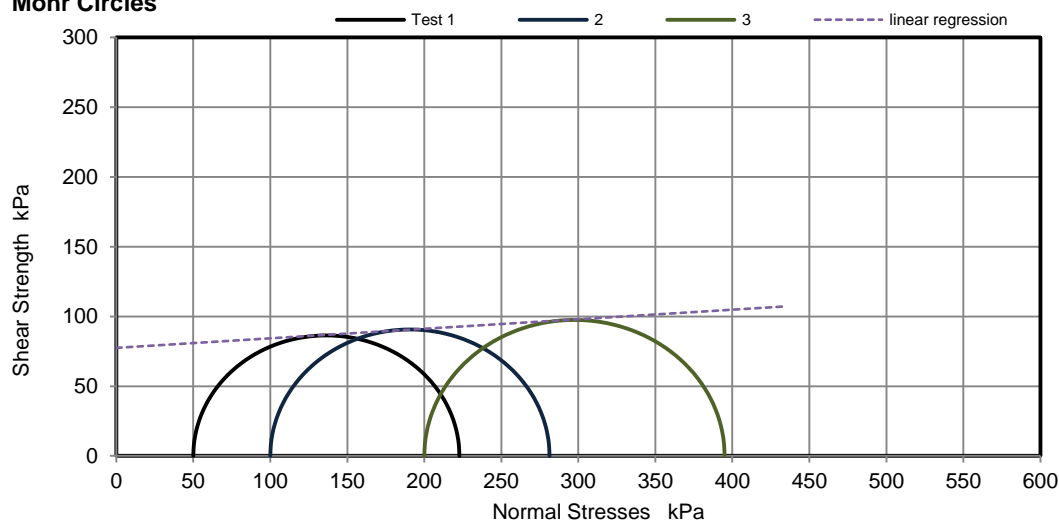
Rate of Strain
Stage Number
Cell Pressure
Axial Strain at failure
Deviator Stress, ($\sigma_1 - \sigma_3$)
Shear strength, cu
Mode of failure
Membrane Correction

1.96				%/min
1	2	3		
50	100	200		kPa
4.9	6.2	8.1		%
173	181	195		kPa
86	91	97		kPa
Brittle				
0.33	0.39	0.47		kPa

Deviator Stress v Axial Strain



Mohr Circles



Position within sample



Linear Regression
 ϕ_u 3.9 °
cu 77 kPa

Note: Mohr circles and their interpretation is not covered by BS1377. These are provided for information only.

Remarks: Correction values: 50kPa=22N, 100kPa=54N, 200kPa=89N.

Signed:

Szczepan Bielatowicz
PL Deputy of Head of Geotechnical Section
for and on behalf of i2 Analytical Ltd

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TEST CERTIFICATE

Unconsolidated Undrained Triaxial Compression

i2 Analytical Ltd
Unit 6 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB



Tested in Accordance with: BS 1377-7: 1990: Clause 9

Client: McAuliffe Group
Client Address: McAuliffe House, Northcott Road,
WV14 0TP

Contact: Matthew Handley
Site Address: Belmont Street

Client Reference: VISIT3619
Job Number: 21-57186
Date Sampled: 11/02/2021
Date Received: 12/02/2021
Date Tested: 20/02/2021
Sampled By: i2 - MH

Testing carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland

Test Results:

Laboratory Reference: 1772354
Hole No.: BH103
Sample Reference: Not Given
Sample Description: Brown CLAY

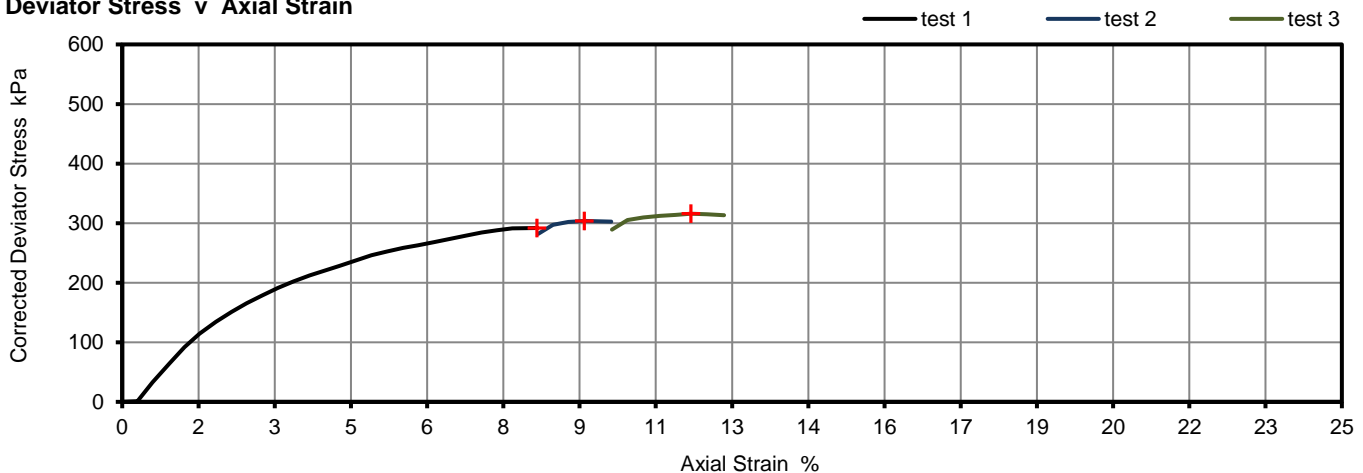
Depth Top [m]: 8.00
Depth Base [m]: 8.45
Sample Type: D

Length	203.70	mm
Diameter	102.71	mm
Bulk Density	1.96	Mg/m ³
Moisture Content	29	%
Dry Density	1.52	Mg/m ³
Membrane thickness	0.29	mm

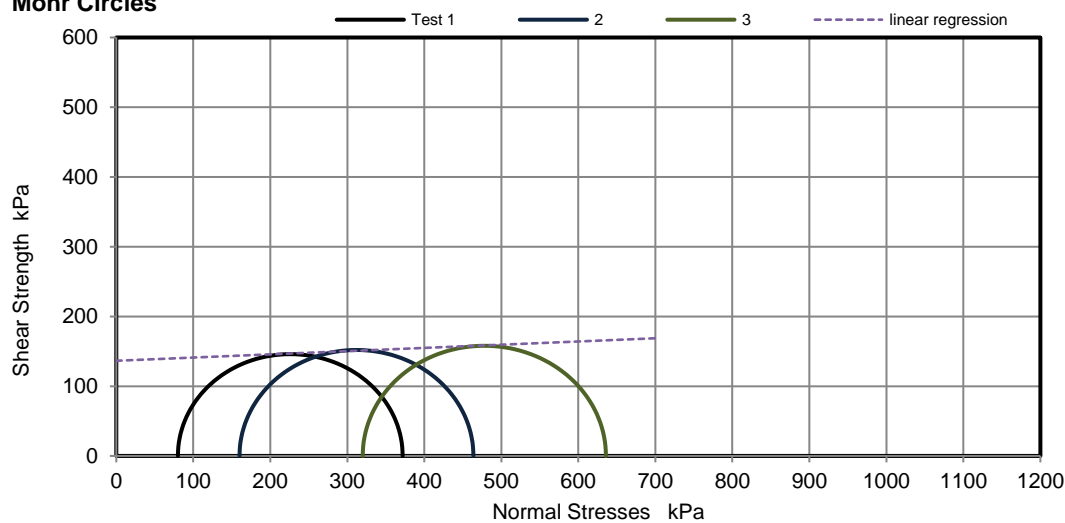
Rate of Strain
Stage Number
Cell Pressure
Axial Strain at failure
Deviator Stress, ($\sigma_1 - \sigma_3$) f
Shear strength, cu
Mode of failure
Membrane Correction

1.96			%/min
1	2	3	
80	160	320	kPa
8.5	9.5	11.7	%
292	304	316	kPa
146	152	158	kPa
Compound			
0.56	0.60	0.70	kPa

Deviator Stress v Axial Strain



Mohr Circles



Position within sample



Linear Regression
 ϕ_u 2.6 °
cu 136 kPa

Note: Mohr circles and their interpretation is not covered by BS1377. These are provided for information only.

Remarks: Correction values: 80kPa=37N, 160kPa=77N, 320kPa=142N.

Signed:

Szczepan Bielatowicz
PL Deputy of Head of Geotechnical Section
for and on behalf of i2 Analytical Ltd

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TEST CERTIFICATE

Liquid and Plastic Limits

i2 Analytical Ltd
Unit 6 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB



Tested in Accordance with: BS 1377-2: 1990: Clause 4.3 and 5

Client: McAuliffe Group
Client Address: McAuliffe House, Northcott Road,
WV14 0TP

Contact: Matthew Handley
Site Address: Belmont Street

Client Reference: MC3619
Job Number: 21-57373
Date Sampled: 15/02/2021
Date Received: 15/02/2021
Date Tested: 26/02/2021
Sampled By: Client - MH

Testing carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland

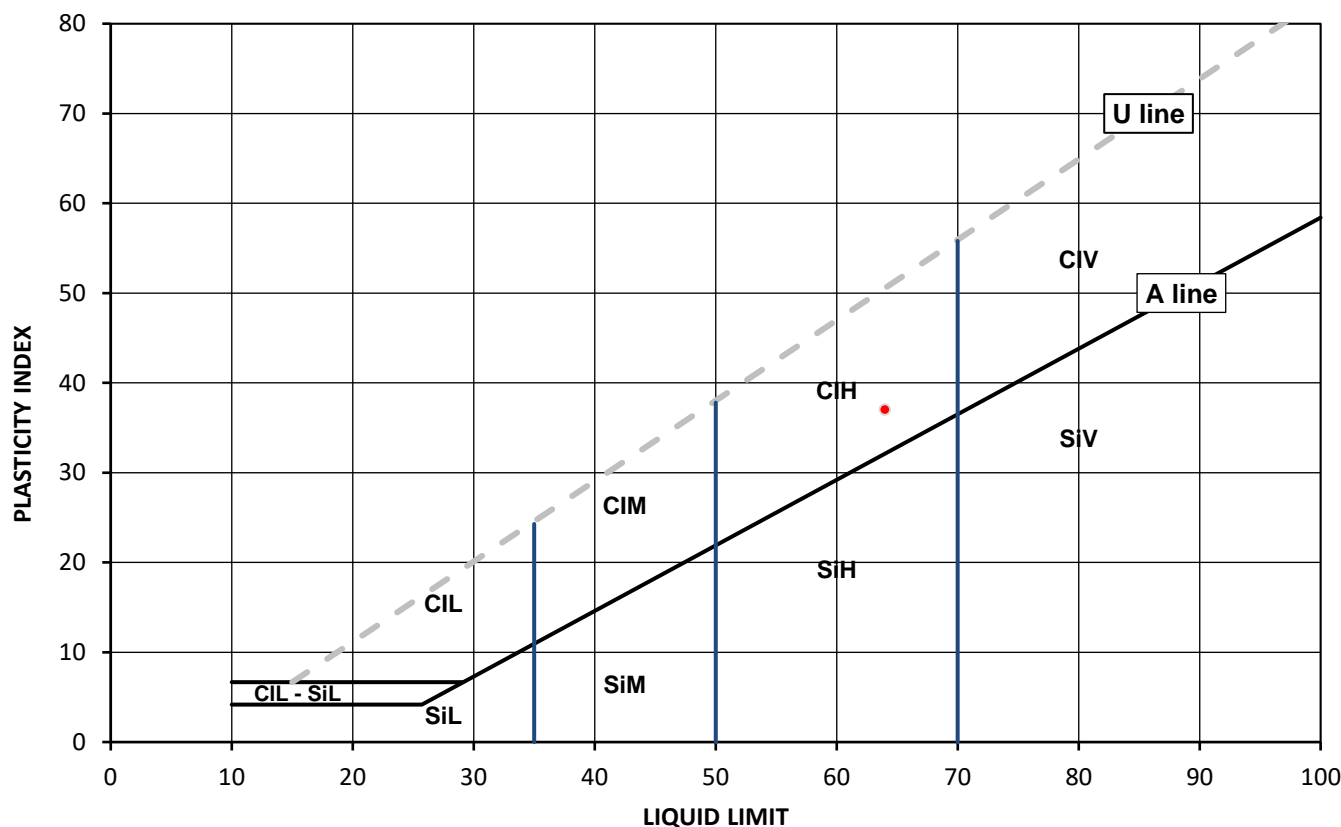
Test Results:

Laboratory Reference: 1773364
Hole No.: BH103
Sample Reference: Not Given
Soil Description: Brown slightly sandy CLAY

Depth Top [m]: 24.00
Depth Base [m]: Not Given
Sample Type: B

Sample Preparation: Tested in natural condition

As Received Moisture Content [W] %	Liquid Limit [WL] %	Plastic Limit [Wp] %	Plasticity Index [Ip] %	% Passing 425µm BS Test Sieve
30	64	27	37	100



Legend, based on BS EN ISO 14688 2:2018 Geotechnical investigation and testing – Identification and classification of soil

	Plasticity	Liquid Limit
Cl	Clay	L Low below 35
Si	Silt	M Medium 35 to 50
	H High 50 to 70	V Very high exceeding 70
	O Organic	append to classification for organic material (eg CIHO)

Note: Moisture Content by BS 1377-2: 1990: Clause 3.2

Remarks:

Signed:

Monika Janoszek
PL Deputy Head of Geotechnical Section
for and on behalf of i2 Analytical Ltd

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TEST CERTIFICATE

Liquid and Plastic Limits

i2 Analytical Ltd
Unit 6 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB



Tested in Accordance with: BS 1377-2: 1990: Clause 4.3 and 5

Client: McAuliffe Group
Client Address: McAuliffe House, Northcott Road,
WV14 0TP

Contact: Matthew Handley
Site Address: Belmont Street

Client Reference: MC3619
Job Number: 21-57373
Date Sampled: 15/02/2021
Date Received: 15/02/2021
Date Tested: 26/02/2021
Sampled By: Client - MH

Testing carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland

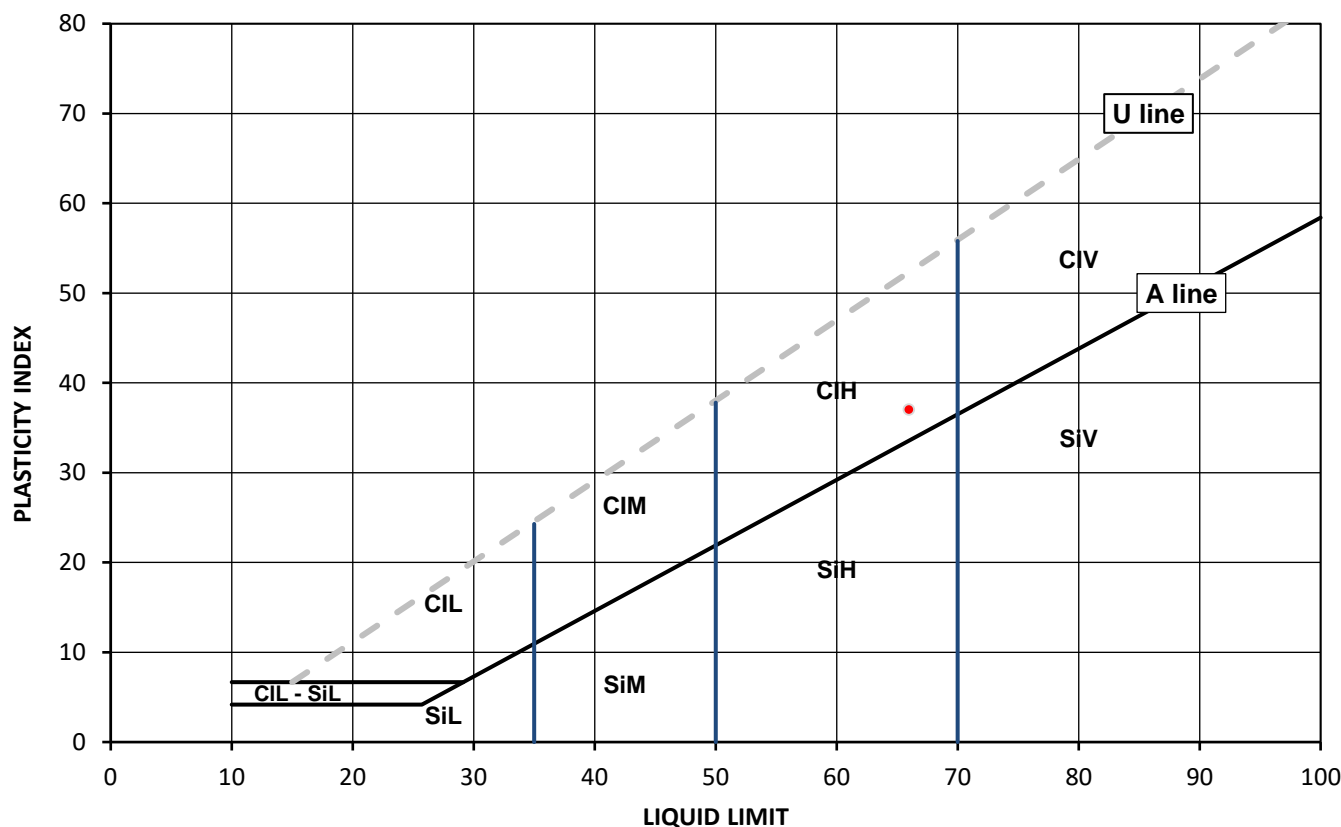
Test Results:

Laboratory Reference: 1773365
Hole No.: BH103
Sample Reference: Not Given
Soil Description: Brown CLAY

Depth Top [m]: 25.50
Depth Base [m]: Not Given
Sample Type: B

Sample Preparation: Tested in natural condition

As Received Moisture Content [W] %	Liquid Limit [WL] %	Plastic Limit [Wp] %	Plasticity Index [Ip] %	% Passing 425µm BS Test Sieve
31	66	29	37	100



Legend, based on BS EN ISO 14688 2:2018 Geotechnical investigation and testing – Identification and classification of soil

	Plasticity	Liquid Limit
Cl	Clay	L Low below 35
Si	Silt	M Medium 35 to 50
	H High 50 to 70	V Very high exceeding 70
	O Organic	
		append to classification for organic material (eg CIHO)

Note: Moisture Content by BS 1377-2: 1990: Clause 3.2

Remarks:

Signed:

Monika Janoszek
PL Deputy Head of Geotechnical Section
for and on behalf of i2 Analytical Ltd

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TEST CERTIFICATE

Liquid and Plastic Limits

i2 Analytical Ltd
Unit 6 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB



Tested in Accordance with: BS 1377-2: 1990: Clause 4.3 and 5

Client: McAuliffe Group
Client Address: McAuliffe House, Northcott Road,
WV14 0TP

Contact: Matthew Handley
Site Address: Belmont Street

Client Reference: MC3619
Job Number: 21-57373
Date Sampled: 15/02/2021
Date Received: 15/02/2021
Date Tested: 26/02/2021
Sampled By: Client - MH

Testing carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland

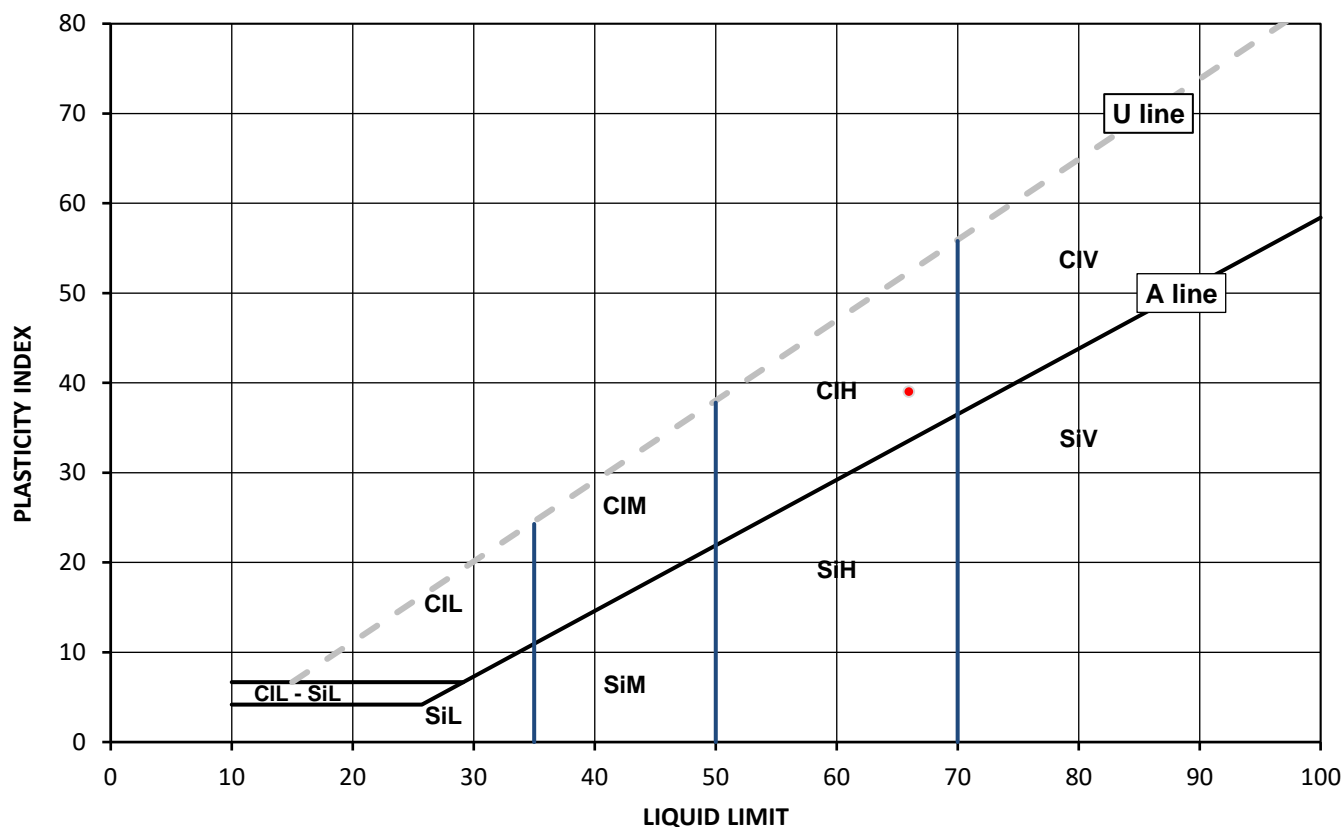
Test Results:

Laboratory Reference: 1773366
Hole No.: BH103
Sample Reference: Not Given
Soil Description: Brown CLAY

Depth Top [m]: 27.00
Depth Base [m]: Not Given
Sample Type: B

Sample Preparation: Tested in natural condition

As Received Moisture Content [W] %	Liquid Limit [WL] %	Plastic Limit [Wp] %	Plasticity Index [Ip] %	% Passing 425µm BS Test Sieve
27	66	27	39	100



Legend, based on BS EN ISO 14688 2:2018 Geotechnical investigation and testing – Identification and classification of soil

	Plasticity	Liquid Limit
Cl	Clay	L Low below 35
Si	Silt	M Medium 35 to 50
	H High 50 to 70	V Very high exceeding 70
	O Organic	append to classification for organic material (eg CIHO)

Note: Moisture Content by BS 1377-2: 1990: Clause 3.2

Remarks:

Signed:

Monika Janoszek
PL Deputy Head of Geotechnical Section
for and on behalf of i2 Analytical Ltd

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TEST CERTIFICATE

Liquid and Plastic Limits

i2 Analytical Ltd
Unit 6 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB



Tested in Accordance with: BS 1377-2: 1990: Clause 4.3 and 5

Client: McAuliffe Group
Client Address: McAuliffe House, Northcott Road,
WV14 0TP

Contact: Matthew Handley
Site Address: Belmont Street

Client Reference: MC3619
Job Number: 21-57373
Date Sampled: 15/02/2021
Date Received: 15/02/2021
Date Tested: 26/02/2021
Sampled By: Client - MH

Testing carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland

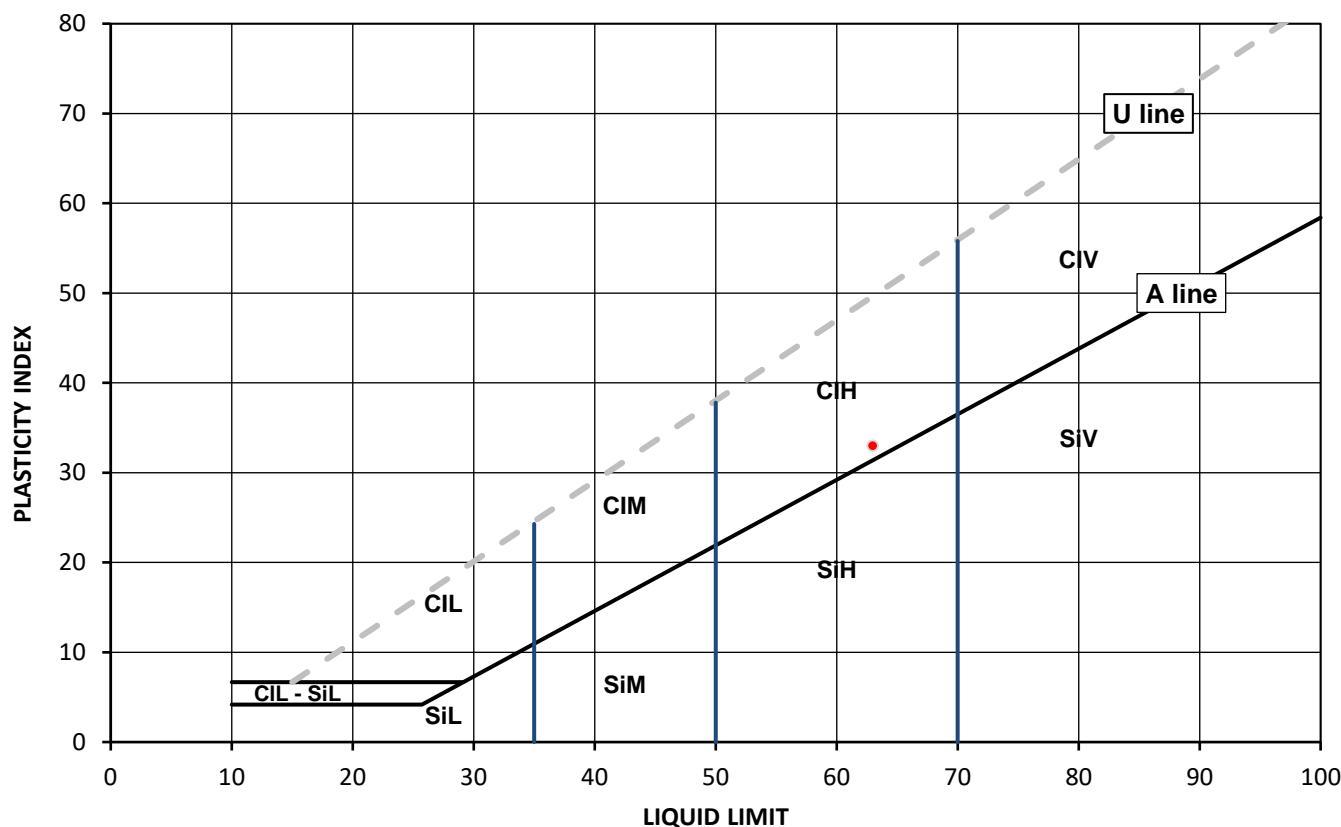
Test Results:

Laboratory Reference: 1773367
Hole No.: BH103
Sample Reference: Not Given
Soil Description: Brown CLAY

Depth Top [m]: 28.50
Depth Base [m]: Not Given
Sample Type: B

Sample Preparation: Tested in natural condition

As Received Moisture Content [W] %	Liquid Limit [WL] %	Plastic Limit [Wp] %	Plasticity Index [Ip] %	% Passing 425µm BS Test Sieve
29	63	30	33	100



Legend, based on BS EN ISO 14688 2:2018 Geotechnical investigation and testing – Identification and classification of soil

	Plasticity	Liquid Limit
Cl	Clay	below 35
Si	Silt	35 to 50
	L	Low
	M	Medium
	H	High
	V	Very high
	O	Organic
		append to classification for organic material (eg CIHO)

Note: Moisture Content by BS 1377-2: 1990: Clause 3.2

Remarks:

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PL Deputy Head of Geotechnical Section
for and on behalf of i2 Analytical Ltd

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TEST CERTIFICATE

Liquid and Plastic Limits

i2 Analytical Ltd
Unit 6 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB



Tested in Accordance with: BS 1377-2: 1990: Clause 4.3 and 5

Client: McAuliffe Group
Client Address: McAuliffe House, Northcott Road,
WV14 0TP

Contact: Matthew Handley
Site Address: Belmont Street

Client Reference: MC3619
Job Number: 21-57373
Date Sampled: 15/02/2021
Date Received: 15/02/2021
Date Tested: 26/02/2021
Sampled By: Client - MH

Testing carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland

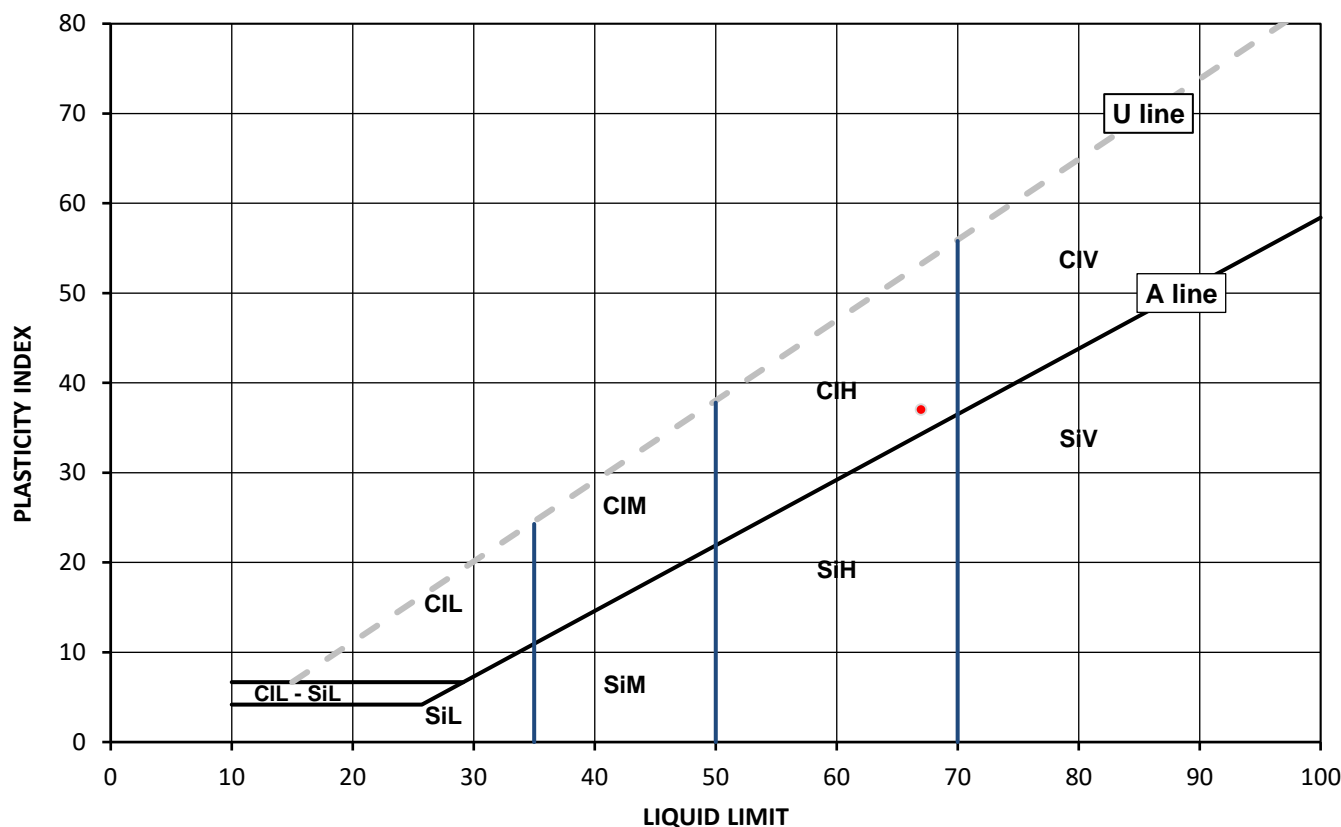
Test Results:

Laboratory Reference: 1773368
Hole No.: BH103
Sample Reference: Not Given
Soil Description: Brown CLAY

Depth Top [m]: 30.00
Depth Base [m]: Not Given
Sample Type: B

Sample Preparation: Tested in natural condition

As Received Moisture Content [W] %	Liquid Limit [WL] %	Plastic Limit [Wp] %	Plasticity Index [Ip] %	% Passing 425µm BS Test Sieve
31	67	30	37	100



Legend, based on BS EN ISO 14688 2:2018 Geotechnical investigation and testing – Identification and classification of soil

	Plasticity	Liquid Limit
Cl Clay	L Low	below 35
Si Silt	M Medium	35 to 50
	H High	50 to 70
	V Very high	exceeding 70
	O Organic	append to classification for organic material (eg CIHO)

Note: Moisture Content by BS 1377-2: 1990: Clause 3.2

Remarks:

Signed:

Monika Janoszek
PL Deputy Head of Geotechnical Section
for and on behalf of i2 Analytical Ltd

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TEST CERTIFICATE

Liquid and Plastic Limits

i2 Analytical Ltd
Unit 6 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB



Tested in Accordance with: BS 1377-2: 1990: Clause 4.3 and 5

Client: McAuliffe Group
Client Address: McAuliffe House, Northcott Road,
WV14 0TP

Contact: Matthew Handley
Site Address: Belmont Street

Client Reference: MC3619
Job Number: 21-57373
Date Sampled: 15/02/2021
Date Received: 15/02/2021
Date Tested: 26/02/2021
Sampled By: Client - MH

Testing carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland

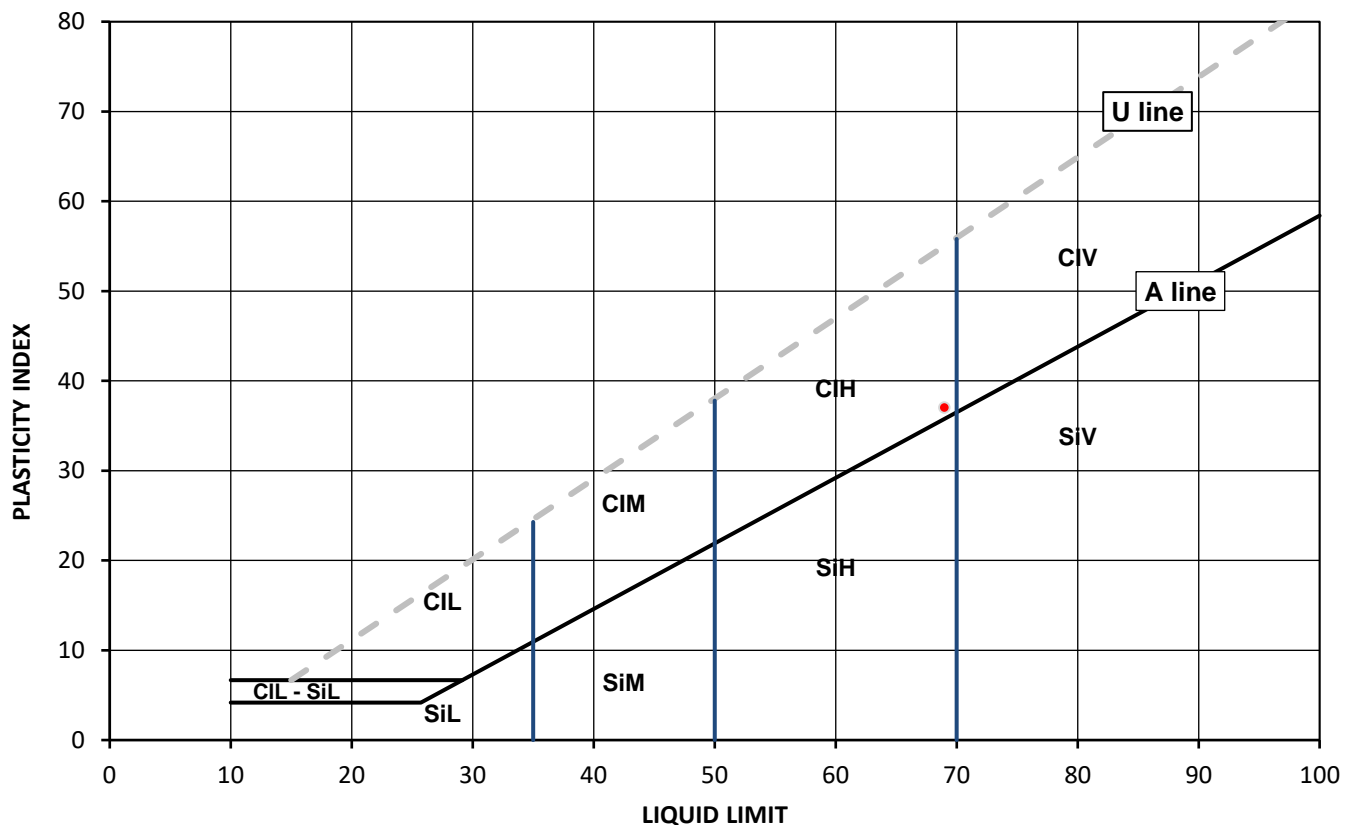
Test Results:

Laboratory Reference: 1773369
Hole No.: BH103
Sample Reference: Not Given
Soil Description: Brown CLAY

Depth Top [m]: 31.50
Depth Base [m]: Not Given
Sample Type: B

Sample Preparation: Tested in natural condition

As Received Moisture Content [W] %	Liquid Limit [WL] %	Plastic Limit [Wp] %	Plasticity Index [Ip] %	% Passing 425µm BS Test Sieve
33	69	32	37	100



Legend, based on BS EN ISO 14688 2:2018 Geotechnical investigation and testing – Identification and classification of soil

	Plasticity	Liquid Limit
Cl	Clay	L Low below 35
Si	Silt	M Medium 35 to 50
	H High 50 to 70	V Very high exceeding 70
	O Organic	
		append to classification for organic material (eg CIHO)

Note: Moisture Content by BS 1377-2: 1990: Clause 3.2

Remarks:

Signed:

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SUMMARY REPORT

Summary of Classification Test Results

i2 Analytical Ltd
Unit 8 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB



Tested in Accordance with:

Client: McAuliffe Group
Client Address: McAuliffe House, Northcott Road,
WV14 0TP

Moisture Content by BS 1377-2: 1990: Clause 3.2; Water Content by BS EN
17892-1: 2014; Atterberg by BS 1377-2: 1990: Clause 4.3 (4 Point Test),
Clause 4.4 (1 Point Test) and 5; PD by BS 1377-2: 1990: Clause 8.2

Client Reference: MC3619
Job Number: 21-57373
Date Sampled: 15/02/2021
Date Received: 15/02/2021
Date Tested: 26/02/2021
Sampled By: Client - MH

Contact: Matthew Handley
Site Address: Belmont Street

Testing carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland

Test results

Laboratory Reference	Hole No.	Sample				Description	Remarks	Moisture Content [W]	Water Content [W]	Atterberg				Density			Total Porosity#		
		Reference	Depth Top	Depth Base	Type					% Passing 425um	WL	Wp	Ip	bulk	dry	PD			
			m	m															
1773364	BH103	Not Given	24.00	Not Given	B	Brown slightly sandy CLAY	Atterberg 4 Point	30		100	64	27	37						
1773365	BH103	Not Given	25.50	Not Given	B	Brown CLAY	Atterberg 4 Point	31		100	66	29	37						
1773366	BH103	Not Given	27.00	Not Given	B	Brown CLAY	Atterberg 4 Point	27		100	66	27	39						
1773367	BH103	Not Given	28.50	Not Given	B	Brown CLAY	Atterberg 4 Point	29		100	63	30	33						
1773368	BH103	Not Given	30.00	Not Given	B	Brown CLAY	Atterberg 4 Point	31		100	67	30	37						
1773369	BH103	Not Given	31.50	Not Given	B	Brown CLAY	Atterberg 4 Point	33		100	69	32	37						

Note: # Non accredited; NP - Non plastic

Comments:

Signed:

Monika Janoszek
PL Deputy Head of Geotechnical Section
for and on behalf of i2 Analytical Ltd

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TEST CERTIFICATE

Particle Size Distribution

i2 Analytical Ltd
Unit 6 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB



Tested in Accordance with: BS 1377-2: 1990

Client: McAuliffe Group
Client Address: McAuliffe House, Northcott Road,
WV14 0TP

Contact: Matthew Handley
Site Address: Belmont Street

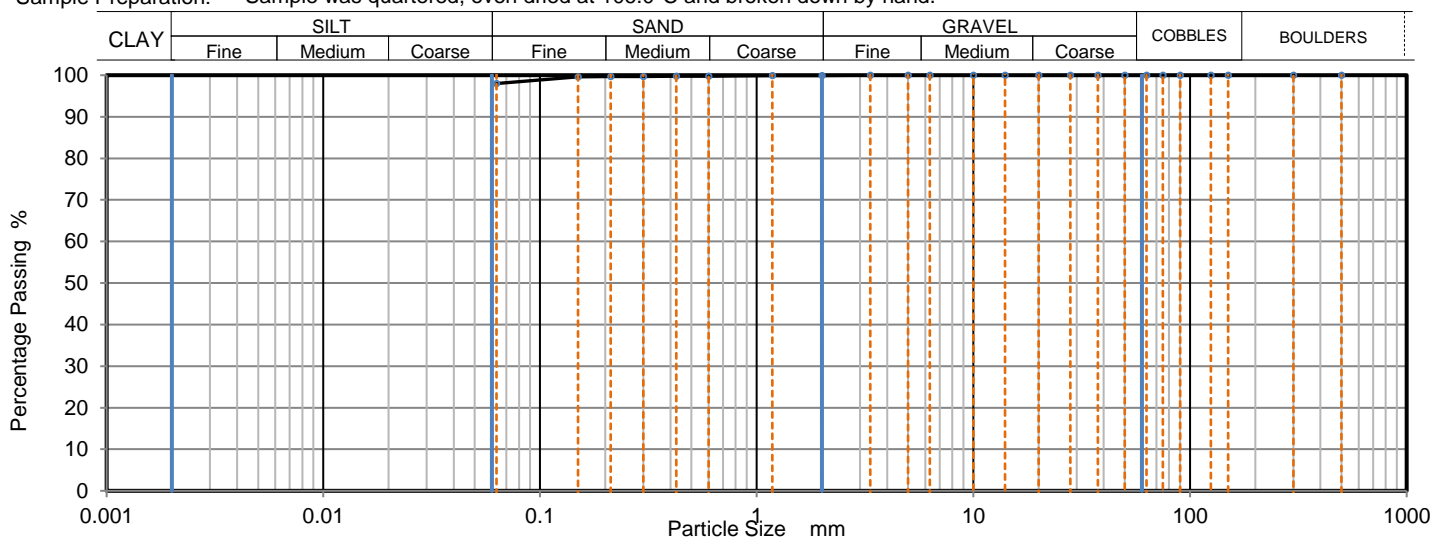
Client Reference: MC3619
Job Number: 21-57373
Date Sampled: 15/02/2021
Date Received: 15/02/2021
Date Tested: 26/02/2021
Sampled By: Client - MH

Testing carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland

Test Results:

Laboratory Reference: 1773364
Hole No.: BH103
Sample Reference: Not Given
Sample Description: Brown slightly sandy CLAY
Sample Preparation: Sample was quartered, oven dried at 106.0°C and broken down by hand.

Depth Top [m]: 24.00
Depth Base [m]: Not Given
Sample Type: B



Sieving		Sedimentation	
Particle Size mm	% Passing	Particle Size mm	% Passing
500	100		
300	100		
150	100		
125	100		
90	100		
75	100		
63	100		
50	100		
37.5	100		
28	100		
20	100		
14	100		
10	100		
6.3	100		
5	100		
3.35	100		
2	100		
1.18	100		
0.6	100		
0.425	100		
0.3	100		
0.212	100		
0.15	100		
0.063	98		

Sample Proportions	% dry mass
Very coarse	0
Gravel	0
Sand	2
Fines <0.063mm	98

Grading Analysis	
D100	mm
D60	mm
D30	mm
D10	mm
Uniformity Coefficient	N/A
Curvature Coefficient	

Uniformity Coefficient and Coefficient of Curvature calculated in accordance with BS EN ISO 14688-2: 2004 + A1: 2013

Note: Tested in Accordance with BS1377:Part 2:1990, clause 9.2

Remarks:

Signed:

Monika Janoszek
PL Deputy Head of Geotechnical Section
for and on behalf of i2 Analytical Ltd

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TEST CERTIFICATE

Particle Size Distribution

i2 Analytical Ltd
Unit 6 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB



Tested in Accordance with: BS 1377-2: 1990

Client: McAuliffe Group
Client Address: McAuliffe House, Northcott Road,
WV14 0TP

Contact: Matthew Handley
Site Address: Belmont Street

Client Reference: MC3619
Job Number: 21-57373
Date Sampled: 15/02/2021
Date Received: 15/02/2021
Date Tested: 26/02/2021
Sampled By: Client - MH

Testing carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland

Test Results:

Laboratory Reference: 1773365

Hole No.: BH103

Sample Reference: Not Given

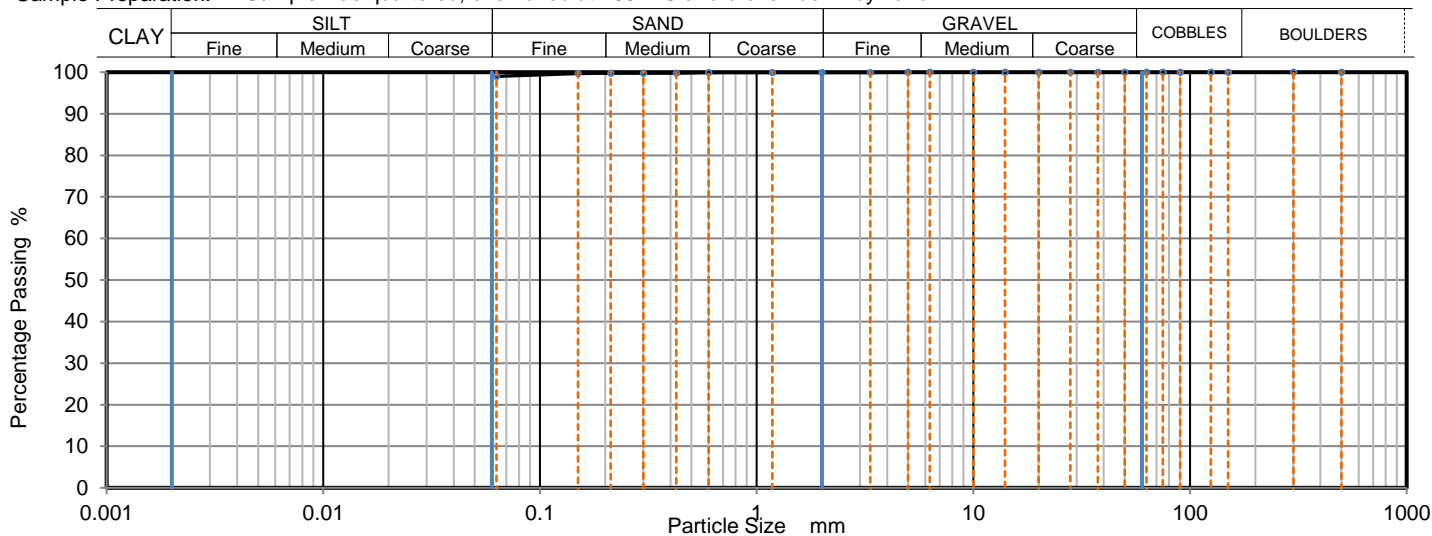
Sample Description: Brown CLAY

Sample Preparation: Sample was quartered, oven dried at 108.7°C and broken down by hand.

Depth Top [m]: 25.50

Depth Base [m]: Not Given

Sample Type: B



Sieving		Sedimentation	
Particle Size mm	% Passing	Particle Size mm	% Passing
500	100		
300	100		
150	100		
125	100		
90	100		
75	100		
63	100		
50	100		
37.5	100		
28	100		
20	100		
14	100		
10	100		
6.3	100		
5	100		
3.35	100		
2	100		
1.18	100		
0.6	100		
0.425	100		
0.3	100		
0.212	100		
0.15	100		
0.063	99		

Sample Proportions	% dry mass
Very coarse	0
Gravel	0
Sand	1
Fines <0.063mm	99

Grading Analysis	
D100	mm
D60	mm
D30	mm
D10	mm
Uniformity Coefficient	N/A
Curvature Coefficient	

Uniformity Coefficient and Coefficient of Curvature calculated in accordance with BS EN ISO 14688-2: 2004 + A1: 2013

Note: Tested in Accordance with BS1377:Part 2:1990, clause 9.2

Remarks:

Signed:

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TEST CERTIFICATE

Particle Size Distribution

Tested in Accordance with: BS 1377-2: 1990

i2 Analytical Ltd
Unit 6 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB



Client: McAuliffe Group
Client Address: McAuliffe House, Northcott Road,
WV14 0TP

Contact: Matthew Handley
Site Address: Belmont Street

Client Reference: MC3619
Job Number: 21-57373
Date Sampled: 15/02/2021
Date Received: 15/02/2021
Date Tested: 26/02/2021
Sampled By: Client - MH

Testing carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland

Test Results:

Laboratory Reference: 1773366

Hole No.: BH103

Sample Reference: Not Given

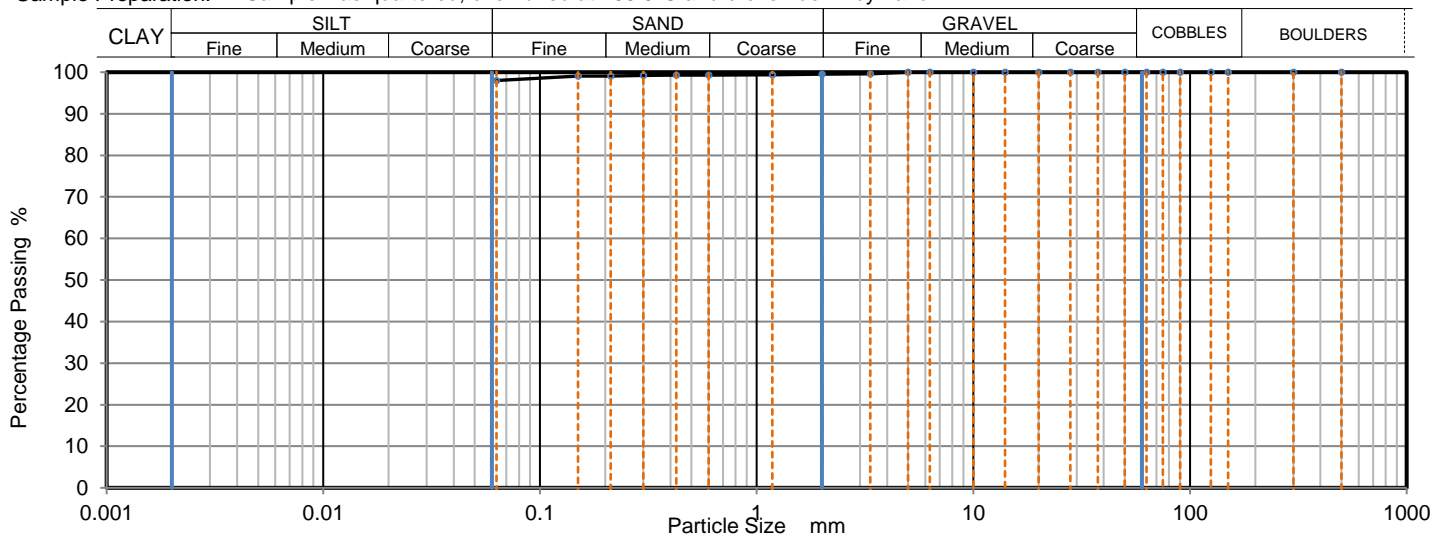
Sample Description: Brown CLAY

Sample Preparation: Sample was quartered, oven dried at 106.0°C and broken down by hand.

Depth Top [m]: 27.00

Depth Base [m]: Not Given

Sample Type: B



Sieving		Sedimentation	
Particle Size mm	% Passing	Particle Size mm	% Passing
500	100		
300	100		
150	100		
125	100		
90	100		
75	100		
63	100		
50	100		
37.5	100		
28	100		
20	100		
14	100		
10	100		
6.3	100		
5	100		
3.35	100		
2	100		
1.18	99		
0.6	99		
0.425	99		
0.3	99		
0.212	99		
0.15	99		
0.063	99		

Sample Proportions	% dry mass
Very coarse	0
Gravel	1
Sand	1
Fines <0.063mm	98

Grading Analysis	
D100	mm
D60	mm
D30	mm
D10	mm
Uniformity Coefficient	N/A
Curvature Coefficient	

Uniformity Coefficient and Coefficient of Curvature calculated in accordance with BS EN ISO 14688-2: 2004 + A1: 2013

Note: Tested in Accordance with BS1377:Part 2:1990, clause 9.2

Remarks:

Signed:

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TEST CERTIFICATE

Particle Size Distribution

Tested in Accordance with: BS 1377-2: 1990

i2 Analytical Ltd
Unit 6 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB



Client: McAuliffe Group
Client Address: McAuliffe House, Northcott Road,
WV14 0TP

Contact: Matthew Handley
Site Address: Belmont Street

Client Reference: MC3619
Job Number: 21-57373
Date Sampled: 15/02/2021
Date Received: 15/02/2021
Date Tested: 26/02/2021
Sampled By: Client - MH

Testing carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland

Test Results:

Laboratory Reference: 1773367

Hole No.: BH103

Sample Reference: Not Given

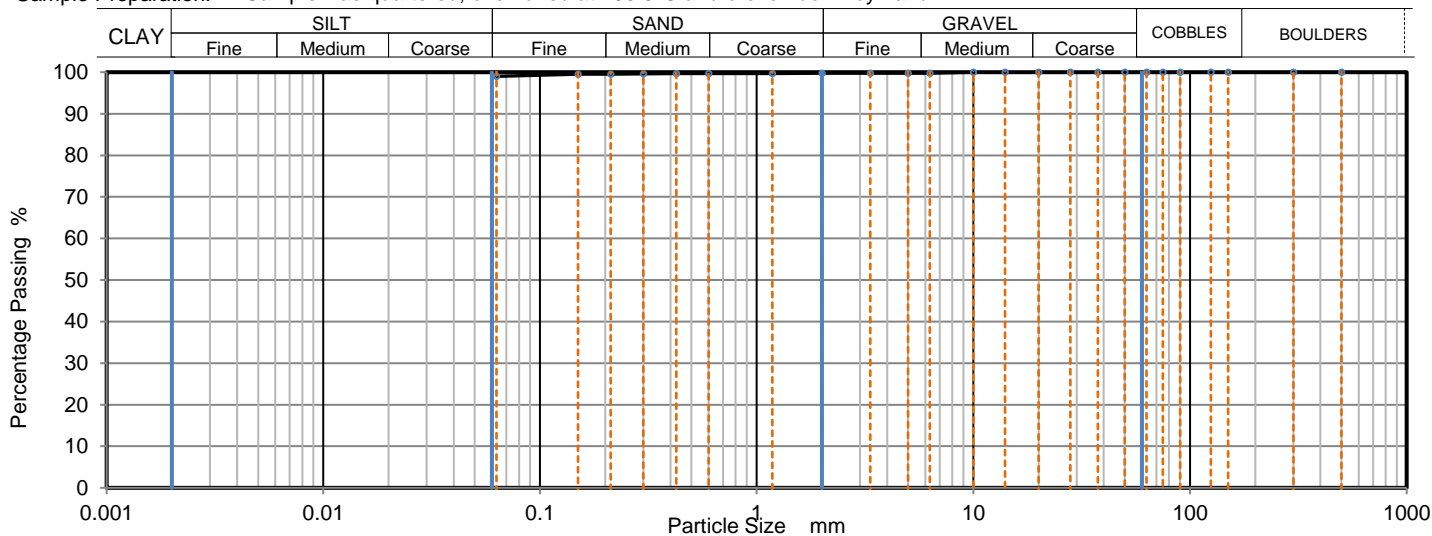
Sample Description: Brown CLAY

Sample Preparation: Sample was quartered, oven dried at 106.0°C and broken down by hand.

Depth Top [m]: 28.50

Depth Base [m]: Not Given

Sample Type: B



Sieving		Sedimentation	
Particle Size mm	% Passing	Particle Size mm	% Passing
500	100		
300	100		
150	100		
125	100		
90	100		
75	100		
63	100		
50	100		
37.5	100		
28	100		
20	100		
14	100		
10	100		
6.3	100		
5	100		
3.35	100		
2	100		
1.18	100		
0.6	100		
0.425	100		
0.3	100		
0.212	100		
0.15	100		
0.063	99		

Sample Proportions	% dry mass
Very coarse	0
Gravel	0
Sand	1
Fines <0.063mm	99

Grading Analysis	
D100	mm
D60	mm
D30	mm
D10	mm
Uniformity Coefficient	N/A
Curvature Coefficient	

Uniformity Coefficient and Coefficient of Curvature calculated in accordance with BS EN ISO 14688-2: 2004 + A1: 2013

Note: Tested in Accordance with BS1377:Part 2:1990, clause 9.2

Remarks:

Signed:

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TEST CERTIFICATE

Particle Size Distribution

Tested in Accordance with: BS 1377-2: 1990

i2 Analytical Ltd
Unit 6 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB



Client: McAuliffe Group
Client Address: McAuliffe House, Northcott Road,
WV14 0TP

Contact: Matthew Handley
Site Address: Belmont Street

Client Reference: MC3619
Job Number: 21-57373
Date Sampled: 15/02/2021
Date Received: 15/02/2021
Date Tested: 26/02/2021
Sampled By: Client - MH

Testing carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland

Test Results:

Laboratory Reference: 1773368

Hole No.: BH103

Sample Reference: Not Given

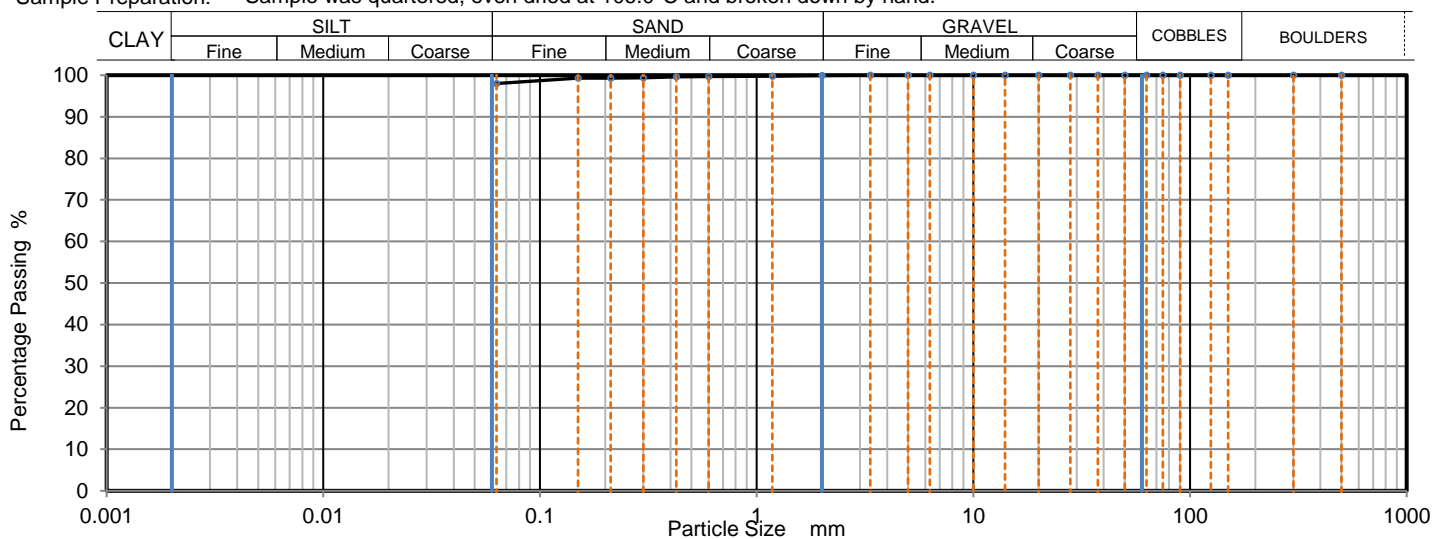
Sample Description: Brown CLAY

Sample Preparation: Sample was quartered, oven dried at 106.0°C and broken down by hand.

Depth Top [m]: 30.00

Depth Base [m]: Not Given

Sample Type: B



Sieving		Sedimentation	
Particle Size mm	% Passing	Particle Size mm	% Passing
500	100		
300	100		
150	100		
125	100		
90	100		
75	100		
63	100		
50	100		
37.5	100		
28	100		
20	100		
14	100		
10	100		
6.3	100		
5	100		
3.35	100		
2	100		
1.18	100		
0.6	100		
0.425	100		
0.3	99		
0.212	99		
0.15	99		
0.063	99		

Sample Proportions	% dry mass
Very coarse	0
Gravel	0
Sand	1
Fines <0.063mm	99

Grading Analysis	
D100	mm
D60	mm
D30	mm
D10	mm
Uniformity Coefficient	N/A
Curvature Coefficient	

Uniformity Coefficient and Coefficient of Curvature calculated in accordance with BS EN ISO 14688-2: 2004 + A1: 2013

Note: Tested in Accordance with BS1377:Part 2:1990, clause 9.2

Remarks:

Signed:

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PL Deputy Head of Geotechnical Section
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TEST CERTIFICATE

Particle Size Distribution

i2 Analytical Ltd
Unit 6 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB



Tested in Accordance with: BS 1377-2: 1990

Client: McAuliffe Group
Client Address: McAuliffe House, Northcott Road,
WV14 0TP

Contact: Matthew Handley
Site Address: Belmont Street

Client Reference: MC3619
Job Number: 21-57373
Date Sampled: 15/02/2021
Date Received: 15/02/2021
Date Tested: 26/02/2021
Sampled By: Client - MH

Testing carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland

Test Results:

Laboratory Reference: 1773369

Hole No.: BH103

Sample Reference: Not Given

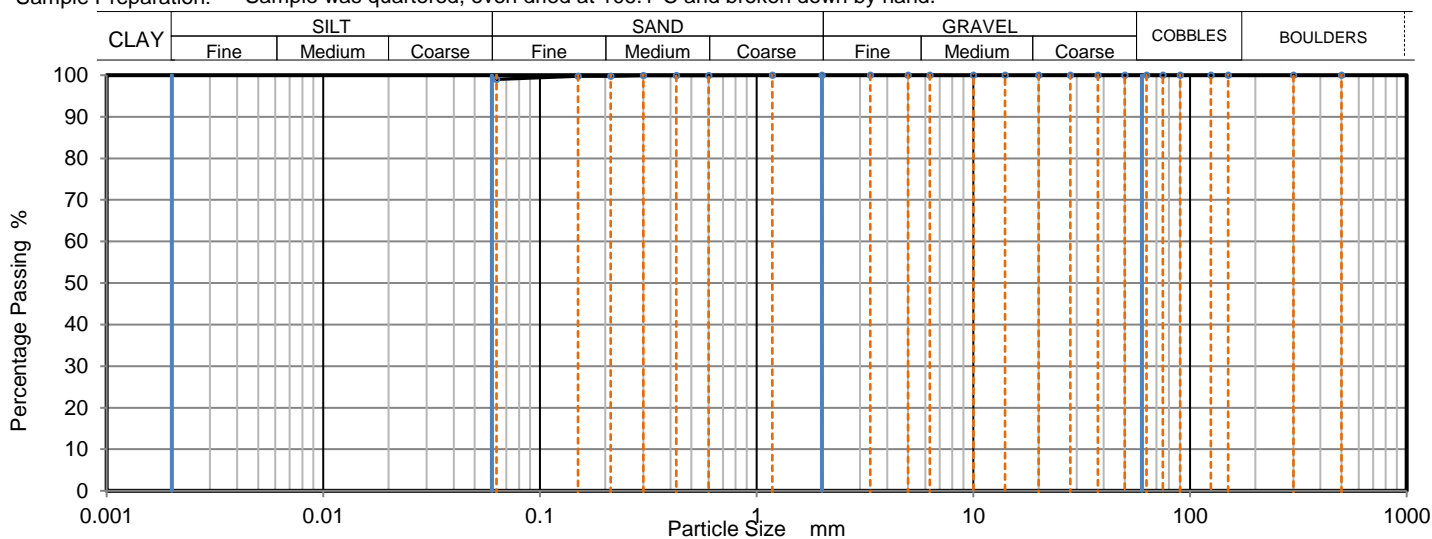
Sample Description: Brown CLAY

Sample Preparation: Sample was quartered, oven dried at 106.1°C and broken down by hand.

Depth Top [m]: 31.50

Depth Base [m]: Not Given

Sample Type: B



Sieving		Sedimentation	
Particle Size mm	% Passing	Particle Size mm	% Passing
500	100		
300	100		
150	100		
125	100		
90	100		
75	100		
63	100		
50	100		
37.5	100		
28	100		
20	100		
14	100		
10	100		
6.3	100		
5	100		
3.35	100		
2	100		
1.18	100		
0.6	100		
0.425	100		
0.3	100		
0.212	100		
0.15	100		
0.063	100		

Sample Proportions	% dry mass
Very coarse	0
Gravel	0
Sand	0
Fines <0.063mm	100

Grading Analysis	
D100	mm
D60	mm
D30	mm
D10	mm
Uniformity Coefficient	N/A
Curvature Coefficient	

Uniformity Coefficient and Coefficient of Curvature calculated in accordance with BS EN ISO 14688-2: 2004 + A1: 2013

Note: Tested in Accordance with BS1377:Part 2:1990, clause 9.2

Remarks:


Signed:

Monika Janoszek
PL Deputy Head of Geotechnical Section
for and on behalf of i2 Analytical Ltd

Opinions and interpretations expressed herein are outside of the scope of the UKAS Accreditation. This report may not be reproduced other than in full without the prior written approval of the issuing laboratory. The results included within the report relate only to the sample(s) submitted for testing.

APPENDIX D

OTHER INFORMATION

PD0140-Drilling Log				Rig Crew (Initials)		Borehole Reference	
<div>  </div>				<div> <div>Geotren UK Ltd: Unit E2018, Warrms Industry Park, Manchester Road, Macclesfield, Cheshire, SK10 5AY</div> <div>Tel: 01457 838910. Email: info@geotrenuk.co.uk, www.geotrenuk.co.uk</div> </div>		<div> <div>Sheet 1 of 1</div> <div>Weather Clear</div> </div>	
Job Ref	2336-1	Site Location	CHUCK FARM	Client	MCAULIFFE	Day	MONDAY
Depth (mbsg)	Strata Description			Test Type	From (m)	To (m)	SP1
					0-25	15-150	220-225
					225-230	230-235	235-240
					240-245	245-250	250-255
					255-260	260-265	265-270
					270-275	275-280	280-285
					285-290	290-295	295-300
					300-305	305-310	310-315
					315-320	320-325	325-330
					330-335	335-340	340-345
					345-350	350-355	355-360
					360-365	365-370	370-375
					375-380	380-385	385-390
					390-395	395-400	400-405
					405-410	410-415	415-420
					420-425	425-430	430-435
					435-440	440-445	445-450
					450-455	455-460	460-465
					465-470	470-475	475-480
					480-485	485-490	490-495
					495-500	500-505	505-510
					510-515	515-520	520-525
					525-530	530-535	535-540
					540-545	545-550	550-555
					555-560	560-565	565-570
					570-575	575-580	580-585
					585-590	590-595	595-600
					600-605	605-610	610-615
					615-620	620-625	625-630
					630-635	635-640	640-645
					645-650	650-655	655-660
					660-665	665-670	670-675
					675-680	680-685	685-690
					690-695	695-700	700-705
					705-710	710-715	715-720
					720-725	725-730	730-735
					735-740	740-745	745-750
					750-755	755-760	760-765
					765-770	770-775	775-780
					780-785	785-790	790-795
					795-800	800-805	805-810
					810-815	815-820	820-825
					825-830	830-835	835-840
					840-845	845-850	850-855
					855-860	860-865	865-870
					870-875	875-880	880-885
					885-890	890-895	895-900
					900-905	905-910	910-915
					915-920	920-925	925-930
					930-935	935-940	940-945
					945-950	950-955	955-960
					960-965	965-970	970-975
					975-980	980-985	985-990
					990-995	995-1000	1000-1005
					1005-1010	1010-1015	1015-1020
					1020-1025	1025-1030	1030-1035
					1035-1040	1040-1045	1045-1050
					1050-1055	1055-1060	1060-1065
					1065-1070	1070-1075	1075-1080
					1080-1085	1085-1090	1090-1095
					1095-1100	1100-1105	1105-1110
					1110-1115	1115-1120	1120-1125
					1125-1130	1130-1135	1135-1140
					1140-1145	1145-1150	1150-1155
					1155-1160	1160-1165	1165-1170
					1170-1175	1175-1180	1180-1185
					1185-1190	1190-1195	1195-1200
					1200-1205	1205-1210	1210-1215
					1215-1220	1220-1225	1225-1230
					1230-1235	1235-1240	1240-1245
					1245-1250	1250-1255	1255-1260
					1260-1265	1265-1270	1270-1275
					1275-1280	1280-1285	1285-1290
					1290-1295	1295-1300	1300-1305
					1305-1310	1310-1315	1315-1320
					1320-1325	1325-1330	1330-1335
					1335-1340	1340-1345	1345-1350
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					1380-1385	1385-1390	1390-1395
					1395-1400	1400-1405	1405-1410
					1410-1415	1415-1420	1420-1425
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					1455-1460	1460-1465	1465-1470
					1470-1475	1475-1480	1480-1485
					1485-1490	1490-1495	1495-1500
					1500-1505	1505-1510	1510-1515
					1515-1520	1520-1525	1525-1530
					1530-1535	1535-1540	1540-1545
					1545-1550	1550-1555	1555-1560
					1560-1565	1565-1570	1570-1575
					1575-1580	1580-1585	1585-1590
					1590-1595	1595-1600	1600-1605
					1605-1610	1610-1615	1615-1620
					1620-1625	1625-1630	1630-1635
					1635-1640	1640-1645	1645-1650
					1650-1655	1655-1660	1660-1665
					1665-1670	1670-1675	1675-1680
					1680-1685	1685-1690	1690-1695
					1695-1700	1700-1705	1705-1710
					1710-1715	1715-1720	1720-1725
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					1740-1745	1745-1750	1750-1755
					1755-1760	1760-1765	1765-1770
					1770-1775	1775-1780	1780-1785
					1785-1790	1790-1795	1795-1800
					1800-1805	1805-1810	1810-1815
					1815-1820	1820-1825	1825-1830
					1830-1835	1835-1840	1840-1845
					1845-1850	1850-1855	1855-1860
					1860-1865	1865-1870	1870-1875
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					1890-1895	1895-1900	1900-1905
					1905-1910	1910-1915	1915-1920
					1920-1925	1925-1930	1930-1935
					1935-1940	1940-1945	1945-1950
					1950-1955	1955-1960	1960-1965
					1965-1970	1970-1975	1975-1980
					1980-1985	1985-1990	1990-1995
					1995-2000	2000-2005	2005-2010
					2010-2015	2015-2020	2020-2025
					2025-2030	2030-2035	2035-2040
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					2055-2060	2060-2065	2065-2070
					2070-2075	2075-2080	2080-2085
					2085-2090	2090-2095	2095-2100
					2100-2105	2105-2110	2110-2115
					2115-2120	2120-2125	2125-2130
					2130-2135	2135-2140	2140-2145
					2145-2150	2150-2155	2155-2160
					2160-2165	2165-2170	2170-2175
					2175-2180	2180-2185	2185-2190
					2190-2195	2195-2200	2200-2205
					2205-2210	2210-2215	2215-2220
					2220-2225	2225-2230	2230-2235
					2235-2240	2240-2245	2245-2250
					2250-2255	2255-2260	2260-2265
					2265-2270	2270-2275	2275-2280
					2280-2285	2285-2290	2290-2295
					2295-2300	2300-2305	2305-2310
					2310-2315	2315-2320	2320-2325
					2325-2330	2330-2335	2335-2340
					2340-2345	2345-2350	2350-2355
					2355-2360	2360-2365	2365-2370
					2370-2375	2375-2380	2380-2385
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					2475-2480	2480-2485	2485-2490
					2490-2495	2495-2500	2500-2505
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					2565-2570	2570-2575	2575-2580
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					2790-2795	2795-2800	2800-2805
					2805-2810	2810-2815	2815-2820
					2820-2825	2825-2830	2830-2835
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					2865-2870	2870-2875	2875-2880
					2880-2885	2885-2890	2890-2895
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					2955-2960	2960-2965	2965-2970
					2970-2975	2975-2980	2980-2985
					2985-2990	2990-2995	2995-3000
					3000-3005	3005-3010	3010-3015
					3015-3020	3020-3025	3025-3030
					3030-3035	3035-3040	3040-3045



PD0140-Drilling Log

Rig Crew (initials) **RF JS** Borehole Reference **101**
 Geotek UK Ltd, Unit 2202B, Warrens Industrial Park, Manchester Road, Mossley, Oldham, Greater Manchester, M20 9WY
 Tel: 0161 275 3333, Email: info@geotekuk.co.uk, www.geotekuk.co.uk

Job Ref **2336-1** Site Location **CHACK FARM** Client **MLAUKLIFE** Day **TUES** Date **2-2-21** Weather **0/CAST**
 Test Type From (m) To (m) 0-75 75-150 150-225 225-300 300-375 375-450 450-525 525-600 600-675 675-750 750-825 825-900 900-975 975-1050 1050-1125 1125-1200 1200-1275 1275-1350 1350-1425 1425-1500 1500-1575 1575-1650 1650-1725 1725-1800 1800-1875 1875-1950 1950-2025 2025-2100 2100-2175 2175-2250 2250-2325 2325-2400 2400-2475 2475-2550 2550-2625 2625-2700 2700-2775 2775-2850 2850-2925 2925-3000 3000-3075 3075-3150 3150-3225 3225-3300 3300-3375 3375-3450 3450-3525 3525-3600 3600-3675 3675-3750 3750-3825 3825-3900 3900-3975 3975-4050 4050-4125 4125-4200 4200-4275 4275-4350 4350-4425 4425-4500 4500-4575 4575-4650 4650-4725 4725-4800 4800-4875 4875-4950 4950-5025 5025-5100 5100-5175 5175-5250 5250-5325 5325-5400 5400-5475 5475-5550 5550-5625 5625-5700 5700-5775 5775-5850 5850-5925 5925-6000 6000-6075 6075-6150 6150-6225 6225-6300 6300-6375 6375-6450 6450-6525 6525-6600 6600-6675 6675-6750 6750-6825 6825-6900 6900-6975 6975-7050 7050-7125 7125-7200 7200-7275 7275-7350 7350-7425 7425-7500 7500-7575 7575-7650 7650-7725 7725-7800 7800-7875 7875-7950 7950-8025 8025-8100 8100-8175 8175-8250 8250-8325 8325-8400 8400-8475 8475-8550 8550-8625 8625-8700 8700-8775 8775-8850 8850-8925 8925-9000 9000-9075 9075-9150 9150-9225 9225-9300 9300-9375 9375-9450 9450-9525 9525-9600 9600-9675 9675-9750 9750-9825 9825-9900 9900-9975 9975-10050 10050-10125 10125-10200 10200-10275 10275-10350 10350-10425 10425-10500 10500-10575 10575-10650 10650-10725 10725-10800 10800-10875 10875-10950 10950-11025 11025-11100 11100-11175 11175-11250 11250-11325 11325-11400 11400-11475 11475-11550 11550-11625 11625-11700 11700-11775 11775-11850 11850-11925 11925-12000 12000-12075 12075-12150 12150-12225 12225-12300 12300-12375 12375-12450 12450-12525 12525-12600 12600-12675 12675-12750 12750-12825 12825-12900 12900-12975 12975-13050 13050-13125 13125-13200 13200-13275 13275-13350 13350-13425 13425-13500 13500-13575 13575-13650 13650-13725 13725-13800 13800-13875 13875-13950 13950-14025 14025-14100 14100-14175 14175-14250 14250-14325 14325-14400 14400-14475 14475-14550 14550-14625 14625-14700 14700-14775 14775-14850 14850-14925 14925-15000 15000-15075 15075-15150 15150-15225 15225-15300 15300-15375 15375-15450 15450-15525 15525-15600 15600-15675 15675-15750 15750-15825 15825-15900 15900-15975 15975-16050 16050-16125 16125-16200 16200-16275 16275-16350 16350-16425 16425-16500 16500-16575 16575-16650 16650-16725 16725-16800 16800-16875 16875-16950 16950-17025 17025-17100 17100-17175 17175-17250 17250-17325 17325-17400 17400-17475 17475-17550 17550-17625 17625-17700 17700-17775 17775-17850 17850-17925 17925-18000 18000-18075 18075-18150 18150-18225 18225-18300 18300-18375 18375-18450 18450-18525 18525-18600 18600-18675 18675-18750 18750-18825 18825-18900 18900-18975 18975-19050 19050-19125 19125-19200 19200-19275 19275-19350 19350-19425 19425-19500 19500-19575 19575-19650 19650-19725 19725-19800 19800-19875 19875-19950 19950-20025 20025-20100 20100-20175 20175-20250 20250-20325 20325-20400 20400-20475 20475-20550 20550-20625 20625-20700 20700-20775 20775-20850 20850-20925 20925-21000 21000-21075 21075-21150 21150-21225 21225-21300 21300-21375 21375-21450 21450-21525 21525-21600 21600-21675 21675-21750 21750-21825 21825-21900 21900-21975 21975-22050 22050-22125 22125-22200 22200-22275 22275-22350 22350-22425 22425-22500 22500-22575 22575-22650 22650-22725 22725-22800 22800-22875 22875-22950 22950-23025 23025-23100 23100-23175 23175-23250 23250-23325 23325-23400 23400-23475 23475-23550 23550-23625 23625-23700 23700-23775 23775-23850 23850-23925 23925-24000 24000-24075 24075-24150 24150-24225 24225-24300 24300-24375 24375-24450 24450-24525 24525-24600 24600-24675 24675-24750 24750-24825 24825-24900 24900-24975 24975-25050 25050-25125 25125-25200 25200-25275 25275-25350 25350-25425 25425-25500 25500-25575 25575-25650 25650-25725 25725-25800 25800-25875 25875-25950 25950-26025 26025-26100 26100-26175 26175-26250 26250-26325 26325-26400 26400-26475 26475-26550 26550-26625 26625-26700 26700-26775 26775-26850 26850-26925 26925-27000 27000-27075 27075-27150 27150-27225 27225-27300 27300-27375 27375-27450 27450-27525 27525-27600 27600-27675 27675-27750 27750-27825 27825-27900 27900-27975 27975-28050 28050-28125 28125-28200 28200-28275 28275-28350 28350-28425 28425-28500 28500-28575 28575-28650 28650-28725 28725-28800 28800-28875 28875-28950 28950-29025 29025-29100 29100-29175 29175-29250 29250-29325 29325-29400 29400-29475 29475-29550 29550-29625 29625-29700 29700-29775 29775-29850 29850-29925 29925-30000 30000-30075 30075-30150 30150-30225 30225-30300 30300-30375 30375-30450 30450-30525 30525-30600 30600-30675 30675-30750 30750-30825 30825-30900 30900-30975 30975-31050 31050-31125 31125-31200 31200-31275 31275-31350 31350-31425 31425-31500 31500-31575 31575-31650 31650-31725 31725-31800 31800-31875 31875-31950 31950-32025 32025-32100 32100-32175 32175-32250 32250-32325 32325-32400 32400-32475 32475-32550 32550-32625 32625-32700 32700-32775 32775-32850 32850-32925 32925-33000 33000-33075 33075-33150 33150-33225 33225-33300 33300-33375 33375-33450 33450-33525 33525-33600 33600-33675 33675-33750 33750-33825 33825-33900 33900-33975 33975-34050 34050-34125 34125-34200 34200-34275 34275-34350 34350-34425 34425-34500 34500-34575 34575-34650 34650-34725 34725-34800 34800-34875 34875-34950 34950-35025 35025-35100 35100-35175 35175-35250 35250-35325 35325-35400 35400-35475 35475-35550 35550-35625 35625-35700 35700-35775 35775-35850 35850-35925 35925-36000 36000-36075 36075-36150 36150-36225 36225-36300 36300-36375 36375-36450 36450-36525 36525-36600 36600-36675 36675-36750 36750-36825 36825-36900 36900-36975 36975-37050 37050-37125 37125-37200 37200-37275 37275-37350 37350-37425 37425-37500 37500-37575 37575-37650 37650-37725 37725-37800 37800-37875 37875-37950 37950-38025 38025-38100 38100-38175 38175-38250 38250-38325 38325-38400 38400-38475 38475-38550 38550-38625 38625-38700 38700-38775 38775-38850 38850-38925 38925-39000 39000-39075 39075-39150 39150-39225 39225-39300 39300-39375 39375-39450 39450-39525 39525-39600 39600-39675 39675-39750 39750-39825 39825-39900 39900-39975 39975-40050 40050-40125 40125-40200 40200-40275 40275-40350 40350-40425 40425-40500 40500-40575 40575-40650 40650-40725 40725-40800 40800-40875 40875-40950 40950-41025 41025-41100 41100-41175 41175-41250 41250-41325 41325-41400 41400-41475 41475-41550 41550-41625 41625-41700 41700-41775 41775-41850 41850-41925 41925-42000 42000-42075 42075-42150 42150-42225 42225-42300 42300-42375 42375-42450 42450-42525 42525-42600 42600-42675 42675-42750 42750-42825 42825-42900 42900-42975 42975-43050 43050-43125 43125-43200 43200-43275 43275-43350 43350-43425 43425-43500 43500-43575 43575-43650 43650-43725 43725-43800 43800-43875 43875-43950 43950-44025 44025-44100 44100-44175 44175-44250 44250-44325 44325-44400 44400-44475 44475-44550 44550-44625 44625-44700 44700-44775 44775-44850 44850-44925 44925-45000 45000-45075 45075-45150 45150-45225 45225-45300 45300-45375 45375-45450 45450-45525 45525-45600 45600-45675 45675-45750 45750-45825 45825-45900 45900-45975 45975-46050 46050-46125 46125-46200 46200-46275 46275-46350 46350-46425 46425-46500 46500-46575 46575-46650 46650-46725 46725-46800 46800-46875 46875-46950 46950-47025 47025-47100 47100-47175 47175-47250 47250-47325 47325-47400 47400-47475 47475-47550 47550-47625 47625-47700 47700-47775 47775-47850 47850-47925 47925-48000 48000-48075 48075-48150 48150-48225 48225-48300 48300-48375 48375-48450 48450-48525 48525-48600 48600-48675 48675-48750 48750-48825 48825-48900 48900-48975 48975-49050 49050-49125 49125-49200 49200-49275 49275-49350 49350-49425 49425-49500 49500-49575 49575-49650 49650-49725 49725-49800 49800-49875 49875-49950 49950-50025 50025-50100 50100-50175 50175-50250 50250-50325 50325-50400 50400-50475 50475-50550 50550-50625 50625-50700 50700-50775 50775-50850 50850-50925 50925-51000 51000-51075 51075-51150 51150-51225 51225-51300 51300-51375 51375-51450 51450-51525 51525-51600 51600-51675 51675-51750 51750-51825 51825-51900 51900-51975 51975-52050 52050-52125 52125-52200 52200-52275 52275-52350 52350-52425 52425-52500 52500-52575 52575-52650 52650-52725 52725-52800 52800-52875 52875-52950 52950-53025 53025-53100 53100-53175 53175-53250 53250-53325 53325-53400 53400-53475 53475-53550 53550-53625 53625-53700 53700-53775 53775-53850 53850-53925 53925-54000 54000-54075 54075-54150 54150-54225 54225-54300 54300-54375 54375-54450 54450-54525 54525-54600 54600-54675 54675-54750 54750-54825 54825-54900 54900-54975 54975-55050 55050-55125 55125-55200 55200-55275 55275-55350 55350-55425 55425-55500 55500-55575 55575-55650 55650-55725 55725-55800 55800-55875 55875-55950 55950-56025 56025-56100 56100-56175 56175-56250 56250-56325 56325-56400 56400-56475 56475-56550 56550-56625 56625-56700 56700-56775 56775-56850 56850-56925 56925-57000 57000-57075 57075-57150 57150-57225 57225-57300 57300-57375 57375-57450 57450-57525 57525-57600 57600-57675 57675-57750 57750-57825 57825-57900 57900-57975 57975-58050 58050-58125 58125-58200 58200-58275 58275-58350 58350-58425 58425-58500 58500-58575 58575-58650 58650-58725 58725-58800 58800-58875 58875-58950 58950-59025 59025-59100 59100-59175 59175-59250 59250-59325 59325-59400 59400-59475 59475-59550 59550-59625 59625-59700 59700-59775 59775-59850 59850-59925 59925-60000 60000-60075 60075-60150 60150-60225 60225-60300 60300-60375 60375-60450 60450-60525 60525-60600 60600-60675 60675-60750 60750-60825 60825-60900 60900-60975 60975-61050 61050-61125 61125-61200 61200-61275 61275-61350 61350-61425 61425-61500 61500-61575 61575-61650 61650-61725 61725-61800 61800-61875 61875-61950 61950-62025 62025-62100 62100-62175 62175-62250 62250-62325 62325-62400 62400-62475 62475-62550 62550-62625 62625-62700 62700-62775 62775-62850 62850-62925 62925-63000 63000-63075 63075-63150 63150-63225 63225-63300 63300-63375 63375-63450 63450-63525 63525-63600 63600-63675 63675-63750 63750-63825 63825-63900 63900-63975 63975-64050 64050-64125 64125-64200 64200-64275 64275-64350 64350-64425 64425-64500 64500-64575 64575-64650 64650-64725 64725-64800 64800-64875 64875-64950 64950-65025 65025-65100 65100-65175 65175-65250 65250-65325 65325-65400 65400-65475 65475-65550 65550-65625 65625-65700 65700-65775 65775-65850 65850-65925 65925-66000 66000-66075 66075-66150 66150-66225 66225-66300 66300-66375 66375-66450 66450-66525 66525-66600 66600-66675 66675-66750 66750-66825 66825-66900 66900-66975 66975-67050 67050-67125 67125-67200 67200-67275 67275-67350 67350-67425 67425-67500 67500-67575 67575-67650 67650-67725 67725-67800 67800-67875 67875-67950 67950-68025 68025-68100 68100-68175 68175-68250 68250-68325 68325-68400 68400-68475 68475-68550 68550-68625 68625-68700 68700-68775 68775-68850 68850-68925 68925-69000 69000-69075 69075-69150 69150-69225 69225-69300 69300-69375 69375-69450 69450-69525 69525-69600 69600-69675 69675-69750 69750-69825 69825-69900 69900-69975 69975-70050 70050-70125 70125-70200 70200-70275 70275-70350 70350-70425 70425-70500 70500-70575 70575-70650 70650-70725 70725-70800 70800-70875 70875-70950 70950-71025 71025-71100 71100-71175 71175-71250 71250-71325 71325-71400 71400-71475 71475-71550 71550-71625 71625-71700 71700-71775 71775-71850 71850-71925 71925-72000 72000-72075 72075-72150 72150-72225 72225-72300 72300-72375 72375-72450 72450-72525 72525-72600 72600-72675 72675-72750 72750-72825 72825-72900 72900-72975 72975-73050 73050-73125 73125-73200 73200-73275 73275-73350 73350-73425 73425-73500 73500-73575 73575-73650 73650-73725 73725-73800 73800-73875 73875-73950 73950-74025 74025-74100 74100-74175 74175-74250 74250-74325 74325-74400 74400-74475 74475-74550 74550-74625 74625-74700 74700-74775 74775-74850 74850-74925 74925-75000 75000-75075 75075-75150 75150-75225 75225-75300 75300-75375 75375-75450 75450-75525 75525-75600 75600-75675 75675-75750 75750-75825 75825-75900 75900-75975 75975-76050 76050-76125 76125-76200 76200-76275 76275-76350 76350-76425 76425-76500 76500-76575 76575-76650 76650-76725 76725-76800 76800-76875 76875-76950 76950-77025

PD0140-Drilling Log				Rig Crew (initials)		RF		JS		Borehole Reference		101	
Job Ref				Site Location		Client		Day		Date		Weather	
2336-1				CHALK FARM.		McAULIFFE		WEDS		3-2-21		D/CWT.	
Depth (m)				Strata Description		Last Type		Time (min)		SPT		Borehole Diameter(s)	
												200 mm	
C.I.L				CONCRETE AND RE-BAR HARDSTANDING.		U1		12/65		23/450		0 D P	
-12						S2		2/45		1 2 1 1 2 2 6		17 D	
-12				SOFT BROWN MIXED SOILY CLAY WITH DRICK		U3		3/45		35/430		170 D P	
-56				TIMBER FILL.		S4		4/45		2 2 3 4 4 4 15		170 D	
-56				NATURAL GROUND, SOFT YELLOW BROWN		U5		5/45		52/430		170 P P	
2.70				Clay.		S6		6/45		2 3 3 6 6 6 21		170 D	
2.70						U7		8/45		67/450		17 D P	
9.30				SOFT TO FIRMER / MEDIUM STIFF SILTY		S8		9/45		2 6 6 7 8 9 30		170 D	
9.30				BROWN - GREY CLAY.		U9		11/45		75/435		67 D P	
13				STIFF SILTY GREY "LONDON CLAYS."		S10		15/45		2 4 8 8 8 9 33		67 D	
HH cont.				Casing (depth m)		6.70 m		BH (depth m)		13m.			
Remarks (Standing time, dayworks, delays, visitors etc.)				Dayworks/ Standing		Chiselling/Slow Drilling		Time (min)		Water Stricks		Total	
Rig Set Up				Y		Time taken over 1 hour (dayworks)				From (m) to (m)		Total	
Service Pit				Y		Time taken over 1 hour (dayworks)				5 10 15 20		m	
Casing Reduced from				10		at metres		Time taken (dayworks)		B/H DRY THROUGHOUT BORING		AND AT END OF DAY -	
From				To		Description				ADDING TOTAL 50 CTRS TO RESIST		BORING BETWEEN 1.20 - 1.3m.	
										Well Diameter		m	
										Other materials used (e.g. gravel, limestone, etc.)			
										Well Material		Gravel	
										No. bags			
										Sample Quantities			
Rig Type				DANDO 2500 CP		Time on Site		07:20		SPT/CH		U1/U3	
Name				DANDO 2500-1		Time off Site		16:40		5 5		1 1	
										Last Driller		R. FENON	
										Last Driller		D	
										Supervising Engineer Name		M. HINDOG	
										Supervising Engineer		Signature	

The above are the driver's site descriptions and factual data only and are subject to amendment after checking by or under the supervision of an engineer or geologist.

PD0140-Drilling Log				Rig Crew (initials)		Borehole Reference	
				RF JS		101	
Geotren UK Ltd. Unit 12018, Warracott Industrial Park, Manchester Road, Mossley, M5 9AR. Tel: 01457 833810, Email: info@geotren.co.uk, www.geotren.co.uk				Sheet 2 of 2		Weather RAIN	
Job Ref	2336-1	Site Location	CHALK FARM.	Client	McAULIFFE	Day	THURS
Depth (m)	Strata Description			Test Type	From (m)	To (m)	SP1
					75-150	150-215	215-300
					300-375	375-450	450-525
					525-600	600-675	675-750
					750-825	825-900	900-975
					975-1050	1050-1125	1125-1200
					1200-1275	1275-1350	1350-1425
					1425-1500	1500-1575	1575-1650
					1650-1725	1725-1800	1800-1875
					1875-1950	1950-2025	2025-2100
					2100-2175	2175-2250	2250-2325
					2325-2400	2400-2475	2475-2550
					2550-2625	2625-2700	2700-2775
					2775-2850	2850-2925	2925-3000
					3000-3075	3075-3150	3150-3225
					3225-3300	3300-3375	3375-3450
					3450-3525	3525-3600	3600-3675
					3675-3750	3750-3825	3825-3900
					3900-3975	3975-4050	4050-4125
					4125-4200	4200-4275	4275-4350
					4350-4425	4425-4500	4500-4575
					4575-4650	4650-4725	4725-4800
					4800-4875	4875-4950	4950-5025
					5025-5100	5100-5175	5175-5250
					5250-5325	5325-5400	5400-5475
					5475-5550	5550-5625	5625-5700
					5700-5775	5775-5850	5850-5925
					5925-6000	6000-6075	6075-6150
					6150-6225	6225-6300	6300-6375
					6375-6450	6450-6525	6525-6600
					6600-6675	6675-6750	6750-6825
					6825-6900	6900-6975	6975-7050
					7050-7125	7125-7200	7200-7275
					7275-7350	7350-7425	7425-7500
					7500-7575	7575-7650	7650-7725
					7725-7800	7800-7875	7875-7950
					7950-8025	8025-8100	8100-8175
					8175-8250	8250-8325	8325-8400
					8400-8475	8475-8550	8550-8625
					8625-8700	8700-8775	8775-8850
					8850-8925	8925-9000	9000-9075
					9075-9150	9150-9225	9225-9300
					9300-9375	9375-9450	9450-9525
					9525-9600	9600-9675	9675-9750
					9750-9825	9825-9900	9900-9975
					9975-10050	10050-10125	10125-10200
					10200-10275	10275-10350	10350-10425
					10425-10500	10500-10575	10575-10650
					10650-10725	10725-10800	10800-10875
					10875-10950	10950-11025	11025-11100
					11100-11175	11175-11250	11250-11325
					11325-11400	11400-11475	11475-11550
					11550-11625	11625-11700	11700-11775
					11775-11850	11850-11925	11925-12000
					12000-12075	12075-12150	12150-12225
					12225-12300	12300-12375	12375-12450
					12450-12525	12525-12600	12600-12675
					12675-12750	12750-12825	12825-12900
					12900-12975	12975-13050	13050-13125
					13125-13200	13200-13275	13275-13350
					13350-13425	13425-13500	13500-13575
					13575-13650	13650-13725	13725-13800
					13800-13875	13875-13950	13950-14025
					14025-14100	14100-14175	14175-14250
					14250-14325	14325-14400	14400-14475
					14475-14550	14550-14625	14625-14700
					14700-14775	14775-14850	14850-14925
					14925-15000	15000-15075	15075-15150
					15150-15225	15225-15300	15300-15375
					15375-15450	15450-15525	15525-15600
					15600-15675	15675-15750	15750-15825
					15825-15900	15900-15975	15975-16050
					16050-16125	16125-16200	16200-16275
					16275-16350	16350-16425	16425-16500
					16500-16575	16575-16650	16650-16725
					16725-16800	16800-16875	16875-16950
					16950-17025	17025-17100	17100-17175
					17175-17250	17250-17325	17325-17400
					17400-17475	17475-17550	17550-17625
					17625-17700	17700-17775	17775-17850
					17850-17925	17925-18000	18000-18075
					18075-18150	18150-18225	18225-18300
					18300-18375	18375-18450	18450-18525
					18525-18600	18600-18675	18675-18750
					18750-18825	18825-18900	18900-18975
					18975-19050	19050-19125	19125-19200
					19200-19275	19275-19350	19350-19425
					19425-19500	19500-19575	19575-19650
					19650-19725	19725-19800	19800-19875
					19875-19950	19950-20025	20025-20100
					20100-20175	20175-20250	20250-20325
					20325-20400	20400-20475	20475-20550
					20550-20625	20625-20700	20700-20775
					20775-20850	20850-20925	20925-21000
					21000-21075	21075-21150	21150-21225
					21225-21300	21300-21375	21375-21450
					21450-21525	21525-21600	21600-21675
					21675-21750	21750-21825	21825-21900
					21900-21975	21975-22050	22050-22125
					22125-22200	22200-22275	22275-22350
					22350-22425	22425-22500	22500-22575
					22575-22650	22650-22725	22725-22800
					22800-22875	22875-22950	22950-23025
					23025-23100	23100-23175	23175-23250
					23250-23325	23325-23400	23400-23475
					23475-23550	23550-23625	23625-23700
					23700-23775	23775-23850	23850-23925
					23925-24000	24000-24075	24075-24150
					24150-24225	24225-24300	24300-24375
					24375-24450	24450-24525	24525-24600
					24600-24675	24675-24750	24750-24825
					24825-24900	24900-24975	24975-25050
					25050-25125	25125-25200	25200-25275
					25275-25350	25350-25425	25425-25500
					25500-25575	25575-25650	25650-25725
					25725-25800	25800-25875	25875-25950
					25950-26025	26025-26100	26100-26175
					26175-26250	26250-26325	26325-26400
					26400-26475	26475-26550	26550-26625
					26625-26700	26700-26775	26775-26850
					26850-26925	26925-27000	27000-27075
					27075-27150	27150-27225	27225-27300
					27300-27375	27375-27450	27450-27525
					27525-27600	27600-27675	27675-27750
					27750-27825	27825-27900	27900-27975
					27975-28050	28050-28125	28125-28200
					28200-28275	28275-28350	28350-28425
					28425-28500	28500-28575	28575-28650
					28650-28725	28725-28800	28800-28875
					28875-28950	28950-29025	29025-29100
					29100-29175	29175-29250	29250-29325
					29325-29400	29400-29475	29475-29550
					29550-29625	29625-29700	29700-29775
					29775-29850	29850-29925	29925-30000
					30000-30075	30075-30150	30150-30225
					30225-30300	30300-30375	30375-30450
					30450-30525	30525-30600	30600-30675
					30675-30750	30750-30825	30825-30900
					30900-30975	30975-31050	31050-31125
					31125-31200	31200-31275	31275-31350
					31350-31425	31425-31500	31500-31575
					31575-31650	31650-31725	31725-31800
					31800-31875	31875-31950	31950-32025
					32025-32100	32100-32175	32175-32250
					32250-32325	32325-32400	32400-32475
					32475-32550	32550-32625	32625-32700
					32700-32775	32775-32850	32850-32925
					32925-33000	33000-33075	33075-33150
					33150-33225	33225-33300	33300-33375
					33375-33450	33450-33525	33525-33600
					33600-33675	33675-33750	33750-33825
					33825-33900	33900-33975	33975-34050
					34050-34125	34125-34200	34200-34275
					34275-34350	34350-34425	34425-34500
					34500-34575	34575-34650	34650-34725
					34725-34800	34800-34875	34875-34950
					34950-35025	35025-35100	35100-35175
					35175-35250	35250-35325	35325-35400
					35400-35475	35475-35550	35550-35625
					35625-35700	35700-35775	35775-35850
					35850-35925	35925-36000	36000-36075
					36075-36150	36150-36225	36225-36300
					36300-36375	36375-36450	36

[illegible]



PD0140-Drilling Log

Rig Crew (Initials) **RF JS** Borehole Reference **102**
 Geotek UK Ltd, Unit 82018, Warren Industrial Park, Masshouse Road, Mosley, Oldham, OL5 9QY
 Tel: 01457 837910, Email: info@geotek.co.uk, www.geotek.co.uk

Job Ref **2336-1** Site Location **CHALK FARM**

Depth (m) **29.30** Strata Description

15 STIFF SILTY GREY "LONDON CLAYS"

Client **MC AUCLIFFE** Day **TUESDAY** Date **9-2-21**

Borehole (Diameter) **150mm**

													150 m		
													Installation Details		
512	155	196	6	7	6	8	9	10	33			6	D		
U13	77	1745								101	425	6	b	P	
514	185	1825	6	8	8	9	12	13	42			6	D		
515	20	2045	8	8	9	10	11	12	42			6	D		
516	21.5	2175	6	10	10	14	14	16	50	R'		6	D		
517	23	228	8	12	12	12	12	14	50	R'		6	D		
518	26	264	10	15	13	13	16	25		R'		6	D		
519	29	293	12	15	13	17	20	30		R'		6	D		
													D		
							</								



PD0140-Drilling Log

Big Crew
(Initials)

RE

JS

Borehole
Reference

102

Gordon UK Ltd, Unit 52018, Warran Industrial Park, Hanebeon Road, Macclesfield, Cheshire, SK10 9AN
Tel: 01457 833930, Email: info@gordonuk.co.uk, www.gordonuk.co.uk

Sheet 4 of 4

Weather Cold
Sunny

Job Ref: 2336-1 Site Location: CHALK FARM

Client

McAuliffe

Day

Weds

Date

10-2-21

Borehole
Diameter (mm)

150mm

Depth (m) Strata Description

Run Type

From

To (m)

To (m)

To (m)

To (m)

To (m)

To (m)

To (m)

To (m)

To (m)

To (m)

To (m)

To (m)

29.30 STIFF Silty Grey "London Clays"
WITH BANDS OF Grey Claystone THROUGHOUT.

520 32 330 12 13 15 20 15 50 R' 6 D

521 33 330 19 16 17 17 50 R' 6 D

BENTO PELLETS 33.30 → 5.50

INSTALL SLOTTED PIPE + END CAP 5.00 - 0.20

INSTALL PLAIN PIPE + 20 - C.C. + GAS BUNG/TAP

33.30 INSTALL GRAVEL SURROUND 5.50 - 20

INSTALL BENTO SEAL + 20 - 0.5

INSTALL FLUSH METAL COVER + CONCRETE

B/Cent: Y / W Casing (depth m) 6m B/C Complete (depth m) 33.30

Remarks (Standing time, dryworks, delays, visitors etc.)

Dryworks/
Standing

Chiselling/Slow Drilling

Water Strikes

Rig Set Up Y 10 Time taken over 1 hour (daywork)

Service Pit Y 10 Time taken over 1 hour (daywork)

Casing Reduced from 10 at metres Time taken (daywork)

From To Description

Backfill with BENTO PELLETS 33.30 - 5.50

USING 25x BAGS OF PELLETS, 1 HR ST TIME

INSTALL 63mm PIPE WORK TO SPEC 1 HR

PLACING ALL B/H Spoil INTO SKIP 1 HR

Well Diameter 63 mm

Flow 120 l/min

Well Materials 8 26

No. Bags 8 26

Sample Quantities

RY/CP 10/10 10/10 10/10 10/10

Name DANDO 2500-1 Time off Site 16.45

RY/CP

10/10

10/10

10/10

10/10

10/10

10/10

10/10

10/10

10/10

10/10

10/10

10/10

10/10

The above are the driller's site descriptions and factual data only and are subject to amendment after checking by or under the supervision of an engineer or geologist.

RY/CP

10/10

10/10

10/10

10/10

10/10

10/10

10/10

10/10

10/10

10/10

10/10

10/10

10/10

The above are the driller's site descriptions and factual data only and are subject to amendment after checking by or under the supervision of an engineer or geologist.



PD0140-Drilling Log

Rig Crew (Initials) **RF JS** Borehole Reference **103**

Geonik UK Ltd, Unit E2018, Wernice Industrial Park, Manchester Road, Mosley, Oldham, Greater Manchester, M16 0PL
Tel: 01457 333910, Email: info@geonik.co.uk, Web: www.geonik.co.uk

Client **McAULIFFE** Day **WEDS** Date **10/2/21** Borehole Diameter(s) **150mm**

Test Type From (m) To (m) 0-15 15-30 30-45 45-60 60-75 75-90 90-105 105-120 120-135 135-150 150-165 165-180 180-195 195-210 210-225 225-240 240-255 255-270 270-285 285-300 300-315 315-330 330-345 345-360 360-375 375-390 390-405 405-420 420-435 435-450 450-465 465-480 480-495 495-510 510-525 525-540 540-555 555-570 570-585 585-600 600-615 615-630 630-645 645-660 660-675 675-690 690-705 705-720 720-735 735-750 750-765 765-780 780-795 795-810 810-825 825-840 840-855 855-870 870-885 885-900 900-915 915-930 930-945 945-960 960-975 975-990 990-1005 1005-1020 1020-1035 1035-1050 1050-1065 1065-1080 1080-1095 1095-1110 1110-1125 1125-1140 1140-1155 1155-1170 1170-1185 1185-1200 1200-1215 1215-1230 1230-1245 1245-1260 1260-1275 1275-1290 1290-1305 1305-1320 1320-1335 1335-1350 1350-1365 1365-1380 1380-1395 1395-1410 1410-1425 1425-1440 1440-1455 1455-1470 1470-1485 1485-1500 1500-1515 1515-1530 1530-1545 1545-1560 1560-1575 1575-1590 1590-1605 1605-1620 1620-1635 1635-1650 1650-1665 1665-1680 1680-1695 1695-1710 1710-1725 1725-1740 1740-1755 1755-1770 1770-1785 1785-1800 1800-1815 1815-1830 1830-1845 1845-1860 1860-1875 1875-1890 1890-1905 1905-1920 1920-1935 1935-1950 1950-1965 1965-1980 1980-1995 1995-2010 2010-2025 2025-2040 2040-2055 2055-2070 2070-2085 2085-2100 2100-2115 2115-2130 2130-2145 2145-2160 2160-2175 2175-2190 2190-2205 2205-2220 2220-2235 2235-2250 2250-2265 2265-2280 2280-2295 2295-2310 2310-2325 2325-2340 2340-2355 2355-2370 2370-2385 2385-2400 2400-2415 2415-2430 2430-2445 2445-2460 2460-2475 2475-2490 2490-2505 2505-2520 2520-2535 2535-2550 2550-2565 2565-2580 2580-2595 2595-2610 2610-2625 2625-2640 2640-2655 2655-2670 2670-2685 2685-2700 2700-2715 2715-2730 2730-2745 2745-2760 2760-2775 2775-2790 2790-2805 2805-2820 2820-2835 2835-2850 2850-2865 2865-2880 2880-2895 2895-2910 2910-2925 2925-2940 2940-2955 2955-2970 2970-2985 2985-3000 3000-3015 3015-3030 3030-3045 3045-3060 3060-3075 3075-3090 3090-3105 3105-3120 3120-3135 3135-3150 3150-3165 3165-3180 3180-3195 3195-3210 3210-3225 3225-3240 3240-3255 3255-3270 3270-3285 3285-3300 3300-3315 3315-3330 3330-3345 3345-3360 3360-3375 3375-3390 3390-3405 3405-3420 3420-3435 3435-3450 3450-3465 3465-3480 3480-3495 3495-3510 3510-3525 3525-3540 3540-3555 3555-3570 3570-3585 3585-3600 3600-3615 3615-3630 3630-3645 3645-3660 3660-3675 3675-3690 3690-3705 3705-3720 3720-3735 3735-3750 3750-3765 3765-3780 3780-3795 3795-3810 3810-3825 3825-3840 3840-3855 3855-3870 3870-3885 3885-3900 3900-3915 3915-3930 3930-3945 3945-3960 3960-3975 3975-3990 3990-4005 4005-4020 4020-4035 4035-4050 4050-4065 4065-4080 4080-4095 4095-4110 4110-4125 4125-4140 4140-4155 4155-4170 4170-4185 4185-4200 4200-4215 4215-4230 4230-4245 4245-4260 4260-4275 4275-4290 4290-4305 4305-4320 4320-4335 4335-4350 4350-4365 4365-4380 4380-4395 4395-4410 4410-4425 4425-4440 4440-4455 4455-4470 4470-4485 4485-4500 4500-4515 4515-4530 4530-4545 4545-4560 4560-4575 4575-4590 4590-4605 4605-4620 4620-4635 4635-4650 4650-4665 4665-4680 4680-4695 4695-4710 4710-4725 4725-4740 4740-4755 4755-4770 4770-4785 4785-4800 4800-4815 4815-4830 4830-4845 4845-4860 4860-4875 4875-4890 4890-4905 4905-4920 4920-4935 4935-4950 4950-4965 4965-4980 4980-4995 4995-5010 5010-5025 5025-5040 5040-5055 5055-5070 5070-5085 5085-5100 5100-5115 5115-5130 5130-5145 5145-5160 5160-5175 5175-5190 5190-5205 5205-5220 5220-5235 5235-5250 5250-5265 5265-5280 5280-5295 5295-5310 5310-5325 5325-5340 5340-5355 5355-5370 5370-5385 5385-5400 5400-5415 5415-5430 5430-5445 5445-5460 5460-5475 5475-5490 5490-5505 5505-5520 5520-5535 5535-5550 5550-5565 5565-5580 5580-5595 5595-5610 5610-5625 5625-5640 5640-5655 5655-5670 5670-5685 5685-5700 5700-5715 5715-5730 5730-5745 5745-5760 5760-5775 5775-5790 5790-5805 5805-5820 5820-5835 5835-5850 5850-5865 5865-5880 5880-5895 5895-5910 5910-5925 5925-5940 5940-5955 5955-5970 5970-5985 5985-6000 6000-6015 6015-6030 6030-6045 6045-6060 6060-6075 6075-6090 6090-6105 6105-6120 6120-6135 6135-6150 6150-6165 6165-6180 6180-6195 6195-6210 6210-6225 6225-6240 6240-6255 6255-6270 6270-6285 6285-6300 6300-6315 6315-6330 6330-6345 6345-6360 6360-6375 6375-6390 6390-6405 6405-6420 6420-6435 6435-6450 6450-6465 6465-6480 6480-6495 6495-6510 6510-6525 6525-6540 6540-6555 6555-6570 6570-6585 6585-6600 6600-6615 6615-6630 6630-6645 6645-6660 6660-6675 6675-6690 6690-6705 6705-6720 6720-6735 6735-6750 6750-6765 6765-6780 6780-6795 6795-6810 6810-6825 6825-6840 6840-6855 6855-6870 6870-6885 6885-6900 6900-6915 6915-6930 6930-6945 6945-6960 6960-6975 6975-6990 6990-7005 7005-7020 7020-7035 7035-7050 7050-7065 7065-7080 7080-7095 7095-7110 7110-7125 7125-7140 7140-7155 7155-7170 7170-7185 7185-7200 7200-7215 7215-7230 7230-7245 7245-7260 7260-7275 7275-7290 7290-7305 7305-7320 7320-7335 7335-7350 7350-7365 7365-7380 7380-7395 7395-7410 7410-7425 7425-7440 7440-7455 7455-7470 7470-7485 7485-7500 7500-7515 7515-7530 7530-7545 7545-7560 7560-7575 7575-7590 7590-7605 7605-7620 7620-7635 7635-7650 7650-7665 7665-7680 7680-7695 7695-7710 7710-7725 7725-7740 7740-7755 7755-7770 7770-7785 7785-7800 7800-7815 7815-7830 7830-7845 7845-7860 7860-7875 7875-7890 7890-7905 7905-7920 7920-7935 7935-7950 7950-7965 7965-7980 7980-7995 7995-8010 8010-8025 8025-8040 8040-8055 8055-8070 8070-8085 8085-8100 8100-8115 8115-8130 8130-8145 8145-8160 8160-8175 8175-8190 8190-8205 8205-8220 8220-8235 8235-8250 8250-8265 8265-8280 8280-8295 8295-8310 8310-8325 8325-8340 8340-8355 8355-8370 8370-8385 8385-8400 8400-8415 8415-8430 8430-8445 8445-8460 8460-8475 8475-8490 8490-8505 8505-8520 8520-8535 8535-8550 8550-8565 8565-8580 8580-8595 8595-8610 8610-8625 8625-8640 8640-8655 8655-8670 8670-8685 8685-8700 8700-8715 8715-8730 8730-8745 8745-8760 8760-8775 8775-8790 8790-8805 8805-8820 8820-8835 8835-8850 8850-8865 8865-8880 8880-8895 8895-8910 8910-8925 8925-8940 8940-8955 8955-8970 8970-8985 8985-9000 9000-9015 9015-9030 9030-9045 9045-9060 9060-9075 9075-9090 9090-9105 9105-9120 9120-9135 9135-9150 9150-9165 9165-9180 9180-9195 9195-9210 9210-9225 9225-9240 9240-9255 9255-9270 9270-9285 9285-9300 9300-9315 9315-9330 9330-9345 9345-9360 9360-9375 9375-9390 9390-9405 9405-9420 9420-9435 9435-9450 9450-9465 9465-9480 9480-9495 9495-9510 9510-9525 9525-9540 9540-9555 9555-9570 9570-9585 9585-9600 9600-9615 9615-9630 9630-9645 9645-9660 9660-9675 9675-9690 9690-9705 9705-9720 9720-9735 9735-9750 9750-9765 9765-9780 9780-9795 9795-9810 9810-9825 9825-9840 9840-9855 9855-9870 9870-9885 9885-9900 9900-9915 9915-9930 9930-9945 9945-9960 9960-9975 9975-9990 9990-10005 10005-10020 10020-10035 10035-10050 10050-10065 10065-10080 10080-10095 10095-10110 10110-10125 10125-10140 10140-10155 10155-10170 10170-10185 10185-10200 10200-10215 10215-10230 10230-10245 10245-10260 10260-10275 10275-10290 10290-10305 10305-10320 10320-10335 10335-10350 10350-10365 10365-10380 10380-10395 10395-10410 10410-10425 10425-10440 10440-10455 10455-10470 10470-10485 10485-10500 10500-10515 10515-10530 10530-10545 10545-10560 10560-10575 10575-10590 10590-10605 10605-10620 10620-10635 10635-10650 10650-10665 10665-10680 10680-10695 10695-10710 10710-10725 10725-10740 10740-10755 10755-10770 10770-10785 10785-10800 10800-10815 10815-10830 10830-10845 10845-10860 10860-10875 10875-10890 10890-10905 10905-10920 10920-10935 10935-10950 10950-10965 10965-10980 10980-10995 10995-11010 11010-11025 11025-11040 11040-11055 11055-11070 11070-11085 11085-11100 11100-11115 11115-11130 11130-11145 11145-11160 11160-11175 11175-11190 11190-11205 11205-11220 11220-11235 11235-11250 11250-11265 11265-11280 11280-11295 11295-11310 11310-11325 11325-11340 11340-11355 11355-11370 11370-11385 11385-11400 11400-11415 11415-11430 11430-11445 11445-11460 11460-11475 11475-11490 11490-11505 11505-11520 11520-11535 11535-11550 11550-11565 11565-11580 11580-11595 11595-11610 11610-11625 11625-11640 11640-11655 11655-11670 11670-11685 11685-11700 11700-11715 11715-11730 11730-11745 11745-11760 11760-11775 11775-11790 11790-11805 11805-11820 11820-11835 11835-11850 11850-11865 11865-11880 11880-11895 11895-11910 11910-11925 11925-11940 11940-11955 11955-11970 11970-11985 11985-12000 12000-12015 12015-12030 12030-12045 12045-12060 12060-12075 12075-12090 12090-12105 12105-12120 12120-12135 12135-12150 12150-12165 12165-12180 12180-12195 12195-12210 12210-12225 12225-12240 12240-12255 12255-12270 12270-12285 12285-12300 12300-12315 12315-12330 12330-12345 12345-12360 12360-12375 12375-12390 12390-12405 12405-12420 12420-12435 12435-12450 12450-12465 12465-12480 12480-12495 12495-12510 12510-12525 12525-12540 12540-12555 12555-12570 12570-12585 12585-12600 12600-12615 12615-12630 12630-12645 12645-12660 12660-12675 12675-12690 12690-12705 12705-12720 12720-12735 12735-12750 12750-12765 12765-12780 12780-12795 12795-12810 12810-12825 12825-12840 12840-12855 12855-12870 12870-12885 12885-12900 12900-12915 12915-12930 12930-12945 12945-12960 12960-12975 12975-12990 12990-13005 13005-13020 13020-13035 13035-13050 13050-13065 13065-13080 13080-13095 13095-13110 13110-13125 13125-13140 13140-13155 13155-13170 13170-13185 13185-13200 13200-13215 13215-13230 13230-13245 13245-13260 13260-13275 13275-13290 13290-13305 13305-13320 13320-13335 13335-13350 13350-13365 13365-13380 13380-13395 13395-13410 13410-13425 13425-13440 13440-13455 13455-13470 13470-13485 13485-13500 13500-13515 13515-13530 13530-13545 13545-13560 13560-13575 13575-13590 13590-13605 13605-13620 13620-13635 13635-13650 13650-13665 13665-13680 13680-13695 13695-13710 13710-13725 13725-13740 13740-13755 13755-13770 13770-13785 13785-13800 13800-13815 13815-13830 13830-13845 13845-13860 13860-13875 13875-13890 13890-13905 13905-13920 13920-13935 13935-13950 13950-13965 13965-13980 13980-13995 13995-14010 14010-14025 14025-14040 14040-14055 14055-14070 14070-14085 14085-14100 14100-14115 14115-14130 14130-14145 14145-14160 14160-14175 14175-14190 14190-14205 14205-14220 14220-14235 14235-14250 14250-14265 14265-14280 14280-14295 14295-14310 14310-14325 14325-14340 14340-14355 14355-14370 14370-14385 14385-14400 14400-14415 14415-14430 14430-14445 14445-14460 14460-14475 14475-14490 14490-14505 14505-14520 14520-14535 14535-14550 14550-14565 14565-14580 14580-14595 14595-14610 14610-14625 14625-14640 14640-14655 14655-14670 14670-14685 14685-14700 14700-14715 14715-14730 14730-14745 14745-14760 14760-14775 14775-14790 14790-14805 14805-14820 14820-14835 14835-14850 14850-14865 14865-14880 14880-14895 14895-14910 14910-14925 14925-14940 14940-14955 14955-14970 14970-14985 14985-15000 15000-15015 15015-15030 15030-15045 15045-15060 15060-15075 15075-15090 15090-15105 15105-15120 15120-15135 15135-15150 15150-15165 15165-15180 15180-15195 15195-15210 15210-15225 15225-15240 15240-15255 15255-15270 15270-15285 15285-15300 15300-15315 15315-15330 15330-15345 15345-15360 15360-15375 15375-15390 15390-15405 15405-15420 15420-15435 15435-15450 15450-15465 15465-15480 15480-15495 15495-15510 15510-15525 15525-15540 15540-15555 15555-15570 15570-15585 15585-15600 15600-15615 15615-15630 15630-15645 15645-15660 15660-15675 15675-15690 15690-15705 15705-15720 15720-15735 15735-15750 15750-15765 15765-15780 15780-15795 15795-15810 15810-15825 15825-15840 15840-15855 15855-15870 15870-15885 15885-15900 15900-15915 15915-15930 15930-15945 15945-15960 15960-15975 15975-15990 15990-16005 16005-16020 16020-16035 16035-16050 16050-16065 16065-16080 16080-16095 16095-16110 16110-16125 16125-16140 16140-16155 16155-16170 16170-16185 16185-16200 16200-16215 16215-16230 16230-16245 16245-16260 16260-16275 16275-16290 16290-16305 16305-16320 16320-16335 16335-16350 16350-16365 16365-16380 16380-16395 16395-16410 16410-16425 16425-16440 16440-16455 16455-16470 16470-16485 16485-16500 16500-16515 16515-16530 16530-16545 16545-16560 16560-16575 16575-16590 16590-16605 16605-16620 16620-16635 16635-16650 16650-16665 16665-16680 16680-16695 16695-16710 16710-16725 16725-16740 16740-16755 16755-16770 16770-16785 16785-16800 16800-16815 16815-16830 16830-1684



PD0140-Drilling Log

Rig Crew (initials) **RF JS** Borehole Reference **103**

Geotek UK Ltd, Unit 12015, Warrick Industrial Park, Manchester Road, Macclesfield, Cheshire, M13 9AF
Tel: 01657 833910, Email: info@geotek.co.uk, www.geotek.co.uk

Job Ref	2336-1	Site location	CHALK FARM	Client	McAULIFFE	Day	WEDS	Date	10-2-21	Borehole Diameter(s)	150 mm																												
Depth (m)	Strata Description																																						
G.L. - 20	Brown Sandy Clayey Soil																																						
- 20 - 43	Loose Black Ash / Brick Fill																																						
- 43 - 65	Soft Yellow Brown Clay / Brick Fill																																						
- 65 - 1.20	Natural Ground / Soft Yellow Brown Clays																																						
BH cost	Y	Casing (depth m)	0	BH Complete (depth m)	1.20																																		
Remarks (Standing time, dayworks, delays, visitors etc.)				<table border="1"> <tr> <th colspan="2">Circulating/Slow Drilling</th> <th colspan="6">Water Samples</th> </tr> <tr> <th>From (m) to (m)</th> <th>Time (min)</th> <th>Time</th> <th>Depth (m)</th> <th>Flow rate (l/min)</th> <th>Flow to (m) flow (min)</th> <th>Total (l)</th> <th colspan="3"></th> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> <td>5</td> <td>10</td> <td>25</td> <td>20</td> <td></td> </tr> </table>								Circulating/Slow Drilling		Water Samples						From (m) to (m)	Time (min)	Time	Depth (m)	Flow rate (l/min)	Flow to (m) flow (min)	Total (l)									5	10	25	20	
Circulating/Slow Drilling		Water Samples																																					
From (m) to (m)	Time (min)	Time	Depth (m)	Flow rate (l/min)	Flow to (m) flow (min)	Total (l)																																	
					5	10	25	20																															
Rig Set Up	Y	N	Time taken over 1 hour (dayworks)																																				
Service Pit	Y	N	Time taken over 1 hour (dayworks)																																				
Casing Reduced from		so	at	metres Time taken (dayworks)																																			
From	To	Description																																					
		Cut down Steel Fence + Remove 1 hr. PULL OUT TREES - BUSHES + REMOVE 1/2 hr. TURN RIG BY HAND IN STREET, PUSH OFF POSITION, REVERSE ON 103 1/2 hr over 1 hr.																																					
Rig Type	DANDO 2500-CP	Time on Site	07:15		<table border="1"> <tr> <th colspan="5">Sample Quantities</th> </tr> <tr> <th>SPT/CPT</th> <th>U/S/T</th> <th>D/S/D</th> <th>B</th> <th>W</th> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </table>						Sample Quantities					SPT/CPT	U/S/T	D/S/D	B	W																			
Sample Quantities																																							
SPT/CPT	U/S/T	D/S/D	B	W																																			
Name	DANDO 2500-1	Time off Site	16:45		<table border="1"> <tr> <th colspan="2">Well Diameter</th> <th colspan="2">Well Materials</th> <th colspan="2">No. bags</th> </tr> <tr> <th>From</th> <th>To</th> <th>From</th> <th>To</th> <th>From</th> <th>To</th> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </table>						Well Diameter		Well Materials		No. bags		From	To	From	To	From	To																	
Well Diameter		Well Materials		No. bags																																			
From	To	From	To	From	To																																		
The above are the driller's site descriptions and factual data only and are subject to amendment after checking by or under the supervision of an engineer or geologist.				<table border="1"> <tr> <td>Supervising Engineer Name</td> <td>R. Fenton</td> <td>Supervising Engineer Signature</td> <td>M. Mance</td> </tr> <tr> <td>Supervising Engineer Name</td> <td></td> <td>Supervising Engineer Signature</td> <td></td> </tr> </table>								Supervising Engineer Name	R. Fenton	Supervising Engineer Signature	M. Mance	Supervising Engineer Name		Supervising Engineer Signature																					
Supervising Engineer Name	R. Fenton	Supervising Engineer Signature	M. Mance																																				
Supervising Engineer Name		Supervising Engineer Signature																																					



PD0140-Drilling Log

Rig Crew (Initials)	RF	JS	Borehole Reference	103
Gordon UK Ltd, Unit E2018, Warrington Parkway, Manchester Road, Mossley, M15 9AY Tel: 01457 899910, Email: info@gordonuk.co.uk, www.gordonuk.co.uk			Year	2014
			Weather	COLD SNOW

Job Ref	2336-1	Site Location	Chalk Farm.
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Depth (m)	Strata Description
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16	STIFF GRAY SILTY "LONDON CLAY'S"
23:30	

Client	McAULIFFE	Day	Friday	Date	12-2-21	Borehole Diameter(s)	150mm
Rig Type	From	To	SP1	SP2	SP3	SP4	SP5
103	17	18	19	20	21	22	23
106	35	6	D	P			
107	5	8	8	9	11	12	41
108	20	24	11	14	12	14	16
109	23	25	15	18	15	20	15

RII code	Y / H	Casing (depth m)	6	RII Casing (depth m)	23.30
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Remarks (Standing time, dayworks, delays, visitors etc.)
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Rig Set Up	Y	(N)	Time taken over 1 hour (dayworks)
Service Pit	Y	(N)	Time taken over 1 hour (dayworks)
Casing Reduced from	to	at	metres Time taken (dayworks)

From	To	Description

Dayworks/ Standing	Chiselling/Slow Drilling	Water Surfaces
18-5-19	1HR	BLH 103 DRY FIRST TIME
22-5-23	1HR	BLH DRY THROUGHOUT
		ADD 20 LITRE DRY HOLE TO ASSIST BORING -
Well Diameter	mm	Other materials used (eg. grease, bit fluid, etc.)
Plan	to	
Well Materials	to	
No. bags		

Rig Type	DANDY 2500-CP	Time on Site	07.15	SP1/CP1	UAT	W	Lead Rigger	R. Fenton	Supervising Engineer Name	M. HANCOCK
Name	DANDY 2500-1	Time off Site	12.30	SP2/CP2	UAT	W	Lead Rigger	R. Fenton	Supervising Engineer Signature	NO

The above are the driller's site descriptions and factual data only and are subject to amendment after checking by or under the supervision of an engineer or geologist.



PD0140-Drilling Log

Rig Crew (initials) **RF OS** Borehole Reference **103**
 Geotek UK Ltd, Unit E2016, Warrick Industrial Park, Manchester Road, Mossley, OL5 6AY
 Tel: 01457 813910, Email: info@geotek.co.uk, www.geotek.co.uk

Job Ref	2336-1	Site Location	CHALK FARM.	Client	Mc ALIFFE	Day	MOND.	Date	15-2-21	Borehole Diameter(s)	150mm
Depth (m)	Strata Description			Est Type	Rate (m)	Total	LFT			Water	Other
							0-15	15-30	30-45	45-60	60-75
							15	16	17	18	19
							20	21	22	23	24
							25	26	27	28	29
							30	31	32	33	34
							35	36	37	38	39
							40	41	42	43	44
							45	46	47	48	49
							50	51	52	53	54
							55	56	57	58	59
							60	61	62	63	64
							65	66	67	68	69
							70	71	72	73	74
							75	76	77	78	79
							80	81	82	83	84
							85	86	87	88	89
							90	91	92	93	94
							95	96	97	98	99
							100	101	102	103	104
							105	106	107	108	109
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SPT Hammer Energy Test Report

in accordance with BS EN ISO 22476-3:2005

ARCHWAY ENGINEERING (UK) LTD
AINLEYS INDUSTRIAL ESTATE
ELLAND
WEST YORKSHIRE
HX5 9JP

SPT Hammer Ref: AR2861S
Test Date: 25/09/2019
Report Date: 25/09/2019
File Name: AR2861S.spt
Test Operator: CM

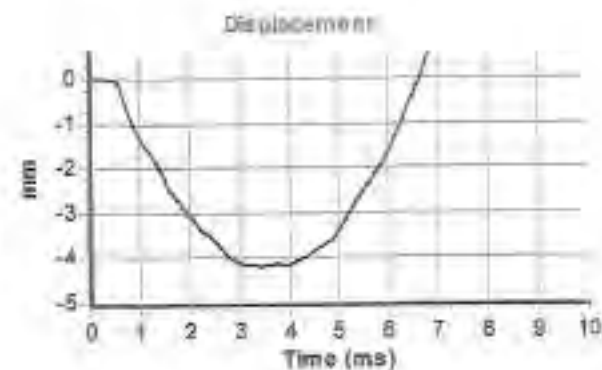
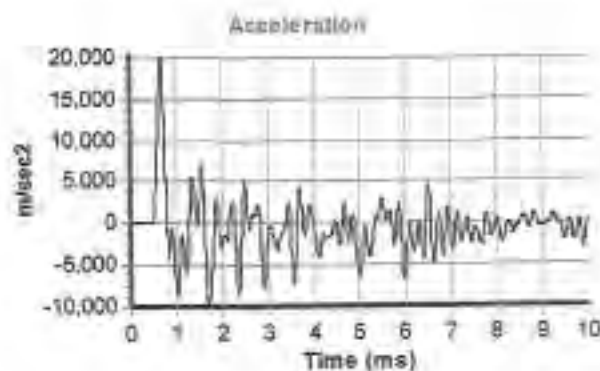
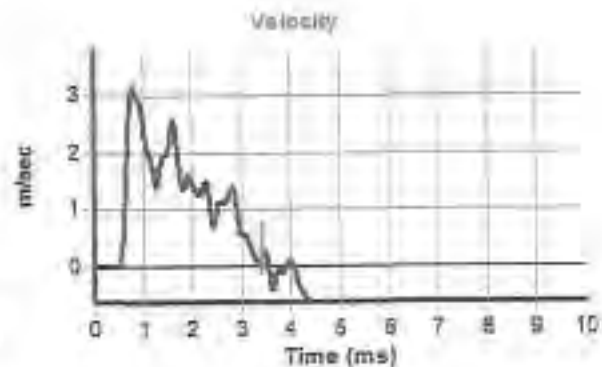
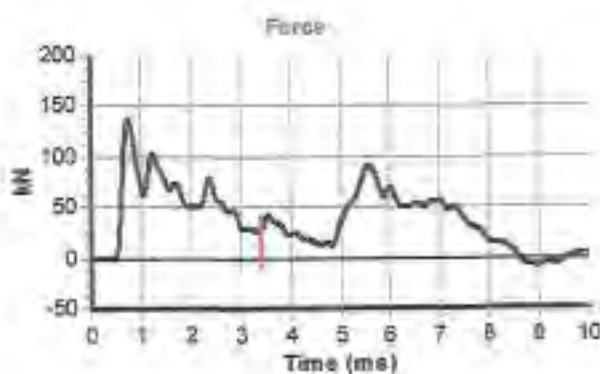
Instrumented Rod Data

Diameter d_r (mm): 54
Wall Thickness t_r (mm): 6.2
Assumed Modulus E_a (GPa): 210
Accelerometer No.1: 7080
Accelerometer No.2: 11609

SPT Hammer Information

Hammer Mass m (kg): 63.5
Falling Height h (mm): 760
SPT String Length L (m): 10.0

Comments / Location



Calculations

Area of Rod A (mm^2): 931
Theoretical Energy E_{theor} (J): 473
Measured Energy E_{meas} (J): 295

Energy Ratio E_r (%): **62**

C. McCluskey

Signed: C. McCLUSKEY

Title: FITTER

The recommended calibration interval is 12 months

TEST DATE AND CONDITIONS			
Date		02/12/2020	
Atmospheric Pressure		996	mB
Ambient Temperature		22.7	°C
EnviroNics Serial No.		5089	

**GFM435 Final Inspection & Calibration
Check Certificate**

GAS DATA LTD

Unit 4, Fairfield Court

Seven Stars Estate

Wheler Rd

Coventry

CV3 4LJ

Tel 02476303311

Fax 02476307711



Customer	Ribble Enviro Ltd
Certificate Number	122178
Order Number	327122

Serial Number	11830
Software Version	G435-00.0024/0004

Recalibration DUE Date
02/12/21

Instrument Checks					
Keyboard	✓		Display Contrast	✓	
Pump Flow In	400	Accept > 200 cc/min	Pump Flow @ -200mB	200	Accept > 200 cc/min
Clock Set / Running	✓		Labels Fitted	✓	

Gas Checks						
Sensor	CH ₄		CO ₂		O ₂	
	Instrument Gas	True Gas Value %	Instrument Gas	True Gas Value %	Instrument Gas	True Gas Value %
	Readings %		Readings %		Readings %	
	60	60	40	40	20.9	20.9
	Accept ±3.0		Accept ±3.0		Accept ±0.5	
	5	5	5	5	6	6
	Accept ±0.3		Accept ±0.3		Accept ±0.3	
Zero Reading 100% N ₂	0	0	0	0	0	0
	Accept ±0.0		Accept ±0.0		Accept ±0.3	

Optional Gas Checks						
Applied Gas & Range		Concentration Tested @ (ppm)	Instrument Readings (ppm)			
Gas Type	Range (ppm)		Zero Reading		Instrument Gas Reading	
H ₂ S	5000	1500	0	Accept ±0.0	1500	Accept ±5.0
CO	2000	1000	0	Accept ±0.0	1002	Accept ±5.0
Hexane	2.0%	2.0%	0	Accept ±0.0	1.99	Accept ±3.0.0

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	50		1002		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		996	Accept ± 2.0
AP Port (Internal)	+800 mB	800	Accept ± 5.0
	+1200 mB	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	-29.8	Accept ± 1.0	-282	-280	Accept ± 5.0
-3	-3	Accept ± 1.0	-12	-12	Accept ± 6.0
0	0	Accept ± 0.0	0	0	Accept ± 0.5
3	3	Accept ± 0.5	12	12	Accept ± 3.0
30	29.7	Accept ± 1.0	285	280	Accept ± 5.0
60	60	Accept ± 6.0	854	852	Accept ± 13.0
90	90.5	Accept ± 9.0	1681	1700	Accept ± 25.0

Temperature Checks		
Calibration Temperature	Instrument Temperature Reading $^{\circ}\text{C}$	
Applied Temperature $^{\circ}\text{C}$		
-10	-10	Accept ± 2.0
0	0	Accept ± 1.0
30	30	Accept ± 1.0
60	60	Accept ± 1.0
100	100	Accept ± 1.0

Technician:
Jack Rutland

Date Tested:
03/12/2020

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 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.



Belmont Street Site, Camden Contaminated Land Assessment

October 2020

Vistry
Partnerships



Charlie Ratchford Centre, Belmont Street, Camden

Phase 1 Ground Condition Assessment

On behalf of **Vistry Partnerships**

Project Ref: 43006/3501/001 | Rev: 01 | Date: September 2020

Registered Office: Buckingham Court Kingsmead Business Park, London Road, High Wycombe, Buckinghamshire, HP11 1JU
Office Address: Caversham Bridge House, Waterman Place, Reading, Berkshire RG1 8DN
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Document Control Sheet




Project Name: Charlie Ratchford Centre, Belmont Street, Camden

Project Ref: 43006/3501

Report Title: Phase 1 Ground Condition Assessment

Doc Ref: 43006/3501/R001/Rev01

Date: September 2020

	Name	Position	Signature	Date
Prepared by:	James Ellis	Industrial Placement Engineer		26/02/2018
Reviewed by:	Arie Zamler	Associate		26/02/2018
Approved by:	Paul Jeffery	Director		26/02/2018
For and on behalf of Stantec UK Limited				

Revision	Date	Description	Prepared	Reviewed	Approved
00	Feb 2018	Final for Issue	JE	AZ	PJ
01	Sept 2020	Issued with Client Name Change	JE	AZ	PJ

This report has been prepared by Stantec UK Limited ('Stantec') on behalf of its client to whom this report is addressed ('Client') in connection with the project described in this report and takes into account the Client's particular instructions and requirements. This report was prepared in accordance with the professional services appointment under which Stantec was appointed by its Client. This report is not intended for and should not be relied on by any third party (i.e. parties other than the Client). Stantec accepts no duty or responsibility (including in negligence) to any party other than the Client and disclaims all liability of any nature whatsoever to any such party in respect of this report.

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Appendix 2	Site Walkover Photographs
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Appendix 4	Risk Estimation Table

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Executive Summary

This report presents a Phase 1 Ground Condition Assessment (Contamination and Stability) for the proposed residential redevelopment of the Charlie Ratchford Centre, Belmont Street, Camden.

The Site The Site is situated about 0.9km to the northwest of the historical centre of Camden Town. The Site is approximately 0.3 hectares in area and is currently occupied by a single storey communal building called the Charlie Ratchford Centre. Historically, the Site was undeveloped agricultural land up to its initial development for terraced housing during the late 18th century. The Site is principally surrounded by residential and commercial development with localised light industrial uses comprising garages, and engineering works. During World War II the Site and the surrounding area had suffered damage from German aerial bombing. By the mid-1970s, the residential housing occupying the Site were demolished and the Site was redeveloped with the construction of the Charlie Ratchford Centre.

Ground Conditions The available geological data indicates that the Site lies directly on the London Clay Formation. It is expected that the natural strata are overlain by Made Ground associated with the previous and present developments of the Site. Groundwater is expected to be present at a relatively shallow depth.

Preliminary Ground Stability Risk Assessment A review of potential geological hazards has identified the risk of land instability or for potentially adverse foundation conditions to be present, in general, to be **Negligible/Very Low/Low**. The exception relates to a **Moderate** risk of for the potential for swelling or shrinking of the near surface clay soils. Foundations will need to be designed to accommodate the movement or be taken to a depth where the likelihood of damaging movement from shrinking or swelling of clay soils is low. Records have identified bomb strikes during World War II in the immediate vicinity of the Site. It is recommended that a detailed Unexploded Ordnance (UXO) Risk Assessment is undertaken by a suitable UXO specialist ahead of any intrusive investigation or other excavation works at the Site.

Preliminary Geoenvironmental Assessment The potential for significant contamination to be present across the Site as a whole associated with its residential and commercial history is considered to be **Low**. the estimated geo-environmental risks are given in the below:

- **Human Health** (current users) – **Very Low**
- **Human Health** (future users) – **Low**
- **Human Health** (off site) – **Low**
- **Human Health** (construction workers) – **Low** with the provision of PPE
- **Groundwater** – **Very Low**
- **Buildings** – **Very Low**

The geoenvironmental risk assessment indicates that any potential contaminants and hazardous ground gases do not by themselves represent an unacceptable risk to human health, controlled waters or ecology and wildlife associated with the development of the Site as currently proposed. It is possible that basic mitigation measures including, health and safety for construction workers, protected water supply pipes may need to be incorporated into the proposed development. Additional measures such as clean capping and ground gas mitigation may be required. It is considered that a ground investigation and Tier 2 risk assessment is unlikely to be required to support the planning application for redevelopment of the Site. Any requirement to carry out a geoenvironmental intrusive investigation can be satisfactorily dealt with by incorporation as a condition in any granted Planning Consent.

It is considered very unlikely that the local planning authority will designate the Site as Contaminated Land under Part 2a of the Environmental Protection Act 1990.

The summary contains an overview of the key findings and conclusions. However, no reliance should be placed on any part of the summary until the whole of the report has been read.

1 Introduction

1.1 Preamble

Peter Brett Associates LLP (PBA) has been commissioned by Vistry Partnerships (the Client) to carry out a Phase 1 Ground Condition Assessment of the Charlie Ratchford Centre (the Site) off Belmont Street, Camden.

This report presents; the findings of desk study researches, the observations from a site walkover, Tier 1 preliminary qualitative contamination risk assessment, and preliminary ground stability assessment. The report has been prepared to support an outline planning application for the redevelopment of the Site for residential use.

It should be noted that the Phase 1 is a land condition assessment and does not purport to be an ecological, flood risk or archaeological survey and additional specific surveys which are submitted separately in support of this planning application.

1.2 Objectives

The National Planning Policy Framework (NPPF) (DCLG 2012) stipulates that planning policies and decisions should ensure that “the Site is suitable for its new use taking account of ground conditions and land instability, including from natural hazards or former activities from previous uses and any proposals for mitigation including land remediation or impacts on the natural environment arising from that remediation”; and that “after remediation, as a minimum, land should not be capable of being determined as contaminated land under Part 2A of the Environmental Protection Act 1990; and adequate site investigation information, prepared by a competent person, is presented.”

The objective of this report is to identify the likely ground conditions using published and publicly available information (see below for sources of information accessed) and to assess whether there are land instability or contamination risks associated with the ground conditions that require management (remediation or mitigation).

1.3 Proposed Development

It is understood that the client intends for the demolition of all existing buildings and enclosures on site and the erection of part 5, part 7 and part 10 storey buildings for residential (Class C3) use, associated landscape improvements and tree planting.

1.4 Assessment of Ground Conditions - Contamination

UK legislation on contaminated land from historical activities is principally contained in Part 2A of the Environmental Protection Act, 1990 (which was inserted into the 1990 Act by section 57 of the Environment Act 1995).

The Regulations and Statutory Guidance that accompanied the Act, including the Contaminated Land (England) Regulations 2006, have been revised with the issue of the Contaminated Land (England) (Amendment) Regulations 2012 (SI 2012/263) and the Contaminated Land Statutory Guidance for England 2012.

With the introduction of the NPPF, Planning Policy Statement 23 (PPS 23), which provided guidance on how to deal with contaminated land within a planning context, was withdrawn. However, the broad approach, concepts and principles behind land contamination management advocated by the Part 2A regime are still applied to the determination of planning applications. Contaminated Land Report 11 (CLR 11) of the Model Procedures for the Management of

Contaminated Land (EA 2004) provides references to established technical and procedural practice.

CLR 11 presents a three-stage process to the management of contaminated land:

- Stage 1 = risk assessment
- Stage 2 = options appraisal and
- Stage 3 = implementation of remedial strategy

Risk assessment is undertaken in a phased manner with the three tiers being:

- Tier 1 – “preliminary risk assessment” – a qualitative assessment forming part of a Phase 1 report,
- Tier 2 – “generic risk assessment” - a quantitative assessment using published criteria to screen site specific ground condition data forming part of a Phase 2 report and
- Tier 3 – “detailed risk assessment” – a quantitative assessment involving the generation of site specific assessment criteria (SSAC).

The underlying principle is the evaluation of *pollutant linkages* in order to assess whether the presence of a source of contamination could potentially lead to harmful consequences. A pollutant linkage consists of the following three elements:

- A source of contamination or hazard that has the potential to cause harm or pollution;
- A pathway for the hazard to move along / generate exposure; and
- A receptor which is affected by the hazard.

Each tier of risk assessment comprises the following four stages:

- Hazard Identification – identifying potential contaminant sources on and off site;
- Hazard Assessment – assessing the potential for unacceptable risks by identifying what pathways and receptors could be present, and what pollutant linkages could result (forming the Conceptual Site Model (CSM));
- Risk Estimation – estimating the magnitude and probability of the possible consequences (what degree of harm might result to a defined receptor and how likely); and
- Risk Evaluation – evaluating whether the risk needs to be, and can be, managed.

The PBA methodology for ground condition assessment (contamination) is presented in **Appendix 1**.

1.5 Assessment of Ground Conditions – Instability

Planning Authorities are required (NPPF paragraphs 120 and 121) to consider if land instability poses a potentially unacceptable risk to development. In paragraph 121, the requirement to take account of potential hazards arising from natural hazards (such as natural cavities) or former activities such as mining is outlined.

The preliminary ground stability assessment methodology adopted by PBA follows the guidance on preliminary land stability assessment given in the Planning Practice Guidance for Land

Stability published by the Department for Communities and Local Government (DCLG 2014). The guidance requires, at least, a desk based study and a site inspection visit by an appropriately qualified person.

The desk based study comprises a review of existing readily available published sources of geological, geomorphological, hydrogeological and /or mining information on the Site and its surroundings and a historical review including mapping and aerial imagery, if appropriate.

The preliminary stability assessment includes for example, where relevant, a review of geological hazards for the Site such as natural and man-made (mining) cavities, landslide, cambering and block movement, collapsible and compressible soils, running sand, and subsidence and heave due to volumetric change in the ground.

1.6 Sources of Information

The following sources of information were used in the preparation of this report:

- A walkover survey by a PBA representative on the 25th January 2018 to observe existing conditions both on the Site and the surrounding area – photographs are presented in **Appendix 2**.
- Envirocheck Report and historical maps provided by Landmark Information Group (LIG, 2018) which is presented in **Appendix 3**.
- Review of the Natural Cavity and Artificial non-coal (underground) mining cavity databases managed and enhanced by PBA.
- Review of borehole records held by the British Geological Society (BGS) accessed via their website, <http://www.bgs.ac.uk/data/boreholescans/home.html>.
- Review of map records held by the BGS accessed via their website <http://mapapps.bgs.ac.uk/geologyofbritain/home.html>.
- Review of the MAGIC (Multi-Agency Geographic Information for the Countryside) web site, <http://www.magic.gov.uk>. The MAGIC website provides authoritative geographic information about the natural environment from across government. The information covers rural, urban, coastal and marine environments across Great Britain. It is presented in an interactive map which can be explored using various mapping tools.
- Review of the environmental information available through the Environment Agency's "What's in your back yard" website, apps.environment-agency.gov.uk/wiyby/default.aspx.
- A search of the PBA project database to identify any ground condition reports near the Site (within 250m).
- A review of the Public Health England Radon Atlas and Interactive Radon Map, available at www.ukradon.org.
- Review of the London WW2 bomb census maps for between 1940 and 1941 located at <http://www.bombsight.org>.
- A review of historical aerial photography presented on Google Earth.

Attention is drawn to the Essential Guidance for Report Readers included after the text of this report.

2 Land Use Information

2.1 Introduction

This section presents a summary of current and historical land uses on and immediately adjacent to the Site. Land use is used to inform the hazard identification element of the risk assessment.

2.2 Site Location and Topographical Setting

The Site is a parcel of land about 0.3 hectares in plan area occupied by a single storey building named the Charlie Ratchford Centre. The Site is situated about 0.9km north-west of the historical centre of Camden Town, and is centred at National Grid Reference TQ 282 845, as presented in **Figure 1**.

The Site is situated at an elevation of circa 31m above Ordnance Datum (m AOD) with the natural ground levels in the general vicinity of the Site falling gently to the south-east towards the River Fleet (now culverted) which is situated about 0.2km to the east of the Site.

2.3 Current Land Use

The current land use information is based on a site reconnaissance survey undertaken by a representative from PBA on the 25th January 2018. Selected photographs taken during the Site Walkover (Plates 1 to 6) are presented in **Appendix 2**. The locations of the photographs and key noted features are shown on **Figure 2**.

On-Site

The Site is occupied by the single-story building named Charlie Ratchford Centre accessed from Belmont Street. The Charlie Ratchford Centre is operated by the London Borough of Camden Council and is currently used as a day centre for elderly residents within the borough.

The building is a rectangular structure comprising offices and communal rooms with a circular courtyard in the centre of the building. A gas boiler is located in a plant room in the north-east centre of the building.

The eastern part of the Site is occupied by a car parking area which fronts the main building. The southern part of the Site comprises a landscape area with; raised planting beds, paved areas, grassed areas, and few trees and shrubs. The northern part of the Site comprises a further landscaped area covered with grass and few trees, beyond which there is a small retaining wall about 0.5m high. Another retaining wall of circa 1.5m height forms the western boundary of the Site, which abuts Crogsland Road.

Off-Site

This Site is surrounded principally by blocks of residential flats to the east and north, retail building to the south, and Haverstock School to the west of Crogsland Road. A number of local shops and businesses are present along the A502 (Haverstock Hill/Chalk Farm Road) to the south of the Site.

Chalk Farm Station is situated about 100m to the south-west of the Site. The Regents Canal lies approximately 0.5km to the south east.

2.4 Historical Land Use

This section presents a summary of the historical land uses on site and in the immediate surrounding area. The historical land use information is based on Ordnance Survey (OS) maps, and plans provided by LIG (2018) presented in **Appendix 3**, supplemented by a review of Google Earth historical aerial photographs.

On-Site

The earliest available OS map dated 1851 shows the Site is unoccupied. Some of the principal roads around the Site are present, however, Crogsland Road is not shown on the map.

By the early 1870s the Site is shown to be occupied by two rows of terraced housing with back gardens, fronting both Crogsland Road to the west and Belmont Street to the east.

There are no significant changes indicated on site by the OS mapping until 1970 when the terraced housing along Crogsland Road and Belmont Street have been demolished.

By 1974 the Site is shown to be occupied by the Charlie Ratchford Centre.

The historical maps and the Google Earth historical aerial imagery shows that there are no significant changes to the Site from 1974 to the present day.

Off-Site

The OS map dated 1851 shows that the Site is surrounded principally by terraced housing. The Camden Town Railway Station is recorded about 250m south-southeast of the Site.

By the mid-1860s terraced housing is shown on the land surrounding the Site with the northern part of Crogsland Road shown in its current alignment. Camden Town Railway Depot, Chalk Farm Station and a Goods Depot are shown about 0.1km to the south of the Site.

The map dated 1873 shows a school about 30m to the south-east of the Site. Subsequently, by mid 1890s the Malden Factories manufacturing of oil and watercolour paints and the Pianoforte Works are shown about 40m to the north-east and 60m to the south-west, respectively. A school is recorded about 50m to the west of the Site.

The Bomb Damage Maps (THL, 2016) indicate the surrounding area had suffered from extensive damage owing to German air dropped bombing during World War II. By early 1950s four terraced properties to the east of the Site were either no longer recorded on the OS mapping or were recorded as a 'ruin' presumably from blast damage. The terraced housing and the former school building immediately to the west of the Site were no longer recorded, presumably as a result of bomb damage.

By the mid-1960s the terraced housing to the east of the Site were demolished and replaced with a tower block and blocks of flats. The former school land to the west of the Site has a new school building constructed. One of the former terraced properties along the southern part of Kirkwood Place is now denoted as being a 'Works'.

The properties to the immediate south of the Site have been demolished and replaced by a garage, located about 20m to the south of the Site.

By the late 1990s the properties and garage to the immediate south of the Site were demolished and replaced by a commercial building, located about 50m south of the Site.

By the mid-2000s, the school buildings to the west of the Site were demolished and a single building denoted Haverstock School was constructed with sports pitches to the west of the Site.

The Google Earth imagery indicates no further changes of note to the area immediately surrounding the Site up to the present day.

3 Environmental Setting

3.1 Introduction

Information on the environmental setting is presented in this Section and the data is used to inform the stability assessment in **Section 4.0** and the Contamination Risk Assessment presented in **Section 5.0**.

3.2 Geology

3.2.1 Geological Map

The 1:50 000 scale geological map of the area, Sheet 256 North London, Solid and Drift published by the British Geological Survey (BGS, 2006) and the associated geological memoir (BGS, 2004) indicate that the Site lies directly on the London Clay Formation underlain by the Lambeth Group (formerly denoted the Woolwich and Reading Beds) with the Thanet Sand Formation and Seaford and Newhaven Chalk Formations (formerly denoted the Upper Chalk) present at depth.

It is expected that the natural deposits are overlain by Made Ground associated with the former and current developments of the Site. Given the presence of previous terraced housing on the site prior to the current development, it may be anticipated that these structures may have included basements and as such remnant footings, walls and infilled materials may be present beneath the Site. The current development will also have remnant foundations, ground slabs and utility trenches present post above ground demolition.

3.2.2 Historical Ground Investigations

A ground investigation was carried out by Ground Technology Services Ltd on the parcel of land immediately to the west of Crogsland Road (GTSL, 2014). The ground investigation comprised two boreholes sunk to 20 and 30m below ground level and the excavation of eight trial pits.

A summary of the ground conditions based on the ground investigation for the adjacent parcel of land is presented in the table below:

Table 3.1 Summary of The Ground Conditions.

Strata	Base of Stratum (m bgl)	Typical Description
Made Ground	1.2 to 2.1	SAND or CLAY with varying proportions of gravel. Gravel typically of flint, brick, concrete and mortar with other varying man-made materials.
London Clay Formation	>30.4	Firm to very stiff brown or grey CLAY. Locally fissured containing occasional partings of silt and fine sand, and claystone nodules.

Groundwater seepage was locally noted at the base of the Made Ground at about 1.3m bgl. Groundwater was also encountered within the London Clay Formation at 26.4m bgl. After completion of the works groundwater levels of 2.1 and 4.2m bgl from water emanating within the Made Ground were measured in monitoring wells, which were installed to a depth of 6.0m bgl.

3.3 Radon

The Envirocheck Report: (LIG, 2018) indicates that the subject site is in a lower probability radon area (less than 1% of homes are estimated to be at or above the Action Level), and reports that

that radon protection measures are not required in the construction of new dwellings or extensions at the subject site.

A review of the Public Health England Radon Atlas and interactive radon map suggest that the entire site lies within a low probability radon area.

3.4 Bomb Damage

During World War II the Site and its immediate surrounding suffered damage from German aerial bombing. The Bomb Sight website that presents the World War II bomb census between 7 October 1940 and 6 June 1941 records the fall of four high explosive bombs to the south and three to the west of the Site (Bombsight, 2018).

3.5 Industrial Setting

Information on the industrial setting of the Site and the immediate environs is presented in the Envirocheck report (LIG, 2018) and reproduced in **Appendix 3**. The results of the database search are summarised on the following table and discussed in the following sections.

Table 3.2 Summary of Environmental and Industrial Setting

Data Type	Number on Site ⁽¹⁾	Number within 250m of Site ⁽¹⁾
Waste Regulation		
Landfill Sites	0 (0)	0 (0)
Licensed Waste Management Facilities	0 (0)	0 (0)
Statutory Permits/Authorisations		
Pollution Prevention and Control ⁽²⁾	0 (0)	0 (0)
Registered Radioactive Substances	0 (0)	0 (0)
Planning Hazardous Substance Consents	0 (0)	0 (0)
COMAH Sites ⁽³⁾ and NIHHS Sites ⁽⁴⁾	0 (0)	0 (0)
Potential Contaminative Uses		
Fuel Stations	0 (0)	2 (1)
Contemporary Trade Directory Entries	0	28
Discharge Consents	0	0
Pollution Records		
Contaminated Land Register Entries and Notices	0	0
Pollution Incidents to Controlled Waters	0	0
Note: 1) Numbers in brackets denotes number of authorisations, licences or permits that are lapsed, revoked, cancelled, obsolete, superseded, defunct, surrendered, not applicable, withdrawn or not yet started. 2) Includes Integrated Pollution Controls, Integrated Pollution Prevention and Control, Local Authority. Integrated Pollution Prevention and Control and Local Authority Pollution Prevention and Control permits. 3) COMAH denotes Control of Major Accident Hazards. 4) NIHHS denotes Notification of Installations Handling Hazardous Substances.		

3.5.1 Contemporary Trade Directory

Fuel Stations The Envirocheck report contains a record for two fuel stations situated about 57 and 200m to the west and southeast of the Site, respectively. The Fuel Station record to the west of the Site is actually located at 81-85 Chalk Farm Road, which is 57m to the southwest of the Site. The current status of this record is obsolete. Given the location, the anticipated underlying low permeability London Clay soils, and distance from the Site, the petrol stations are not considered to be a potential source of contamination that might impact the Site or the proposed development, and as such are not taken forward as potential sources of contamination.

Statutory Permits/Authorisations/Potential Contaminative Uses The entries in the vicinity of the Site typically relate to local ice cream manufacturing, wholesalers, distribution, car and tyre dealers, and domestic cleaning facilities situated primarily to the southwest and southeast of the Site.

The activities listed above are taken forward as a potential source of contamination and are considered to represent a potential risk of environmental hazard to the Site and the proposed development.

Pollution Incidents According to the Envirocheck Report there are no recorded pollution incidents in the immediate vicinity of the Site.

Local Authority Pollution Prevention and Controls There is one Local Authority Pollution Prevention and Control located within 250m of the Site. The nearest is Texaco (Petrol filling station), located approximately 57m to the southwest of the Site at 81-85 Chalk Farm Road, however, the status is now closed.

3.6 Hydrogeology

The London Clay Formation is classified as Unproductive Strata; these are rock layers or drift deposits with low permeability that have negligible significance for water supply or river base flow. Although the groundwater flow in the London Clay Formation is imperceptible, groundwater flow through such formations may take place and needs to be considered in assessing the effects of any development on the hydrogeological regime and the risk associated with persistent pollutants. It is recognised that the investigation undertaken at the adjoining land (see section 3.2.2 above) encountered groundwater within the London Clay Formation at 26.4m bgl.

The Seaford and Newhaven Chalk Formations, present at depth below the Site, represent a regionally important Principal Aquifer. Principal Aquifers are defined as formations that may be highly productive and able to support large abstractions for public supply and other purposes.

The overlying Thanet Sand Formation and Lambeth Group are classified as Secondary Aquifers, which are formations of variable permeability that, although seldom producing large quantities of water for abstraction, may be important for local supplies and in supplying base flow to rivers.

The main hydrogeological significance of the London Clay Formation, and to a lesser extent the Lambeth Group, is to confine the aquifer in the Thanet Sand Formation and Seaford and Newhaven Chalk Formations. For the purposes of this report, the Thanet Sand Formation and Seaford and Newhaven Chalk Formations are considered to form the Chalk Aquifer, and the whole unit will be considered to be a Principal Aquifer for the purposes of the geoenvironmental risk assessment presented in this report.

The indicative maps included in the Envirocheck Report (LIG, 2018) indicate that the Site is not located within a groundwater source protection zone (SPZ). Groundwater source protection

zones are defined as the groundwater catchment zones for significant public water supplies and private wells or boreholes that supply water to potable or equivalent standards.

There are no recorded groundwater abstractions within 500m of the Site. The nearest licenced well is situated about 0.5km to the north-east of the Site. The well is abstracting water from the Chalk Aquifer and is licensed to Greenwich Leisure Limited for commercial, industrial, and public services including drinking, cooking, sanitary, and washing.

The Site is not indicated to be within an area where there is potential for groundwater flooding to occur.

3.7 Hydrology

The nearest surface water feature is the now culverted River Fleet, situated about 0.2km to the east of the Site.

The nearest open surface water feature is the Regents Canal situated about 460m south of the Site. The canal is orientated west to east and south-east. The canal joins the River Thames about 6km to the south-east of the Site.

There are three surface water abstractions within 500m of the Site, all of which are from the Regents Canal. The nearest abstraction is situated about 460m to the south-east of the Site and is operated by the British Waterways Board for industrial, commercial and public services for the use of non-evaporative cooling.

The chemical quality grade of the water of the Regents Canal was classified by the General Quality Assessment (GQA) of the Environment Agency in 2000 as being Poor (Grade E). The General Quality Assessment (GQA) reporting system for river water quality ended in 2009.

3.8 Ecological Systems

There are no designated statutory ecological sites within 2km of the Site. The nearest woodland is situated about 0.5km south of the Site.

Ecological systems are eliminated as a potential receptor for the purpose of the ground condition assessment, only ecosystems with a designation of national or international level are considered.

It should be noted the statement above regarding ecological systems does not purport to be an ecological risk assessment which might require a separate commission. The presence of a protected species (if applicable) requires a site-specific survey and is outside the scope of this report.

4 Ground Stability Risk Assessment

4.1 Introduction

In accordance with the requirements of the National Planning Policy Framework (DCLG, 2012), the potential for the proposed development to contribute to or to be adversely affected by land instability has been assessed. Accordingly, consideration is given below to the potential risk of subsidence arising from artificial cavities, natural cavities, slope instability and potential adverse foundation conditions arising from existing ground conditions across the Site, as identified by the desk study.

Consideration is given below to the risk of these potential geotechnical constraints arising from existing ground conditions at the Site, as identified in this data review.

4.2 Natural and Mining Cavities

The National Natural and Mining (non-coal) Cavities Databases, maintained and updated by PBA, have been searched for relevant natural and mining cavity records. Records of natural or mining cavities were not found within a 2.0km radius of the Site. Whilst the absence of existing records does not in itself demonstrate that natural or mining cavities are not present on the Site, the geology and geomorphological setting of the Site is such that the potential for such features to be present is considered to be **Negligible**.

4.3 Surface Quarrying

There are no records of surface quarrying within the Site or its immediate vicinity, as such, the potential for such features to be present is considered to be **Negligible**.

4.4 Slope Instability

The stability of the existing slopes on site is likely to be controlled by the near surface materials which are likely to principally comprise clay, albeit there is likely to be a thin mantle of Made Ground present across the Site. The natural slopes on site are considered likely to be stable, although given the uncertain nature and composition of any Made Ground, and possible localised shallow perched water within these deposits, shallow excavations in these deposits are likely to require temporary support during construction works.

It should be noted that assessment of the current retaining structures on site is outside of the scope of this study.

4.5 Naturally Occurring Geological Hazards

An assessment of hazard ratings for geological hazards that may give rise to contamination pathways, instability or adverse foundation or construction conditions as supplied by the British Geological Survey (BGS) from their National Geoscience Information Service (NGIS) are presented in the Envirocheck Report reproduced in **Appendix 3**. The generic assessment is generated automatically based on digital geological maps and the scope and the accuracy is limited by the methods used to create the dataset and is therefore only indicative for the search area.

The information contained in the Envirocheck Report has been reviewed and where considered necessary reassessed considering the specific information available for the Site. The modified assessment of the potential for geological hazards to be present on the Site is summarised in **Table 4.1** below.

Table 4.1 Summary of Geological Hazards On-Site

Hazard	Hazard Potential	PBA Assessment and Comment
Collapsible Ground Stability	Very Low	The ground conditions are such that a rapid reduction in volume is not expected to occur when they are loaded and saturated with water.
Compressible Ground Stability	Very Low	The ground conditions are such that layers of very soft compressible materials such as organic clay or peat are not expected to be present.
Landslide Ground Stability	Very Low	The gradient of the Site is significantly flatter than the expected maximum safe gradient of the near surface soils.
Running Sand	Very Low	The ground conditions are such that no indicators for running sand have been identified. No special actions are required to avoid problems due to running sand.
Shrinking or Swelling Clay	Moderate	The London Clay Formation on the Site is expected to have a moderate volume change potential (NHBC, 2016). Due allowance will need to be made for the presence of trees and shrubs in the design of foundations, floor slabs and infrastructure founded on this strata.

PBA assess that the Site has a Negligible to Very Low potential for being affected by the majority of geological hazards. The only exception to this is a Moderate potential for the Site to be affected by shrinkable ground in the London Clay Formation.

In order to minimise this risk, ground investigation and testing will need to be undertaken and if necessary, foundations will need to be designed to accommodate the movement or be taken to a depth where the likelihood of damaging movement is low.

4.6 Potential Adverse Foundation Conditions

The geotechnical constraints to the development are those relating to the natural ground conditions and any geological hazards on the Site, and the constraints relating to the previous and current use of the Site.

Based on the anticipated ground conditions and column loads, it is considered that piled foundations supported in the London Clay Formation are likely to be appropriate for the proposed building.

It is anticipated that some form of rotary drilled or auger bored and cast in place piles including continuous flight auger systems will be appropriate. The presence of any existing foundations or remnants of below ground structures (from the historical development), or mudstone/claystone layers in the London Clay Formation may form obstructions to piling works.

Overall, the geotechnical constraint to the development of the Site associated with the natural ground conditions, geological hazards and land uses is considered to be **Moderate** owing to the potential for the presence of remnant historic foundations and other substructures in the ground, and the requirement for piled foundations.

4.7 Unexploded Ordnance (UXO) Risk Assessment

The Site and its immediate surrounding was heavily bombed during World War II with records portraying bomb strikes on and in the immediate vicinity of the Site. In accordance with the guidance given in CIRIA C681 (2009) it is recommended that a detailed Unexploded Ordnance (UXO) Risk Assessment is undertaken by a suitable UXO specialist ahead of any intrusive investigation or any excavations at the Site.

5 Tier 1 Preliminary Risk Assessment

5.1 Introduction

The methodology developed and adopted by PBA for the assessment of ground conditions is presented in **Appendix 1**. In accordance with guidance presented in CLR 11 (EA Model Procedures for the Management of Land Contamination) we adopt a staged approach to risk assessment and this report presents a Tier 1 assessment or first stage.

The underlying principle to ground condition assessment is the identification of pollutant linkages to evaluate whether the presence of a source of contamination could potentially lead to harmful consequences.

5.2 Conceptual Site Model

The Tier 1 Preliminary Risk Assessment includes the development of a conceptual site model (CSM). The CSM describes the types and locations of potential contamination sources, the identification of potential receptors and the identification of potential transport/migration pathways.

For a pollutant linkage to be identified a connection between all three elements (source-pathway-receptor) is required.

5.3 Potential Pollutant Linkages

Potential pollutant linkages have been identified using the information on potential sources (hazards), receptors and exposure pathways.

Potential Sources (Hazards) and Contaminants of Concern

On-Site

Historical Site Use The Site was agricultural farmland until the mid-1800s where terraced housing was built. The Site remained terraced housing until the 1970s when the housing was demolished and the Charlie Ratchford Centre was built.

Current Site Use The Site is used as a community centre with offices including landscape areas and car parking.

Overall, the potential for widespread significant contamination associated with the current and historical land use to be present at the Site is considered to be **Low**.

Off-Site

The Site has been surrounded principally by mixed residential and commercial developments with local historical light industrial activities. Overall, the potential for widespread significant contamination associated with the current and historical land use to be present in the vicinity of the Site is considered to be **Low** in or adjacent to areas of residential and commercial uses, and **Low to Moderate** in or adjacent to areas of former light industrial land use.

Potential Sources of Contamination

Potential Sources of Contamination (PSC) identified on the Site or within the vicinity of the Site are described in the following table.

Table 5.1 Summary of Potential Sources of Contamination (PSC)

PSC	Description
On Site	
Commercial use and Former Residential use	Low potential for contamination to be present on site associated with residential and commercial land use.
Off Site	
Residential	Low potential for contamination to be present off-site associated with residential land use.
Light Industrial (localised)	Moderate potential for contamination to be present off-site associated with former light industrial land uses.

Potential Receptors and Sensitivity Score

The receptors considered as part of this land contamination assessment are summarised in **Table 5.2** and based on the information reviewed either eliminated from further consideration or allocated a sensitivity score in accordance with the PBA Methodology. The sensitivity score informs the consequence element of the risk estimation process.

Table 5.2 Potential Receptors and Sensitivity Score

Receptor Type	Comment	Sensitivity Score
Human Health – Current Users	Charlie Ratchford Centre employees and visitors	4
Human Health – Future Users	Residential end users	5
Human Health – Neighbours	Residential end users	5
Human Health – Construction / Maintenance Workers'	Workers will be present, construction works including demolition excavations for foundations and groundworks, and will occasionally visit for maintenance following completion.	4
Groundwater	Unproductive Aquifer	1
Surface Water	No surface water bodies within 250m	NA
Property – Buildings	Structures are and will be present on site	1
Ecological Systems	No statutory designated sites within 2km.	N/A
Property – Animal / Crop	No fauna or flora onsite and within 250m	NA

Potential Exposure Pathways

Table 2 in the PBA methodology describes possible exposure pathways for each receptor type. Each of these possible pathways is then identified as viable or not when assessing the probability of the source of contamination causing a consequence to a defined receptor.

5.4 Risk Estimation

When there is a pollutant linkage (and therefore some measure of risk) it is necessary to determine whether the risk is significant and therefore whether further action is required.

Risk estimation involves predicting the likely consequence (what degree of harm might result) and the probability that the consequences will arise (how likely the outcome is).

Based on the information available, the estimated risks have been designated with further comments in the sections below. The outcomes of the risk assessment are presented in **Table 1** in **Appendix 4** giving an assessment of consequence and probability.

A summary of the risk estimation for the Site is presented in **Table 5.3** below.

Table 5.3 Risk Estimation

Receptor	Risk Estimation
Human Health – Current Users	Very Low
Human Health – Future Users	Low
Human Health – Neighbours	Low
Human Health – Construction / Maintenance Workers'	Low
Groundwater	Very Low
Surface Water	N/A
Property – Buildings	Very Low
Ecological Systems	N/A
Property - Animal / Crop	N/A

5.5 Risk Evaluation

Possible pollutant linkages are determined using professional judgement. If a linkage is considered possible, it is considered that this represents a potentially 'unacceptable risk' and therefore requires further consideration. This may be through remediation or mitigation or through further tiers of assessment.

Possible pollutant linkages have been identified for human health, groundwater and ecological features, and the level of risk is generally **Very Low and Low**. As such 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.

The Low risk to construction and maintenance workers relates to the risk of ingestion, inhalation or skin contact of contaminated materials on the Site and inhalation of any potentially hazardous ground gases. The provision of appropriate protective clothing and equipment to be worn by site workers together with the adoption of good standards of hygiene to prevent prolonged skin contact, inhalation and ingestion of soils during construction will be required to mitigate the risk to site workers. In addition, the methods of working should be selected to limit disturbance to the existing near-surface soils present on the Site.

Given the adoption of appropriate measures, the risks associated with the potential for skin contact, inhalation and ingestion of the near-surface soils to construction workers involved in earthworks or groundworks is expected to be **Low**.

5.6 Risk Evaluation

The Site as a whole is considered to have at worst a **Low** geoenvironmental risk associated with contamination.

The Tier 1 risk assessment has identified a number of possible pollutant linkages. Whilst the collection of site specific data from an intrusive investigation is required to ascertain whether or not the PSCs are present it is considered that given the Site setting and the proposed development there are technical and financially viable solutions to manage the risks.

Given the Site setting and the type of development proposed (residential), it is possible that basic mitigation measures including, health and safety for construction workers, protected water supply pipes may need to be incorporated into the proposed development. Additional measures such as clean capping in landscaped areas and ground gas mitigation may be required.

It is considered that these actions and potential mitigation measures are typical for similar redevelopments and should not be considered particularly onerous or unexpected.

The need to establish the nature of the ground conditions, the extent of contamination (if present) and identify potential remediation and/or mitigation measures associated with impacted soil, groundwater and ground gas will need to be assessed through intrusive ground investigation, monitoring, and Tier 2 risk assessments.

Given the relatively low level of risk it is considered that a ground investigation and Tier 2 risk assessment is not required to support the planning application for redevelopment of the Site. Any requirement to carry out a geoenvironmental intrusive investigation can be satisfactorily dealt with by incorporation as a condition in any granted Planning Consent.

On this basis, it is considered very unlikely that the local planning authority will designate the Site as Contaminated Land under Part 2a of the Environmental Protection Act 1990.

Essential Guidance for Report Readers

This report has been prepared within an agreed timeframe and to an agreed budget that will necessarily apply some constraints on its content and usage. The remarks below are presented to assist the reader in understanding the context of this report and any general limitations or constraints. If there are any specific limitations and constraints they are described in the report text.

The opinions and recommendations expressed in this report are based on statute, guidance, and best practice current at the time of its publication. Peter Brett Associates LLP (PBA) does not accept any liability whatsoever for the consequences of any future legislative changes or the release of subsequent guidance documentation, etc. Such changes may render some of the opinions and advice in this report inappropriate or incorrect and the report should be returned to us and reassessed if required for re-use after one year from date of publication. Following delivery of the report PBA has no obligation to advise the Client or any other party of such changes or their repercussions.

Some of the conclusions in this report may be based on third party data. No guarantee can be given for the accuracy or completeness of any of the third party data used. Historical maps and aerial photographs provide a "snap shot" in time about conditions or activities at the Site and cannot be relied upon as indicators of any events or activities that may have taken place at other times.

The conclusions and recommendations made in this report and the opinions expressed are based on the information reviewed and/or the ground conditions encountered in exploratory holes and the results of any field or laboratory testing undertaken. There may be ground conditions at the Site that have not been disclosed by the information reviewed or by the investigative work undertaken. Such undisclosed conditions cannot be taken into account in any analysis and reporting.

This report has been written for the sole use of the Client stated at the front of the report in relation to a specific development or scheme. The conclusions and recommendations presented herein are only relevant to the scheme or the phase of project under consideration. This report shall not be relied upon or transferred to any other party without the express written authorisation of PBA. Any such party relies upon the report at its own risk.

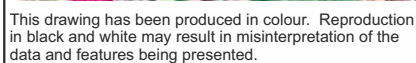
The interpretation carried out in this report is based on scientific and engineering appraisal carried out by suitably experienced and qualified technical consultants based on the scope of our engagement. We have not taken into account the perceptions of, for example, banks, insurers, other funders, lay people, etc, unless the report has been prepared specifically for that purpose. Advice from other specialists may be required such as the legal, planning and architecture professions, whether specifically recommended in our report or not.

Public or legal consultations or enquiries, or consultation with any Regulatory Bodies (such as the Environment Agency, Natural England or Local Authority) have taken place only as part of this work where specifically stated.

References

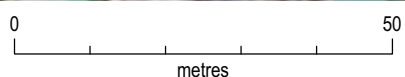
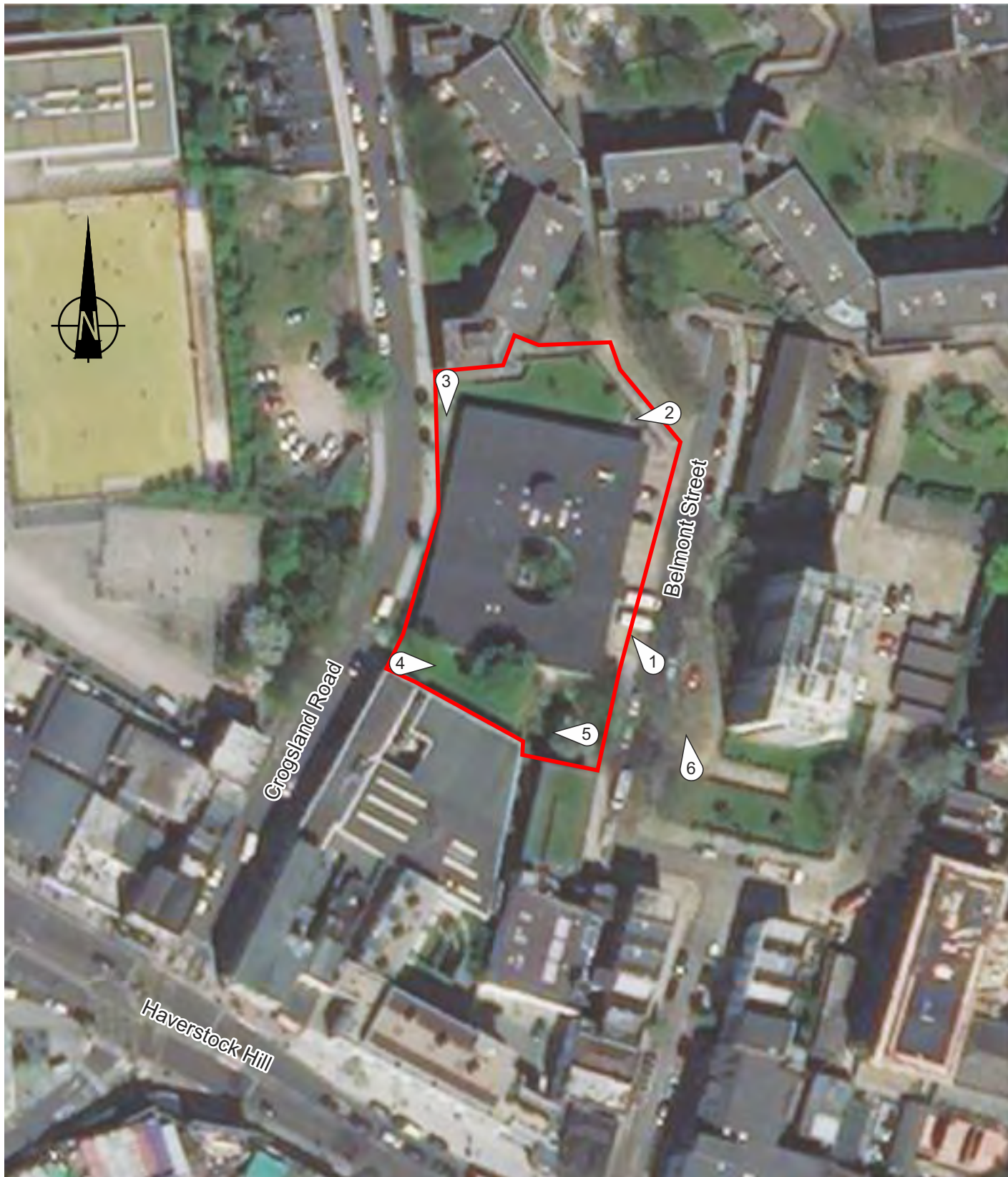
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Figures



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FIGURE 1



This drawing has been produced in colour. Reproduction in black and white may result in misinterpretation of the data and features being presented.

Key

Approximate Site Boundary

6 Photograph Position



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USDA, USGS, AeroGRID, IGN, and the
GIS User Community

**CHARLIE RATCHFORD
CENTRE,
BELMONT STREET,
CAMDEN
SITE LAYOUT PLAN**

Date	04.09.2020
A4 Scale	1:1000
Drawn by	davco
Checked by	JE
Revision	0

FIGURE 2

Appendix 1 PBA Methodology for Assessing Land Contamination in England

Stantec Guide: Methodology for Assessment of Land Contamination (England)

1 INTRODUCTION

This document defines the approach adopted by Stantec in relation to the assessment of land contamination in England. The aim is for the approach to (i) be systematic and objective, (ii) provide for the assessment of uncertainty and (iii) provide a rational, consistent, transparent framework.

When preparing our methodology, we have made reference to various technical guidance documents and legislation referenced in Section 7 of which the principal documents are (i) Contaminated Land Statutory Guidance (Defra 2012), (ii) online guidance Land Contamination: Risk Management (LC:RM) accessed from GOV.UK which is expected to replace Contaminated Land Research (CLR) Report 11: Model Procedures for the Management of Contamination (EA 2004). It should be noted that LCRM is currently due to be revised following consultation and CLR 11 is archived, (iii) Contaminated land risk assessment: A guide to good practice (C552) (CIRIA 2001) (iv) National Planning Policy Framework (NPPF, 2019) (v) BS 10175 Investigation of potentially contaminated sites - Code of Practice (BSI 2017) and (vi) The series of British Standards on Soil Quality BS 18400.

2 DEALING WITH LAND CONTAMINATION

Government policy on land contamination aims to prevent new contaminated land from being created and promotes a risk-based approach to addressing historical contamination. For historical contamination, regulatory intervention is held in reserve for land that meets the legal definition and cannot be dealt with through any other means, including through planning. Land is only considered to be “contaminated land” in the legal sense if it poses an unacceptable risk.

UK legislation on contaminated land is principally contained in Part 2A of the Environmental Protection Act, 1990 (which was inserted into the 1990 Act by section 57 of the Environment Act 1995). Part 2A was introduced in England on 1 April 2000 and provides a risk-based approach to the identification and remediation of land where contamination poses an unacceptable risk to human health or the environment.

The Model Procedures for the Management of Land Contamination (CLR 11), were developed to provide the technical framework for applying a risk management process when dealing with land affected by contamination. The process involves identifying, making decisions on, and taking appropriate action to deal with land contamination in a way that is consistent with government policies and legislation within the UK. The approach, concepts and principles for land contamination management promoted by LC:RM (and its predecessor CLR 11) are applied to the determination of planning applications. The

guidance given in LC:RM follows the same principles.

Other legislative regimes may also provide a means of dealing with land contamination issues, such as the regimes for waste, water, environmental permitting, and environmental damage. Further, the law of statutory nuisance may result in contaminants being unacceptable to third parties whilst not attracting action under Part 2A or other environmental legislation.

2.1 Part 2A

The Regulations and Statutory Guidance that accompanied the Act, including the Contaminated Land (England) Regulations 2006, has been revised with the issue of The Contaminated Land (England) (Amendment) Regulations 2012 (SI 2012/263) and the Contaminated Land Statutory Guidance for England 2012.

Part 2A defines contaminated land as “*land which appears to the Local Authority in whose area it is situated to be in such a condition that, by reason of substances in, on or under the land that significant harm is being caused, or there is a significant possibility that such significant harm (SPOSH) could be caused, or significant pollution of controlled waters is being caused, or there is a significant possibility of such pollution (SPOSP) being caused*”.

Harm is defined as “*harm to the health of living organisms or other interference with the ecological systems of which they form part, and in the case of man, includes harm to his property*”.

Part 2A provides a means of dealing with unacceptable risks posed by land contamination to human health and the environment, and under the guidance enforcing authorities should seek to find and deal with such land. It states that “*under Part 2A the starting point should be that land is not contaminated land unless there is reason to consider otherwise. Only land where unacceptable risks are clearly identified, after a risk assessment has been undertaken in accordance with the Guidance, should be considered as meeting the Part 2A definition of contaminated land*”. Further, the guidance makes it clear that “*regulatory decisions should be based on what is reasonably likely, not what is hypothetically possible*”.

The overarching objectives of the Government's policy on contaminated land and the Part 2A regime are:

- “(a) To identify and remove unacceptable risks to human health and the environment.
- (a) To seek to ensure that contaminated land is made suitable for its current use.
- (b) To ensure that the burdens faced by individuals, companies and society as a whole are proportionate, manageable and compatible with the principles of

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sustainable development”.

The enforcing authority may need to decide whether and how to act in situations where decisions are not straight forward, and where there is uncertainty. *“In so doing, the authority should use its judgement to strike a reasonable balance between: (a) dealing with risks raised by contaminants in land and the benefits of remediating land to remove or reduce those risks; and (b) the potential impacts of regulatory intervention including financial costs to whoever will pay for remediation, health and environmental impacts of taking action, property blight, and burdens on affected people”.*

The authority is required to *“take a precautionary approach to the risks raised by contamination, whilst avoiding a disproportionate approach given the circumstances of each case”.* The aim is *“that the regime produces net benefits, taking account of local circumstances”.*

The guidance recognises that *“normal levels of contaminants in soils should not be considered to cause land to qualify as contaminated land, unless there is a particular reason to consider otherwise”.* Normal levels are quoted as:

- “a) natural presence of contaminants’ such as from underlying geology ‘that have not been shown to pose an unacceptable risk to health and the environment*
- b) ...low level diffuse pollution, and common human activity...”*

Similarly the guidance states that significant pollution or significant possibility of significant pollution of controlled waters is required for land to be considered contaminated and the *“fact that substances are merely entering water”* or *“where discharge from land is not discernible at a location immediately downstream”* does not constitute contaminated land.

To help achieve a more targeted approach to identifying and managing contaminated land in relation to the risk (or possibility) of harm to human health, the revised Statutory Guidance presented a new four category system for considering land under Part 2A, ranging from Category 4, where there is no risk that land poses a significant possibility of significant harm (SPOSH), or the level of risk is low, to Category 1, where the risk that land poses a significant possibility of significant harm (SPOSH) is unacceptably high.

For land that cannot be readily placed into Categories 1 or 4 further assessment is required. If there is sufficient concern that the risks could cause significant harm or have the significant possibility of significant harm the land is to be placed into Category 2. If the concern is not met land is considered Category 3.

The technical guidance clearly states that the currently published Soil Guidance Values (SGV's) and Generic Assessment Criteria (GAC's) represent *“cautious estimates of level of contaminants in soils”* which should be considered *“no risk to health or, at most, a minimal risk”.* These values do not represent the boundary between categories 3 and 4 and *“should be considered to be comfortably within Category 4”.*

At the end of 2013 technical guidance in support of Defra's revised Statutory Guidance (SG) was published and then revised in 2014 (CL: AIRE 2014) which provided:

- A methodology for deriving C4SLs for four generic land-uses comprising residential, commercial, allotments and public open space; and
- A demonstration of the methodology, via the derivation of C4SLs for six substances – arsenic, benzene, benzo(a)pyrene, cadmium, chromium (VI) and lead.

For controlled waters, the revised Statutory Guidance states that the following types of pollution should be considered to constitute significant pollution of controlled waters:

- “(a) Pollution equivalent to “environmental damage” to surface water or groundwater as defined by The Environmental Damage (Prevention and Remediation) Regulations 2009, but which cannot be dealt with under those Regulations.*
- (b) Inputs resulting in deterioration of the quality of water abstracted, or intended to be used in the future, for human consumption such that additional treatment would be required to enable that use.*
- (c) A breach of a statutory surface water Environment Quality Standard, either directly or via a groundwater pathway.*
- (d) Input of a substance into groundwater resulting in a significant and sustained upward trend in concentration of contaminants (as defined in Article 2(3) of the Groundwater Daughter Directive (2006/118/EC)).”*

The guidance also states that, in some circumstances, significant concentrations at a compliance point (in groundwater or surface water) may constitute pollution of controlled waters.

As with SPOSH for human health, the revised Statutory Guidance presents a four-category system for Significant Pollution of controlled waters. Category 1 covers land where there is a strong and compelling case for SPOSP, for example where significant pollution would almost certainly occur if no action was taken to avoid it. Category 4 covers land where there is no risk or the risk is low, for

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example, where the land contamination is having no discernible impact on groundwater or surface water quality. Category 2 is for land where the risks posed to controlled waters are not high enough to consider the land as Category 1 but nonetheless are of sufficient concern to constitute SPOSP, Category 3 is for land where the risks posed to controlled waters are higher than low but not of sufficient concern to constitute SPOSP.

2.2 Planning

The Local Planning Authority (LPA) is responsible for the control of development, and in doing so it has a duty to take account of all material considerations, including contamination.

The principal planning objective is to ensure that any unacceptable risks to human health, buildings and other property and the natural and historical environment from the contaminated condition of the land are identified so that appropriate action can be considered and taken to address those risks.

The National Planning Policy Framework (NPPF, 2019), includes the following.

Paragraph 118 states that planning policies and decisions should “(c) give substantial weight to the value of using suitable brownfield land within settlements for homes and other identified needs, and support appropriate opportunities to remediate despoiled, degraded, derelict, contaminated or unstable land.”

Paragraph 179 states “Where a site is affected by contamination or land stability issues, responsibility for securing a safe development rests with the developer and/or landowner”.

Paragraph 170 states “planning policies and decisions should contribute to and enhance the natural and local environment by:

- (e) *preventing new and existing development from contributing to, being put at unacceptable risk from, or being adversely affected by, unacceptable levels of soil, air, water or noise pollution or land instability. Development should, wherever possible, help to improve local environmental conditions such as air and water quality, taking into account relevant information such as river basin management plans; and*
- (f) *remediating and mitigating despoiled, degraded, derelict, contaminated and unstable land, where appropriate.”*

Paragraph 178 describes the policy considerations the Government expects LPA's to have in regard to land affected by contamination when preparing policies for development plans and in taking decisions on applications.

Paragraph 178 states “*planning policies and decisions should ensure that:*

- (a) *a site is suitable for its proposed use taking account of ground conditions and any risks arising from land instability and contamination. This includes risks arising from natural hazards or former activities such as mining, and any proposals for mitigation including land remediation (as well as potential impacts on the natural environment arising from that remediation);*
- (b) *after remediation, as a minimum, land should not be capable of being determined as contaminated land under Part IIA of the Environmental Protection Act 1990; and*
- (c) *adequate site investigation information, prepared by a competent person, is available to inform these assessments.”*

Paragraph 183 states “*The focus of planning policies and decisions should be on whether proposed development is an acceptable use of land, rather than the control of processes or emissions (where these are subject to separate pollution control regimes). Planning decisions should assume that these regimes will operate effectively. Equally, where a planning decision has been made on a development, the planning issues should not be revisited through the permitting regimes operated by pollution control authorities.”*

The Glossary in Annex 2 provides the following:

Brownfield land registers: Registers of previously developed land that local planning authorities consider to be appropriate for residential development, having regard to criteria in the Town and Country Planning (Brownfield Land Registers) Regulations 2017. Local planning authorities will be able to trigger a grant of permission in principle for residential development on suitable sites in their registers where they follow the required procedures.

Competent person (to prepare site investigation information): A person with a recognised relevant qualification, sufficient experience in dealing with the type(s) of pollution or land instability, and membership of a relevant professional organisation.

Previously developed land: Land which is or was occupied by a permanent structure, including the curtilage of the developed land (although it should not be assumed that the whole of the curtilage should be developed) and any associated fixed surface infrastructure. This excludes: land that is or was last occupied by agricultural or forestry buildings; land that has been developed for minerals extraction or waste disposal by landfill, where provision for restoration has been made through development management procedures; land in built-up areas such as residential gardens, parks, recreation grounds and allotments; and land that was previously developed but where the

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remains of the permanent structure or fixed surface structure have blended into the landscape.

Site investigation information: Includes a risk assessment of land potentially affected by contamination, or ground stability and slope stability reports, as appropriate. All investigations of land potentially affected by contamination should be carried out in accordance with established procedures (such as BS10175 Investigation of Potentially Contaminated Sites – Code of Practice).

Stantec adopt the principle that a Preliminary Investigation (Desk Study and Site Reconnaissance) and Preliminary Risk Assessment (see below) is the minimum assessment requirement to support a planning application.

The level at which contamination is deemed to be unacceptable, or, gives rise to adverse effects under a planning context has not been identified but is envisaged to be more precautionary than the level required to determine land as contaminated under Part 2A.

2.3 Building Control

The building control department of the local authority or private sector approved inspectors are responsible for the operation and enforcement of the Building Regulations (DCLG 2010) to protect the health, safety and welfare of people in and around buildings. Approved Document C requires the protection of buildings and associated land from the effects of contamination, to be applied (non-exclusively) in all changes of use from commercial or industrial premises, to residential property.

3 APPROACH

As with CLR11 the guidance given in LC:RM presents three stages of risk management: -

- (a) Stage 1 - Risk Assessment;
- (b) Stage 2 - Options Appraisal; and
- (c) Stage 3 - Remediation.

Each stage has three tiers. The three tiers of Stage 1 Risk Assessment are: -

- Tier 1 - Preliminary Risk Assessment (PRA) - first tier of RA that develops the outline conceptual model (CM) and establishes whether there are any potentially unacceptable risks.
- Tier 2 - Generic Quantitative Risk Assessment (GQRA) - carried out using generic assessment criteria and assumptions to estimate risk.
- Tier 3 - Detailed Quantitative Risk Assessment (DQRA) - carried out using detailed site-specific information to generate Site Specific

Assessment Criteria (SSAC) as risk evaluation criteria.

For each tier of a Stage 1 - Risk Assessment you must:

1. Identify the hazard - establish contaminant sources.
2. Assess the hazard - use a source-pathway-receptor (S-P-R) pollutant linkage approach to find out if there is the potential for unacceptable risk.
3. Estimate the risk - predict what degree of harm or pollution might result and how likely it is to occur.
4. Evaluate the risk - decide whether a risk is unacceptable.

A Stantec Preliminary Investigation report normally comprises a desk study, walkover site reconnaissance and preliminary risk assessment (PRA). The project specific proposal defines the actual scope of work which might include review of ground investigation data in which case the report includes a GQRA.

Risk estimation involves identifying the magnitude of the potential consequence (taking into account both the potential severity of the hazard and the sensitivity of the receptor) and the magnitude of the likelihood i.e. the probability (taking into account the presence of the hazard and the receptor and the integrity of the pathway). This approach is promoted in current guidance such as R&D 66 (NHBC 2008).

For a PRA, Stantec's approach is that if a pollution linkage is identified then it represents a potentially unacceptable risk which either (1) remediation / direct risk management or (2) progression to further tiers of risk assessment (GQRA and DQRA) requiring additional data collection and enabling refinement of the CM using the site specific data.

4 IDENTIFICATION OF POLLUTANT LINKAGES AND DEVELOPMENT OF A CONCEPTUAL MODEL (CM)

For all Tiers of a Stage 1 Risk Assessment, the underlying principle to ground condition assessment is the identification of *pollutant linkages* in order to evaluate whether the presence of a source of contamination could potentially lead to harmful consequences. A pollutant linkage consists of the following three elements: -

- A source/hazard – a substance or situation which has the potential to cause harm or pollution;
- A pathway – a means by which the hazard moves along / generates exposure; and
- A receptor/target – an entity which is vulnerable to the potential adverse effects of the hazard.

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The *Conceptual Model* identifies the types and locations of potential contaminant sources/hazards and potential receptors and potential migration/transportation pathway(s). The CM is refined through progression to further tiers of risk assessment (GQRA and GQRA) requiring additional data collection.

4.1 Hazard Identification

A hazard is a substance or situation that has the potential to cause harm. Hazards may be chemical, biological or physical.

In a PRA the potential for hazards to be present is determined from consideration of the previous or ongoing activities on or near to the site in accordance with the criteria presented in the **Table 1**.

Based on the land use information Contaminants of Potential Concern (COPC) are identified. The COPC direct the scope of the collection of site-specific data and the analytical testing selected for subsequent Tiers.

At Tier 2 the site-specific data is evaluated using appropriate published assessment criteria (refer to Stantec document entitled *Rationale for the Selection of Evaluation Criteria for a Generic Quantitative Risk Assessment (GQRA)*). In general, published criteria have been developed using highly conservative assumptions and therefore if the screening criterion is not exceeded (and if enough samples from appropriate locations have been analysed) then the COPC is eliminated as a potential Hazard. It should be noted that exceedance does not necessarily indicate that a site is contaminated and/or unsuitable for use only that the COPC is retained as a potential Hazard. Published criteria are generated using models based on numerous and complex assumptions. Whether or not these assumptions are appropriate or sufficiently protective requires confirmation on a project by project basis. Manipulation of the default assumptions would normally form part of a Tier 3 Detailed Quantitative Risk Assessment (DQRA).

When reviewing or assessing site specific data Stantec utilise published guidance on comparing contamination data with a critical concentration (CL:AIRE/CIEH 2008) which presents a structured

process for employing statistical techniques for data assessment purposes.

4.2 Receptor and Pathway Identification

For all Tiers the potential receptors (for both on site and adjoining land) that will be considered are:

- Human Health – including current and future occupiers, construction and future maintenance workers, and neighbouring properties/third parties;
- Ecological Systems;¹
- Controlled Waters² – Under section 78A(9) of Part 2A the term “pollution of controlled waters” means the entry into controlled waters of any poisonous, noxious or polluting matter or any solid waste matter. The term “controlled waters” in relation to England has the same meaning as in Part 3 of the Water Resources Act 1991, except that “ground waters” does not include waters contained in underground strata but above the saturation zone.
- Property - Animal or Crop (including timber; produce grown domestically, or on allotments, for consumption; livestock; other owned or domesticated animals; wild animals which are the subject of shooting or fishing rights); and
- Property - Buildings (any structure or erection, and any part of a building including any part below ground level, but does not include plant or machinery comprised in a building, or buried services such as sewers, water pipes or electricity cables including archaeological sites and ancient monuments).

If a receptor is taken forward for further assessment it will be classified in terms of its sensitivity, the criteria for which are presented in **Table 2**. Table 2 has been generated using descriptions of environmental receptor importance/value given in various guidance documents including R&D 66 (NHBC 2008), EA 2017 and Transport Analysis Guidance (based on DETR 2000). Human health and buildings classifications have been generated by Stantec using the attribute description for each class. Surface water sensitivity is classified using the Water Framework Directive (WFD) status for the River Basin obtained from: <https://environment.data.gov.uk/catchment-planning/>

without such a survey a Land Contamination risk assessment may conclude that the identification of potential ecological receptors is inconclusive (refer to Stantec Specification for a Preliminary Investigation (Desk Study and Site Reconnaissance)).

² The definition of “pollution of controlled water” was amended by the introduction of Section 86 of the Water Act 2003. For the purposes of Part 2A groundwater does not include waters above the saturated zone and our assessment does not therefore address perched water other than where development causes a pathway to develop.

¹ International or nationally designated sites (as defined in the statutory guidance (Defra Circular 04/12)) “in the local area” will be identified as potential ecological receptors. A search radius of 1, 2 or 5km will be utilised depending on the site-specific circumstances (see also pathway identification). The Environment Agency has published an ecological risk assessment framework (EA 2008) which promotes (as opposed to statutorily enforces) consideration of additional receptors to include locally protected sites and protected or notable species. These additional potential receptors will only be considered if a Phase 1 habitat survey, undertaken in accordance with guidance (JNCC 1993), is commissioned and the data provided to Stantec. It should be noted that

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The exposure pathway and modes of transport that will be considered are presented in **Table 3**.

4.3 Note regarding Ecological Systems

The Environment Agency (EA) has developed an ecological risk assessment framework which aims to provide a structured approach for assessing the risks to ecology from chemical contaminants in soils (EA 2008). In circumstances where contaminants in water represent a potential risk to aquatic ecosystems then risk assessors will need to consider this separately.

The framework consists of a three-tiered process: -

- Tier 1 is a screening step where the site soils chemical data is compared to a soil screening value (SSV)
- Tier 2 uses various tools (including surveys and biological testing) to gather evidence for any harm to the ecological receptors
- Tier 3 seeks to attribute the harm to the chemical contamination

Tier 1 is preceded by a desk study to collate information about the site and the nature of the contamination to assess whether pollutant linkages are feasible. The framework presents ten steps for ecological desk studies and development of a conceptual model as follows.

1. Establish Regulatory Context
2. Collate and Assess Documentary Information
3. Summarise Documentary Information
4. Identify Contaminants of Potential Concern
5. Identify Likely Fate Transport of Contaminants
6. Identify Potential Receptors of Concern
7. Identify Potential Pathways of Concern
8. Create a Conceptual Model
9. Identify Assessment and Measurement Endpoints
10. Identify Gaps and Uncertainties

The information in a standard PRA report covers Steps 1 to 4 inclusive. Step 5 considers fate and transport of contaminants and it should be noted that our standard report adopts a simplified approach considering only transport mechanisms. A simplified approach has also been adopted in respect of Steps 6 and 7 receptors (a detailed review of the ecological attributes has not been undertaken) and pathways (a food chain assessment has not been undertaken). Step 9 is outside the scope of our standard PRA report.

It should be noted that the PRA report will present an assessment for ecological systems (where identified as a receptor for a land contamination assessment) considering the viability of the mode of transport given the site-specific circumstances and not specific pathways. The PRA may conclude that the risk to potential ecological receptors is inconclusive.

4.4 Note regarding controlled waters

Controlled waters are rivers, estuaries, coastal waters, lakes and groundwaters, but not perched waters.

The EU Water Framework Directive (WFD) 2000/60/EC provides for the protection of sub-surface, surface, coastal and territorial waters through a framework of river basin management. The EU Updated Water Framework Standards Directive 2014/101/EU amended the EU WFD to update the international standards therein; it entered into force on 20 November 2014 with the requirements for its provisions to be transposed in Member State law by 20 May 2016. Other EU Directives in the European water management framework include:

- the EU Priority Substances Directive 2013/39/EU;
- EU Groundwater Pollutants Threshold Values Directive 2014/80/EU amending the EU Groundwater Directive 2006/118/EC; and
- EU Biological Monitoring Directive 2014/101/EU.

The Ground Water Daughter Directive (GWDD) was enacted by the Groundwater Regulations (2009), which were subsumed by the Environmental Permitting Regulations (2010) which provide essential clarification including on the four objectives specifically for groundwater quality in the WFD: -

Achieve 'Good' groundwater chemical status by 2015, commonly referred to as 'status objective';
Achieve Drinking Water Protected Area Objectives;
Implement measures to reverse any significant and sustained upward trend in groundwater quality, referred to as 'trend objective'; and

Prevent or limit the inputs of pollutants into groundwater, commonly referred to as 'prevent or limit' objectives

The Water Act 2003 (Commencement No.11) Order 2012 amends the test for 'contaminated land' which relates to water pollution so that pollution of controlled waters must now be "significant" to meet the definition of contaminated land.

The Water Framework Directive (WFD) requires the preparation, implementation and review of River Basin Management Plans (RBMP) on a six-year cycle. River basins are made up of lakes, rivers, groundwaters, estuaries and coastal waters, together with the land they drain. River Basin Districts (RBD) and the WFD Waterbodies that they comprise are important spatial management units, regularly used in catchment management studies. River Basin Management Plans (RBMP) have been developed for the 11 River Basin Districts in England and Wales.

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These were released by Defra in 2009 (Defra 2009) and updated in 2015.

These RBMP's establish the current status of waters within the catchments of the respective Districts and the current status of adjoining waters identified. As part of a Tier 2 risk assessment water quality data is screened against the WFD assessment criteria. Comparison with the RBMP's current status of waters for the catchment under consideration would form part of a Tier 3 assessment.

5 RISK ESTIMATION

Risk estimation classifies what degree of harm might result to a receptor (defined as consequence) and how likely it is that such harm might arise (probability).

At Tier 1 the consequence classification is generated by multiplying the hazard classification score and the receptor sensitivity score. This approach follows that presented in the republished R&D 66 (NHBC 2008).

The criteria for classifying probability are set out in **Table 4** and have been taken directly from Table 6.4 CIRIA C552 (CIRIA 2001). Probability considers the integrity of the exposure pathway.

The consequence classifications detailed in **Table 5** have been adapted from Table 6.3 presented in C552 and R&D 66 (Annex 4 Table A4.3).

The Tier 1 risk classification is estimated for each pollutant linkage using the matrix given in **Table 6** which is taken directly from C552 (Table 6.5).

Subsequent Tiers refine the CM through retention or elimination of potential hazards and pollutant linkages.

6 RISK EVALUATION

Evaluation criteria are the parameters used to judge whether harm or pollution needs further assessment or is unacceptable. The evaluation criteria used will depend on:

- the reasons for doing the RA and the regulatory context such as Part 2A or planning;
- the CM and pollutant linkages present;
- any criteria set by regulators;
- any advisory requirements such as from Public Health England;
- the degree of confidence and precaution required;
- the level of confidence required to judge whether a risk is unacceptable;
- how you've used or developed more detailed assessment criteria in the later tiers of RA;
- the availability of robust scientific data;
- how much is known - for example, about the pathway mechanism and how the contaminants affect receptors; and

- any practical reasons such as being able to measure or predict against the criteria.

In order to put the Tier 1 risk classification into context the likely actions are described in **Table 7** which is taken directly from Table 6.6 of C552 (CIRIA 2001).

REFERENCES

BSI 2017 BS 10175:2011+A2:2017 Investigation of potentially contaminated sites - Code of Practice

BSI 2019 BS 8485:2015+A1:2019 Code of practice for the design of protective measures for methane and carbon dioxide ground gases for new buildings

CIRIA 2001: Contaminated land risk assessment – a guide to good practice C552.

CIRIA 2008: Assessing risks posed by hazardous ground gases to buildings C655

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https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/810197/NPPF_Feb_2019_revised.pdf

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Table 1: Criteria for Classifying Hazards / Potential for Generating Contamination

Classification/Score	Potential for generating contamination/gas based on land use
Very Low 1	Land Use: Residential, retail or office use, agriculture Contamination: Limited. Gas generation potential: Soils with low organic content
Low 2	Land Use: Recent small scale industrial and light industry Contamination: locally slightly elevated concentrations. Gas generation potential: Soils with high organic content (limited thickness)
Moderate 3	Land Use: Railway yards, collieries, scrap yards, engineering works. Contamination: Possible widespread slightly elevated concentrations and locally elevated concentrations. Gas generation potential: Dock silt and substantial thickness of organic alluvium/peat
High 4	Land Use: Heavy industry, non-hazardous landfills. Contamination: Possible widespread elevated concentrations. Gas generation potential: Shallow mine workings Pre 1960s landfill
Very High 5	Land Use: Hazardous waste landfills, gas works, chemical works, Contamination: Likely widespread elevated concentrations. Gas generation potential: Landfill post 1960

“Greenfield” is land which has not been developed and there has been no use of agrochemicals

Table 2: Criteria for Classifying Receptor Sensitivity/Value

Classification	Definition
Very Low 1	Receptor of limited importance <ul style="list-style-type: none"> Groundwater: Unproductive strata (Strata with negligible significance for water supply or river baseflow) (previously Non-aquifer), Secondary B (water-bearing parts of non-aquifers), Secondary undifferentiated (previously minor or non-aquifer, but information insufficient to classify as secondary A or B) Surface water: WFD Surface Water status Bad Ecology: No local designation Buildings: Replaceable Human health: Unoccupied/limited access
Low 2	Receptor of local or county importance with potential for replacement <ul style="list-style-type: none"> Groundwater: Secondary A aquifer Surface water: WFD Surface Water status Poor Ecology: local habitat resources Buildings: Local value Human health: Minimum score 4 where human health identified as potential receptor
Moderate 3	Receptor of local or county importance with potential for replacement <ul style="list-style-type: none"> Groundwater: Principal aquifer Surface water: WFD Surface Water status Moderate Ecology: County wildlife sites, Areas of Outstanding Natural Beauty (AONB) Buildings: Area of Historic Character Human health: Minimum score 4 where human health identified as potential receptor
High 4	Receptor of county or regional importance with limited potential for replacement <ul style="list-style-type: none"> Groundwater: Source Protection Zone 2 or 3 Surface water: WFD Surface Water status Good Ecology: SSSI, National or Marine Nature Reserve (NNR or MNR) Buildings: Conservation Area Human health: Minimum score 4 where human health identified as potential receptor
Very High 5	Receptor of national or international importance <ul style="list-style-type: none"> Groundwater: Source Protection Zone (SPZ) 1 Surface water: WFD Surface Water status High Ecology: Special Areas of Conservation (SAC and candidates), Special Protection Areas (SPA and potentials) or wetlands of international importance (RAMSAR) Buildings: World Heritage site Human health: Residential, open spaces and uses where children are present

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Table 3: Exposure Pathway and Modes of Transport

Receptor	Pathway	Mode of transport
Human health	Ingestion	Fruit or vegetable leaf or roots
		Contaminated water
		Soil/dust indoors
		Soil/dust outdoors
	Inhalation	Particles (dust / soil) – outdoor
		Particles (dust / soil) - indoor
		Vapours – outdoor - migration via natural or anthropogenic pathways
		Vapours - indoor - migration via natural or anthropogenic pathways
	Dermal absorption	Direct contact with soil
		Direct contact with waters (swimming / showering)
		Irradiation
Groundwater	Leaching	Gravity / permeation
	Migration	Natural – groundwater as pathway Anthropogenic (e.g. boreholes, culverts, pipelines etc.)
Surface Water	Direct	Runoff or discharges from pipes
	Indirect	Recharge from groundwater
	Indirect	Deposition of windblown dust
Buildings	Direct contact	Sulphate attack on concrete, hydrocarbon corrosion of plastics
	Gas ingress	Migration via natural or anthropogenic paths
Ecological systems	See Notes	Runoff/discharge to surface water body
	See Notes	Windblown dust
	See Notes	Groundwater migration
	See Notes	At point of contaminant source
Animal and crop	Direct	Windblown or flood deposited particles / dust / sediments
	Indirect	Plants via root up take or irrigation. Animals through watering
	Inhalation	By livestock / fish - gas / vapour / particulates / dust
	Ingestion	Consumption of vegetation / water / soil by animals

Table 4: Classification of Probability

Classification	Definition
High likelihood	There is a pollution linkage and an event either appears very likely in the short-term and almost inevitable over the long-term, or there is already evidence at the receptor of harm / pollution.
Likely	There is a pollution linkage and all the elements are present and in the right place, which means that it is probable that an event will occur. Circumstances are such that an event is not inevitable, but possible in the short-term and likely over the long-term.
Low likelihood	There is a pollution linkage and circumstances are possible under which an event could occur. However, it is by no means certain that even over a longer period such event would take place, and is less likely in the shorter-term.
Unlikely	There is a pollution linkage, but circumstances are such that it is improbable that an event would occur even in the very long-term.

Stantec Methodology for Assessment of Land Contamination (England)

Table 5: Classification of Consequence (score = magnitude of hazard and sensitivity of receptor)

Classification Score	Examples
Severe 17-25 (3 out of 25 outcomes)	Human health effect - exposure likely to result in "significant harm" as defined in the Defra (2012) Part 2A Statutory Guidance ¹ . Controlled water effect - short-term risk of pollution (note: Water Resources Act contains no scope for considering significance of pollution) of sensitive water resource. Equivalent to EA Category 1 incident (persistent and/or extensive effects on water quality leading to closure of potable abstraction point or loss of amenity, agriculture or commercial value. Major fish kill. Ecological effect - short-term exposure likely to result in a substantial adverse effect. Catastrophic damage to crops, buildings or property
Medium 10-16 (7 out of 25 outcomes)	Human health effect - exposure could result in "significant harm" ¹ . Controlled water effect - equivalent to EA Category 2 incident requiring notification of abstractor Ecological effect - short-term exposure may result in a substantial adverse effect. Damage to crops, buildings or property
Mild 5-9 (7 out of 25 outcomes)	Human health effect - exposure may result in "significant harm" ¹ . Controlled water effect - equivalent to EA Category 3 incident (short lived and/or minimal effects on water quality). Ecological effect - unlikely to result in a substantial adverse effect. Minor damage to crops, buildings or property. Damage to building rendering it unsafe to occupy (for example foundation damage resulting in instability).
Minor 1-4 (8 out of 25 outcomes)	No measurable effect on humans. Protective equipment is not required during site works. Equivalent to insubstantial pollution incident with no observed effect on water quality or ecosystems. Repairable effects to crops, buildings or property. The loss of plants in a landscaping scheme. Discolouration of concrete.

¹ Significant harm includes death, disease, serious injury, genetic mutation, birth defects or impairment of reproductive function. The local authority may also consider other health effects to constitute significant harm such as physical injury; gastrointestinal disturbances; respiratory tract effects; cardio-vascular effects; central nervous system effects; skin ailments; effects on organs such as the liver or kidneys; or a wide range of other health impacts. Whether or not these would constitute significant harm would depend on the seriousness of harm including impact on health, quality of life and scale of impact.

Table 6: Classification of Risk (Combination of Consequence Table 5 and Probability Table 4)

	Consequence			
Probability	Severe	Medium	Mild	Minor
High likelihood	Very high	High	Moderate	Low
Likely	High	Moderate	Moderate/	Low
Low likelihood	Moderate	Moderate	Low	Very low
Unlikely	Low	Low	Very low	Very low

Stantec Methodology for Assessment of Land Contamination (England)

Table 7: Description of Risks and Likely Action Required

Risk Classification	Description
<i>Very high risk</i>	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 to a designated receptor is currently happening. This risk, if realised, is likely to result in a substantial liability. Urgent investigation (if not undertaken already) and remediation is likely to be required in the short term.
<i>High risk</i>	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 (if not undertaken already) is required and remedial works may be necessary in the short-term and are likely over the longer-term.
<i>Moderate risk</i>	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 is more likely that the harm would be relatively mild. Investigation (if not already undertaken) is normally required to clarify the risk and to determine the potential liability. Some remedial works may be required in the longer-term.
<i>Low risk</i>	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.
<i>Very low risk</i>	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.

Appendix 2 Site Walkover Photographs



Plate 1 – Site entrance on Belmont Street, looking northwest.



Plate 2 – North side of Charlie Ratchford Centre, looking west.


 Stantec	Client	SITE PHOTOGRAPHS CHARLIE RATCHFORD CENTRE, BELMONT STREET, CAMDEN	Date	Feb 2018
	Vistry Partnerships		A4 Scale	NTS
			Drawn	JE
			Checked	AZ
			Appendix	2
Caversham Bridge House, Waterman Place, Reading, RG1 8DN Tel 0118 950 0761 Fax 0118 959 7498				



Plate 3 – West side of Charlie Ratchford Centre, looking south.



Plate 4 – South side of Charlie Ratchford Centre, looking east.



 Stantec	Client	SITE PHOTOGRAPHS CHARLIE RATCHFORD CENTRE, BELMONT STREET, CAMDEN	Date	Feb 2018
	Vistry Partnerships		A4 Scale	NTS
			Drawn	JE
			Checked	AZ
			Appendix	2
Caversham Bridge House, Waterman Place, Reading, RG1 8DN Tel 0118 950 0761 Fax 0118 959 7498				



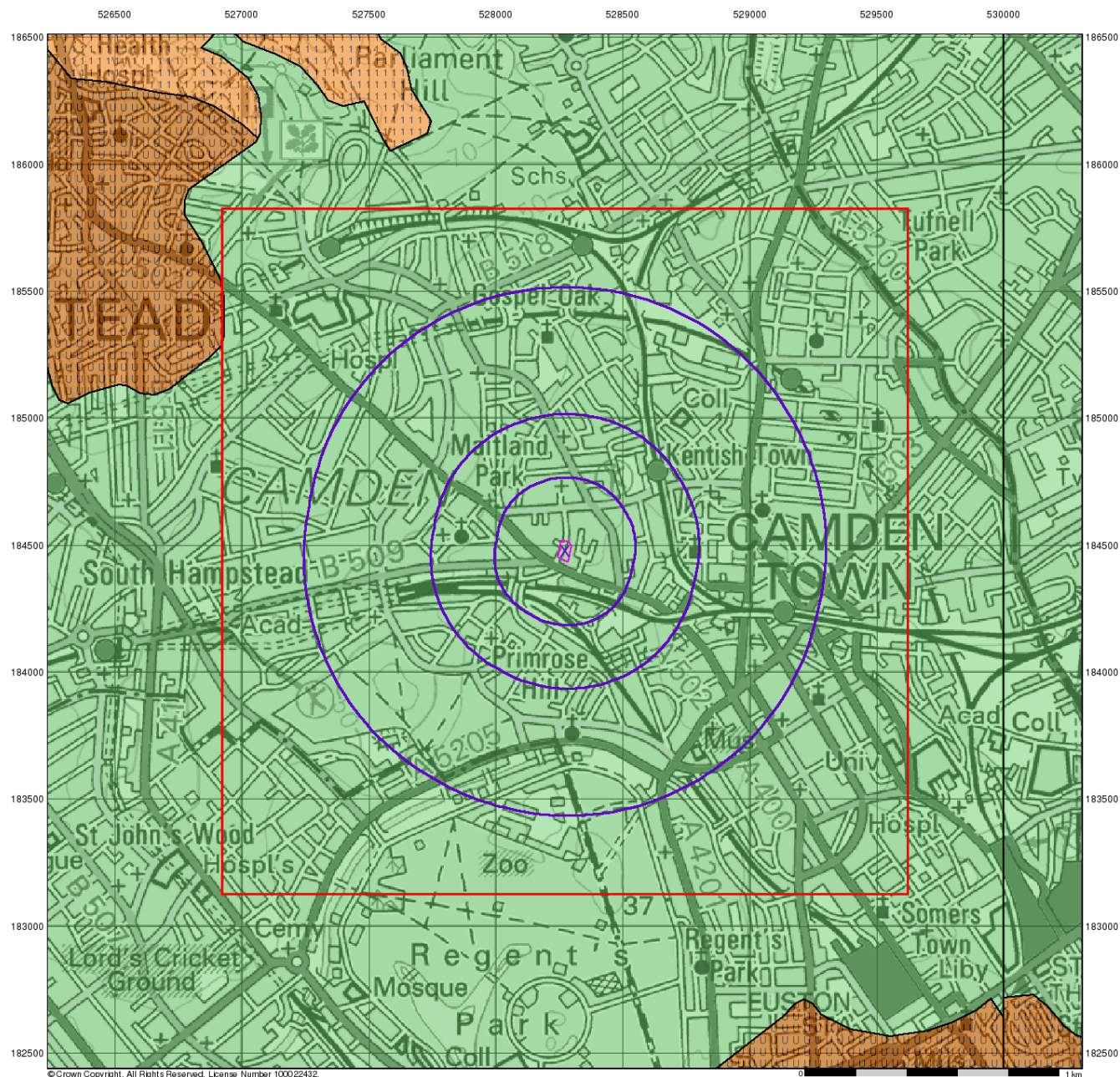
Plate 5 – South side of Charlie Ratchford Centre, looking west.



Plate 6 – View north of Charlie Ratchford Centre on Belmont Street.

 Caversham Bridge House, Waterman Place, Reading, RG1 8DN Tel 0118 950 0761 Fax 0118 959 7498	Client	SITE PHOTOGRAPHS CHARLIE RATCHFORD CENTRE, BELMONT STREET, CAMDEN	Date	Feb 2018
	Vistry Partnerships		A4 Scale	NTS
			Drawn	JE
			Checked	AZ
			Appendix	2

Appendix 3 Historical Maps and Envirocheck Report



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Groundwater Vulnerability

General

- ✕ Specified Site ○ Specified Buffer(s) ✕ Bearing Reference Point
- Slice B Map ID

Agency and Hydrological

Geological Classes

Major Aquifer (Highly Permeable)

Minor Aquifer (Variably Permeable)

Non Aquifer (Negligibly Permeable)

Water or Sea

Drift Deposit

Soil Classes

High (H) 1, 2, 3, U

Intermediate (I) 1, 2

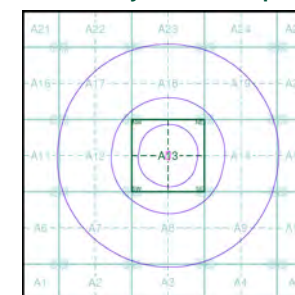
Low

High (H) 1, 2, 3, U

Intermediate (I) 1, 2

Low

Site Sensitivity Context Map - Slice A



Order Details

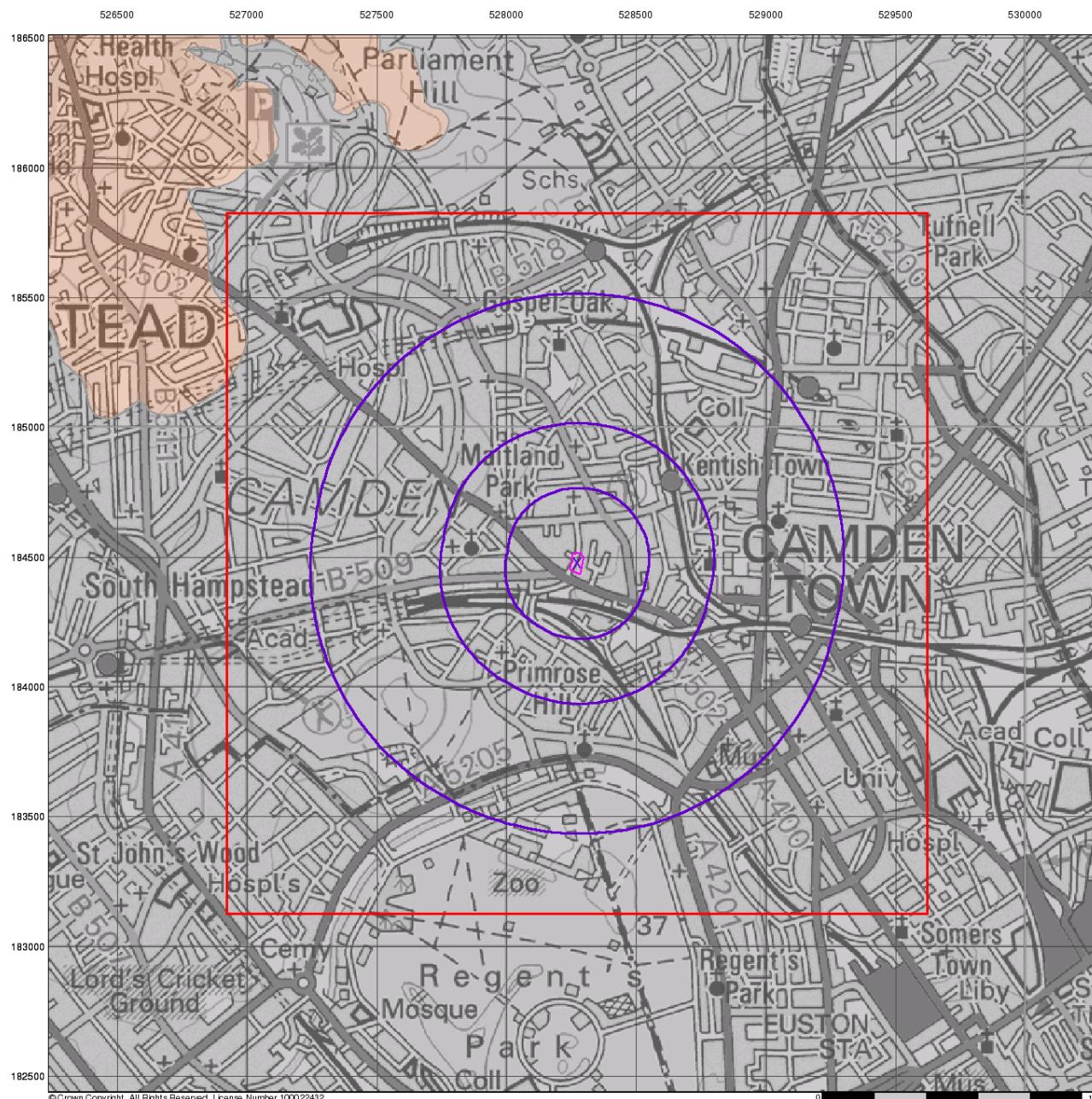
Order Number: 155381768_1_1
 Customer Ref: 43006/3501
 National Grid Reference: 528270, 184480
 Slice: A
 Site Area (Ha): 0.3
 Search Buffer (m): 1000

Site Details

Camden Carers Centre, The Charlie Ratchford Centre, Belmont Street, LONDON, NW1 8HF



Tel: 0844 844 9952
 Fax: 0844 844 9951
 Web: www.envirocheck.co.uk



Bedrock Aquifer Designation

General

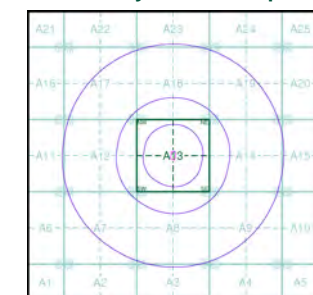
- Specified Site
- Specified Buffer(s)
- Bearing Reference Point
- Slice
- Map ID

Agency and Hydrological

Geological Classes

- Principal Aquifer
- Secondary A Aquifer
- Secondary B Aquifer
- Secondary Undifferentiated
- Unproductive Strata
- Unknown
- Unknown (Lakes and Landslip)

Site Sensitivity Context Map - Slice A



Order Details

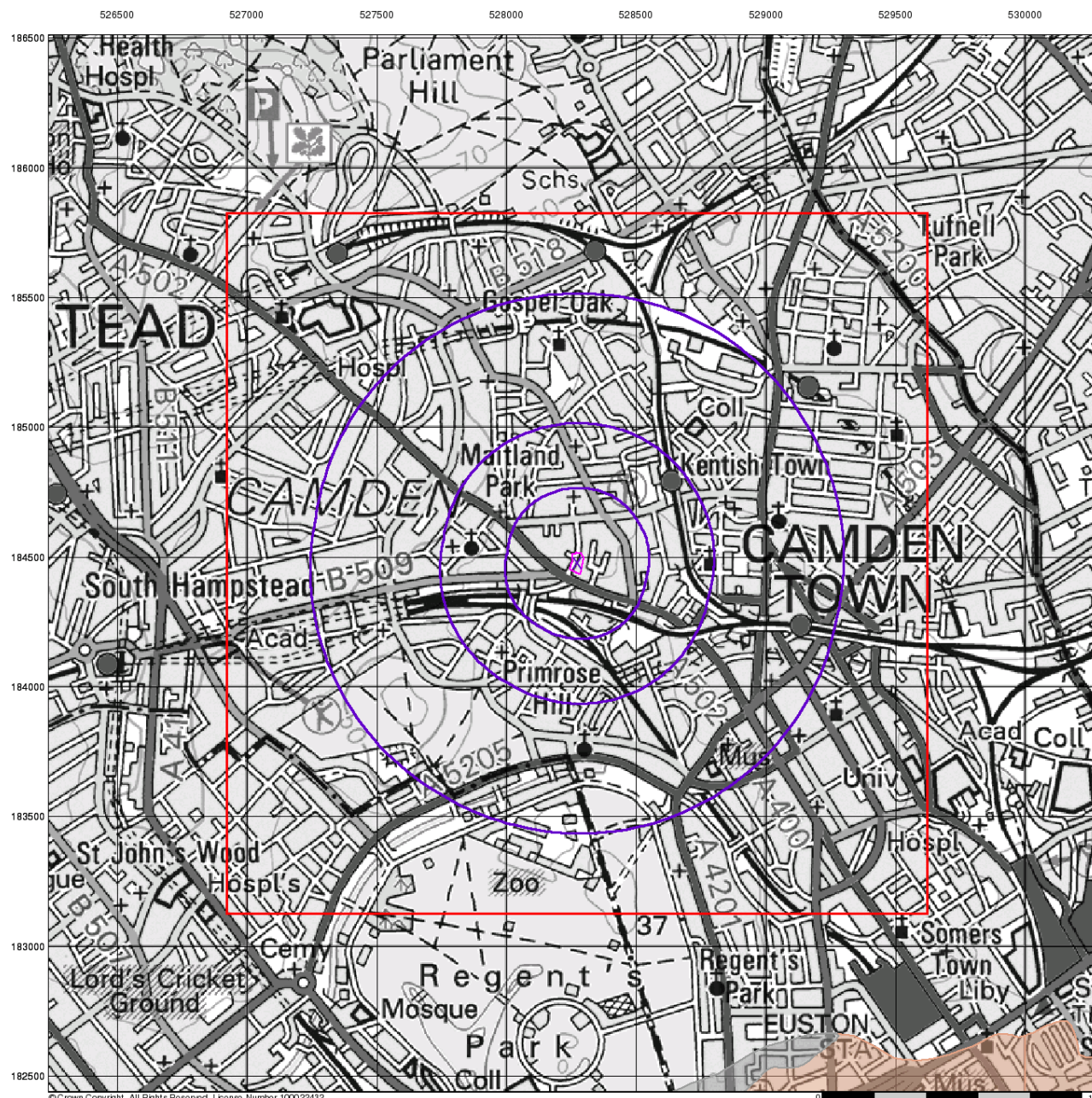
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 Site Area (Ha): 0.3
 Search Buffer (m): 1000

Site Details

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Superficial Aquifer Designation

General

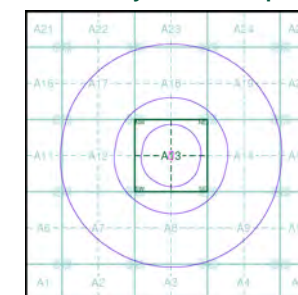
- Specified Site
- Specified Buffer(s)
- Bearing Reference Point
- Slice
- Map ID

Agency and Hydrological

Geological Classes

- Principal Aquifer
- Secondary A Aquifer
- Secondary B Aquifer
- Secondary Undifferentiated
- Unproductive Strata
- Unknown
- Unknown (Lakes and Landslip)

Site Sensitivity Context Map - Slice A



Order Details

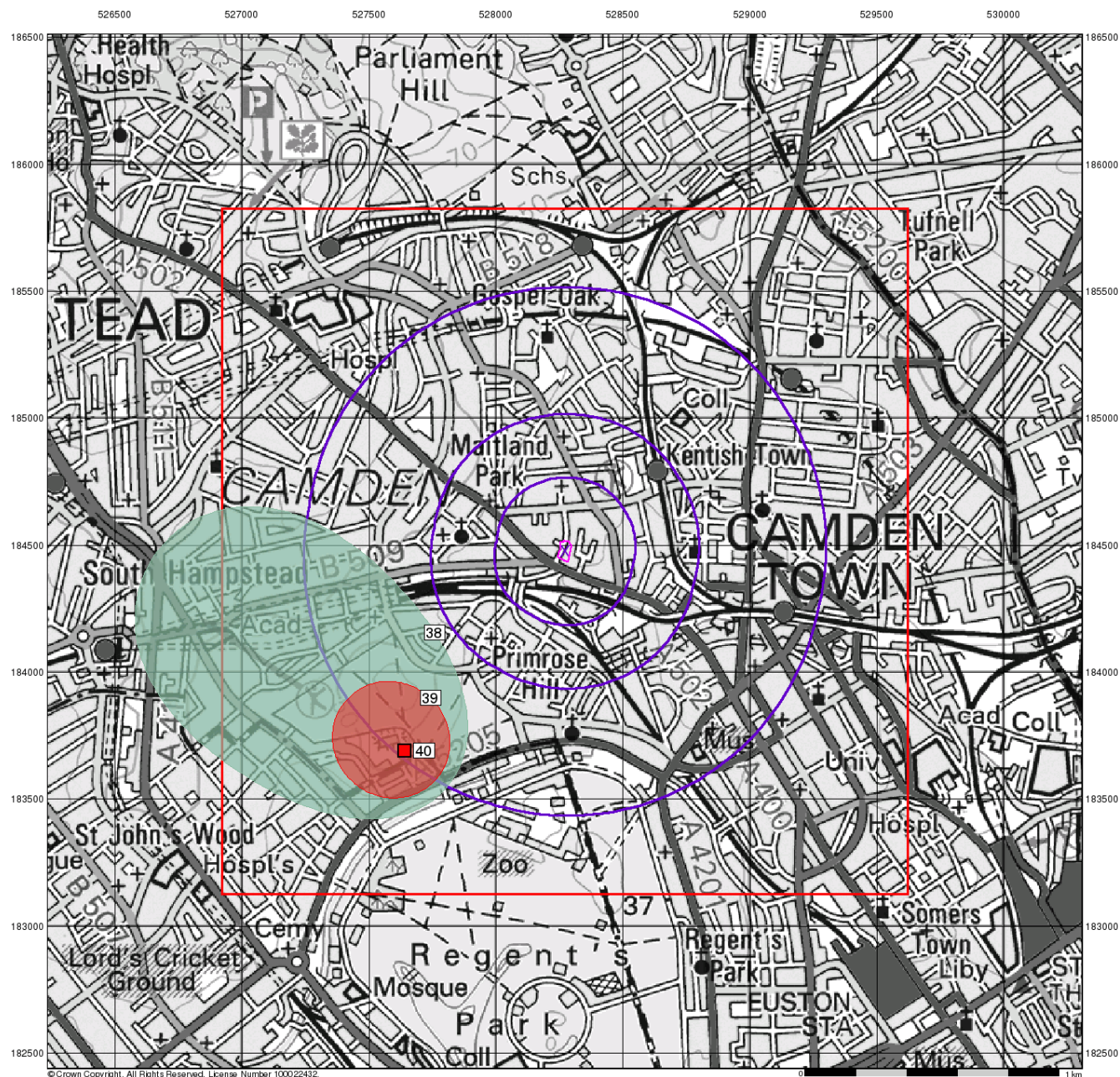
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 Customer Ref: 43006/3501
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 Slice: A
 Site Area (Ha): 0.3
 Search Buffer (m): 1000

Site Details

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Source Protection Zones

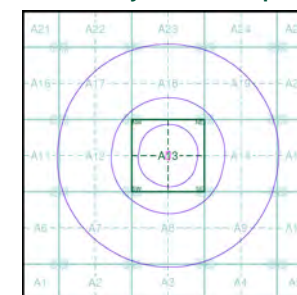
General

- Specified Site
- Specified Buffer(s)
- Bearing Reference Point
- Slice
- Map ID

Agency and Hydrological

- Inner zone (Zone 1)
- Inner zone - subsurface activity only (Zone 1c)
- Outer zone (Zone 2)
- Outer zone - subsurface activity only (Zone 2c)
- Total catchment (Zone 3)
- Total catchment - subsurface activity only (Zone 3c)
- Special interest (Zone 4)
- Source Protection Zone Borehole

Site Sensitivity Context Map - Slice A



Order Details

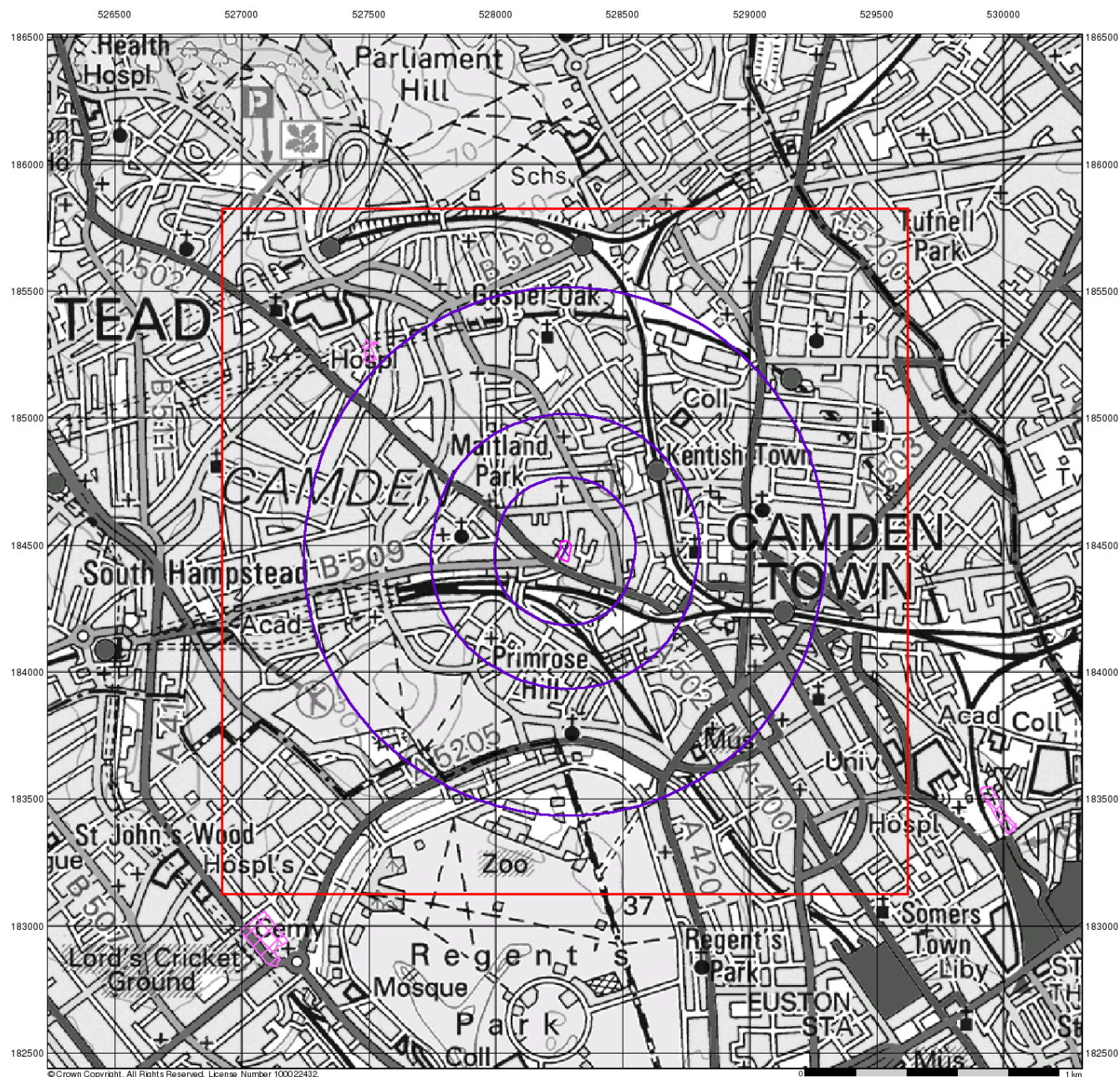
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 Customer Ref: 43006/3501
 National Grid Reference: 528270, 184480
 Slice: A
 Site Area (Ha): 0.3
 Search Buffer (m): 1000

Site Details

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Sensitive Land Uses

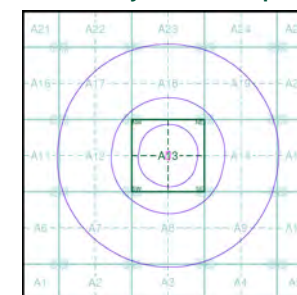
General

- Specified Site
- Specified Buffer(s)
- Bearing Reference Point
- Slice
- Map ID

Sensitive Land Uses

- Ancient Woodland
- Area of Adopted Green Belt
- Area of Unadopted Green Belt
- Area of Outstanding Natural Beauty
- Environmentally Sensitive Area
- Forest Park
- Local Nature Reserve
- Marine Nature Reserve
- National Nature Reserve
- National Park
- Nitrate Sensitive Area
- Nitrate Vulnerable Zone
- Ramsar Site
- Site of Special Scientific Interest
- Special Area of Conservation
- Special Protection Area
- World Heritage Sites

Site Sensitivity Context Map - Slice A



Order Details

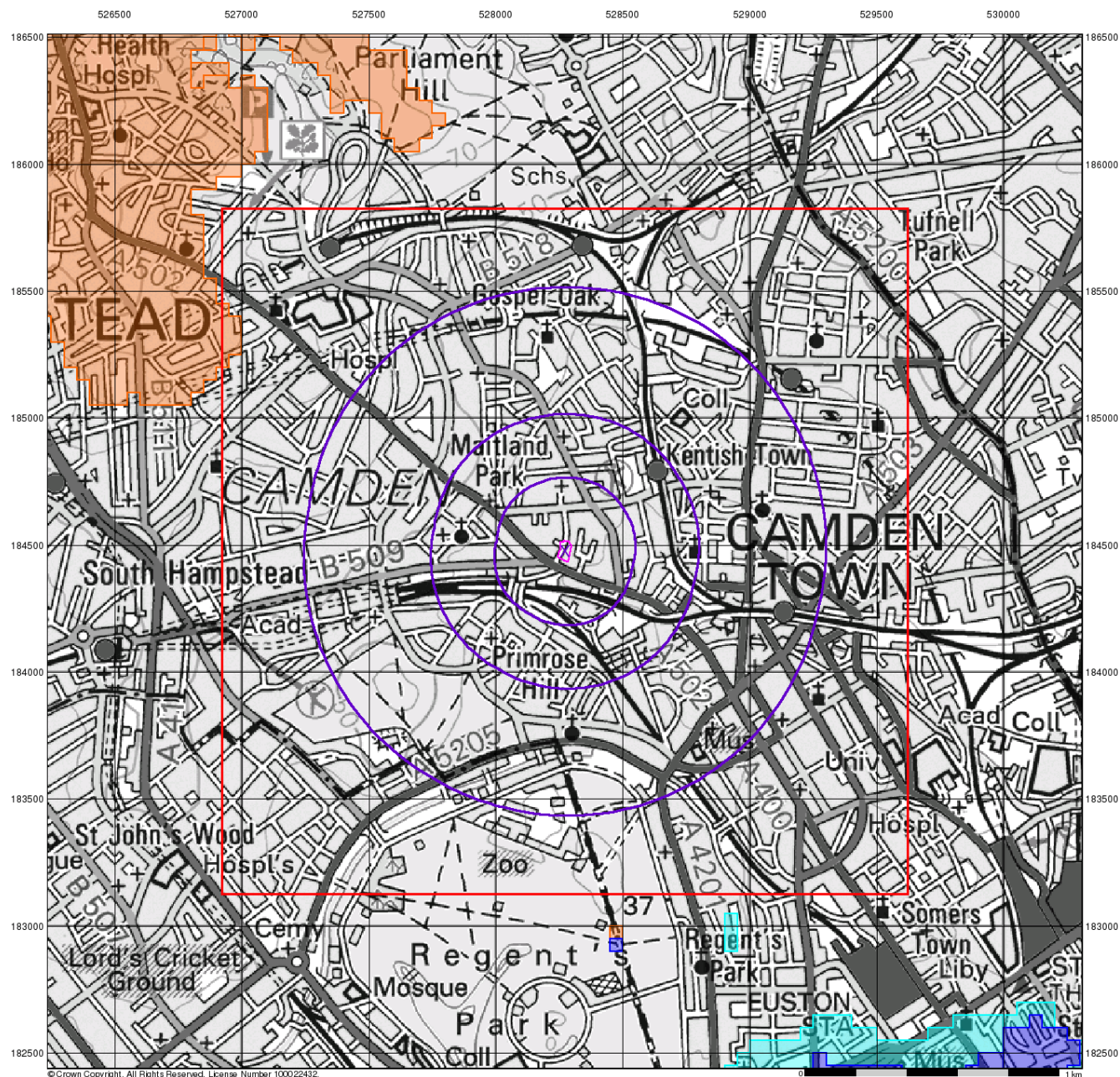
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 National Grid Reference: 528270, 184480
 Slice: A
 Site Area (Ha): 0.3
 Search Buffer (m): 1000

Site Details

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Tel: 0844 844 9952
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BGS Flood GFS Data

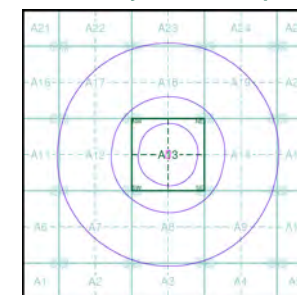
General

- Specified Site
- Specified Buffer(s)
- Bearing Reference Point
- Slice

Agency and Hydrological (Flood)

- Limited Potential for Groundwater Flooding to Occur
- Potential for Groundwater Flooding of Property Situated Below Ground Level
- Potential for Groundwater Flooding to Occur at Surface

Site Sensitivity Context Map - Slice A



Order Details

Order Number: 155381768_1_1
 Customer Ref: 43006/3501
 National Grid Reference: 528270, 184480
 Slice: A
 Site Area (Ha): 0.3
 Search Buffer (m): 1000

Site Details

Camden Carers Centre, The Charlie Ratchford Centre, Belmont Street, LONDON, NW1 8HF



Tel: 0844 844 9952
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Envirocheck[®] Report:

Datasheet

Order Details:

Order Number:

155381768_1_1

Customer Reference:

43006/3501

National Grid Reference:

528270, 184480

Slice:

A

Site Area (Ha):

0.3

Search Buffer (m):

1000

Site Details:

Camden Carers Centre
The Charlie Ratchford Centre
Belmont Street
LONDON
NW1 8HF

Client Details:

Ms K Riley
Peter Brett Associates LLP
Caversham Bridge House
Waterman Place
Reading
Berkshire
RG1 8DN

Report Section	Page Number
Summary	-
Agency & Hydrological	1
Waste	15
Hazardous Substances	-
Geological	18
Industrial Land Use	22
Sensitive Land Use	-
Data Currency	79
Data Suppliers	87
Useful Contacts	88

Introduction

The Environment Act 1995 has made site sensitivity a key issue, as the legislation pays as much attention to the pathways by which contamination could spread, and to the vulnerable targets of contamination, as it does the potential sources of contamination. For this reason, Landmark's Site Sensitivity maps and Datasheet(s) place great emphasis on statutory data provided by the Environment Agency/Natural Resources Wales and the Scottish Environment Protection Agency; it also incorporates data from Natural England (and the Scottish and Welsh equivalents) and Local Authorities; and highlights hydrogeological features required by environmental and geotechnical consultants. It does not include any information concerning past uses of land. The datasheet is produced by querying the Landmark database to a distance defined by the client from a site boundary provided by the client. In the attached datasheet the National Grid References (NGRs) are rounded to the nearest 10m in accordance with Landmark's agreements with a number of Data Suppliers.

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Data Type	Page Number	On Site	0 to 250m	251 to 500m	501 to 1000m (*up to 2000m)
Agency & Hydrological					
BGS Groundwater Flooding Susceptibility					n/a
Contaminated Land Register Entries and Notices					
Discharge Consents	pg 1			2	1
Prosecutions Relating to Controlled Waters			n/a	n/a	n/a
Enforcement and Prohibition Notices					
Integrated Pollution Controls					
Integrated Pollution Prevention And Control					
Local Authority Integrated Pollution Prevention And Control					
Local Authority Pollution Prevention and Controls	pg 1		1	10	14
Local Authority Pollution Prevention and Control Enforcements	pg 5				1
Nearest Surface Water Feature	pg 5			Yes	
Pollution Incidents to Controlled Waters	pg 5				3
Prosecutions Relating to Authorised Processes	pg 6				1
Registered Radioactive Substances	pg 6				9
River Quality	pg 7			1	1
River Quality Biology Sampling Points					
Substantiated Pollution Incident Register	pg 8				1
River Quality Chemistry Sampling Points					
Water Abstractions	pg 8			4	9 (*9)
Water Industry Act Referrals					
Groundwater Vulnerability	pg 13	Yes	n/a	n/a	n/a
Drift Deposits			n/a	n/a	n/a
Bedrock Aquifer Designations	pg 13	Yes	n/a	n/a	n/a
Superficial Aquifer Designations			n/a	n/a	n/a
Source Protection Zones	pg 13				3
Extreme Flooding from Rivers or Sea without Defences				n/a	n/a
Flooding from Rivers or Sea without Defences				n/a	n/a
Areas Benefiting from Flood Defences				n/a	n/a
Flood Water Storage Areas				n/a	n/a
Flood Defences				n/a	n/a
OS Water Network Lines	pg 14			2	7

Data Type	Page Number	On Site	0 to 250m	251 to 500m	501 to 1000m (*up to 2000m)
Waste					
BGS Recorded Landfill Sites					
Historical Landfill Sites					
Integrated Pollution Control Registered Waste Sites					
Licensed Waste Management Facilities (Landfill Boundaries)					
Licensed Waste Management Facilities (Locations)	pg 15				2
Local Authority Landfill Coverage		1	n/a	n/a	n/a
Local Authority Recorded Landfill Sites					
Potentially Infilled Land (Non-Water)	pg 15				1
Potentially Infilled Land (Water)	pg 15				6
Registered Landfill Sites					
Registered Waste Transfer Sites	pg 16				3
Registered Waste Treatment or Disposal Sites	pg 17				1
Hazardous Substances					
Control of Major Accident Hazards Sites (COMAH)					
Explosive Sites					
Notification of Installations Handling Hazardous Substances (NIHHS)					
Planning Hazardous Substance Consents					
Planning Hazardous Substance Enforcements					

Data Type	Page Number	On Site	0 to 250m	251 to 500m	501 to 1000m (*up to 2000m)
Geological					
BGS 1:625,000 Solid Geology	pg 18	Yes	n/a	n/a	n/a
BGS Estimated Soil Chemistry					
BGS Recorded Mineral Sites					
BGS Urban Soil Chemistry	pg 18		Yes	Yes	Yes
BGS Urban Soil Chemistry Averages	pg 21	Yes			
CBSCB Compensation District			n/a	n/a	n/a
Coal Mining Affected Areas			n/a	n/a	n/a
Mining Instability			n/a	n/a	n/a
Man-Made Mining Cavities					
Natural Cavities					
Non Coal Mining Areas of Great Britain				n/a	n/a
Potential for Collapsible Ground Stability Hazards	pg 21	Yes		n/a	n/a
Potential for Compressible Ground Stability Hazards				n/a	n/a
Potential for Ground Dissolution Stability Hazards				n/a	n/a
Potential for Landslide Ground Stability Hazards	pg 21	Yes	Yes	n/a	n/a
Potential for Running Sand Ground Stability Hazards				n/a	n/a
Potential for Shrinking or Swelling Clay Ground Stability Hazards	pg 21	Yes		n/a	n/a
Radon Potential - Radon Affected Areas			n/a	n/a	n/a
Radon Potential - Radon Protection Measures			n/a	n/a	n/a
Industrial Land Use					
Contemporary Trade Directory Entries	pg 22		28	77	234
Fuel Station Entries	pg 50		2	1	3
Points of Interest - Commercial Services	pg 50		3	6	97
Points of Interest - Education and Health	pg 59				1
Points of Interest - Manufacturing and Production	pg 59		10	21	35
Points of Interest - Public Infrastructure	pg 65		1	6	11
Points of Interest - Recreational and Environmental	pg 66		13	14	33
Gas Pipelines					
Underground Electrical Cables	pg 71		10	12	43

Data Type	Page Number	On Site	0 to 250m	251 to 500m	501 to 1000m (*up to 2000m)
Sensitive Land Use					
Ancient Woodland					
Areas of Adopted Green Belt					
Areas of Unadopted Green Belt					
Areas of Outstanding Natural Beauty					
Environmentally Sensitive Areas					
Forest Parks					
Local Nature Reserves					
Marine Nature Reserves					
National Nature Reserves					
National Parks					
Nitrate Sensitive Areas					
Nitrate Vulnerable Zones					
Ramsar Sites					
Sites of Special Scientific Interest					
Special Areas of Conservation					
Special Protection Areas					
World Heritage Sites					

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
1	Discharge Consents Operator: The Jim Henson Studio Property Type: SPORT, AMUSEMENT+RECREATION/GOLF CLUB/GYM/THEME PK/SPA Location: 30 Oval Road, Camden Town, London, Nw1 7de Authority: Environment Agency, Thames Region Catchment Area: Not Given Reference: CATM.2853 Permit Version: 1 Effective Date: 1st April 1997 Issued Date: 1st April 1997 Revocation Date: 30th September 2005 Discharge Type: Trade Discharges - Cooling Water Discharge: Canal Environment: Receiving Water: Guc - Paddington Arm Status: Revoked (Water Resources Act 1991, Section 88 & Schedule 10 as amended by Environment Act 1995) Positional Accuracy: Located by supplier to within 10m	A8NE (SE)	498	2	528600 184050
1	Discharge Consents Operator: Rushes Motion Control Property Type: SPORT, AMUSEMENT+RECREATION/GOLF CLUB/GYM/THEME PK/SPA Location: 30 Oval Road, Camden Town, London, Nw1 7de Authority: Environment Agency, Thames Region Catchment Area: Not Given Reference: Cntm.1566 Permit Version: 1 Effective Date: 1st September 1994 Issued Date: 1st September 1994 Revocation Date: 1st October 1996 Discharge Type: Trade Discharges - Cooling Water Discharge: Freshwater Stream/River Environment: Receiving Water: Guc - Paddington Arm Status: Lapsed (under Environment Act 1995, Schedule 23) Positional Accuracy: Located by supplier to within 100m	A8NE (SE)	498	2	528600 184050
2	Discharge Consents Operator: National Grid Company Plc. Property Type: SUB-STATION/ELECTRICITY/GAS/AIR CONDITIONING SUPPLY Location: Fitzroy Bridge Outlet, Primrosehill, Camden, London Authority: Environment Agency, Thames Region Catchment Area: Not Given Reference: CTMR.0387 Permit Version: 1 Effective Date: 28th March 1980 Issued Date: 28th March 1980 Revocation Date: Not Supplied Discharge Type: Trade Discharges - Cooling Water Discharge: Canal Environment: Receiving Water: Grand Unioncanal Status: Transferred from Rivers (Prevention of Pollution) Act 1951-1961 Positional Accuracy: Located by supplier to within 100m	A8NE (S)	521	2	528360 183920
3	Local Authority Pollution Prevention and Controls Name: Texaco Location: 81-85 Chalk Farm Road, LONDON, NW1 8AR Authority: London Borough of Camden, Pollution Projects Team Permit Reference: NOT GIVEN Dated: 24th December 1998 Process Type: Local Authority Air Pollution Control Description: PG1/14 Petrol filling station Status: Site Closed Positional Accuracy: Manually positioned to the address or location	A13SW (S)	57	3	528269 184381
4	Local Authority Pollution Prevention and Controls Name: Esso Location: 29 Chalk Farm Road, LONDON, NW1 8AG Authority: London Borough of Camden, Pollution Projects Team Permit Reference: PPC15 Dated: 24th December 1998 Process Type: Local Authority Pollution Prevention and Control Description: PG1/14 Petrol filling station Status: Permitted Positional Accuracy: Manually positioned to the address or location	A13SE (SE)	317	3	528567 184291

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
5	Local Authority Pollution Prevention and Controls Name: Lex Volvo Location: 1 Dumpton Place, Gloucester Avenue, Chalk Farm, LONDON, NW1 8JB Authority: London Borough of Camden, Pollution Projects Team Permit Reference: Not Given Dated: 7th January 1994 Process Type: Local Authority Air Pollution Control Description: PG6/34 Respraying of road vehicles Status: Authorised Positional Accuracy: Manually positioned to the address or location	A8NW (S)	319	3	528165 184138
6	Local Authority Pollution Prevention and Controls Name: Wm Morrisons Supermarkets Plc Location: Chalk Farm Road, London, Nw1 8aa Authority: London Borough of Camden, Pollution Projects Team Permit Reference: PPC/DC1 Dated: 26th January 2007 Process Type: Local Authority Pollution Prevention and Control Description: PG6/46 Dry cleaning Status: Permitted Positional Accuracy: Located by supplier to within 10m	A13SE (SE)	328	3	528439 184146
6	Local Authority Pollution Prevention and Controls Name: Wm Morrisons Supermarkets Plc Location: Chalk Farm Road, LONDON, NW1 8AA Authority: London Borough of Camden, Pollution Projects Team Permit Reference: PPC19 Dated: 22nd December 1998 Process Type: Local Authority Pollution Prevention and Control Description: PG1/14 Petrol filling station Status: Permitted Positional Accuracy: Located by supplier to within 10m	A13SE (SE)	328	3	528439 184146
7	Local Authority Pollution Prevention and Controls Name: J T Coachworks Location: 52A Prince Wales Road, LONDON, NW5 3LR Authority: London Borough of Camden, Pollution Projects Team Permit Reference: Not Given Dated: 30th April 1993 Process Type: Local Authority Air Pollution Control Description: PG6/34 Respraying of road vehicles Status: Authorisation revokedRevoked Positional Accuracy: Automatically positioned to the address	A13NE (NE)	358	3	528594 184700
8	Local Authority Pollution Prevention and Controls Name: The Dry Cleaners Of Hampstead Location: 80 Haverstock Hill, London, Nw3 2be Authority: London Borough of Camden, Pollution Projects Team Permit Reference: PPC/DC41 Dated: 25th June 2007 Process Type: Local Authority Pollution Prevention and Control Description: PG6/46 Dry cleaning Status: Permitted Positional Accuracy: Located by supplier to within 10m	A12NE (NW)	416	3	527875 184684
9	Local Authority Pollution Prevention and Controls Name: L G Coachworks Location: 61-65 Wilkin Street Mews, Wilkin Street, London, NW5 3NN Authority: London Borough of Camden, Pollution Projects Team Permit Reference: NOT GIVEN Dated: 9th December 1997 Process Type: Local Authority Air Pollution Control Description: PG6/34 Respraying of road vehicles Status: Authorised Positional Accuracy: Manually positioned to the road within the address or location	A13NE (NE)	417	3	528586 184806
10	Local Authority Pollution Prevention and Controls Name: D P Enamellers Location: Imperial Works, Perren Street, London, NW5 3ED Authority: London Borough of Camden, Pollution Projects Team Permit Reference: Not Given Dated: 27th July 1997 Process Type: Local Authority Air Pollution Control Description: PG6/23 Coating of metal and plastic Status: Authorisation revokedRevoked Positional Accuracy: Manually positioned to the address or location	A14NW (NE)	421	3	528610 184784

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
11	Local Authority Pollution Prevention and Controls Name: Primrose Valet Location: 91 Regent'S Park Road, London, Nw1 8ur Authority: London Borough of Camden, Pollution Projects Team Permit Reference: PPC/DC53 Dated: 28th January 2009 Process Type: Local Authority Pollution Prevention and Control Description: PG6/46 Dry cleaning Status: Permitted Positional Accuracy: Manually positioned to the address or location	A12SE (SW)	443	3	527917 184155
12	Local Authority Pollution Prevention and Controls Name: Moderna Dry Cleaners Location: 70 Queens Crescent, London, Nw5 4ee Authority: London Borough of Camden, Pollution Projects Team Permit Reference: PPC/DC16 Dated: 12th January 2007 Process Type: Local Authority Pollution Prevention and Control Description: PG6/46 Dry cleaning Status: Permitted Positional Accuracy: Located by supplier to within 10m	A18SW (N)	492	3	528216 185005
13	Local Authority Pollution Prevention and Controls Name: Prince Of Wales Dry Cleaners Location: 17 Prince Of Wales Road, London, Nw5 3lh Authority: London Borough of Camden, Pollution Projects Team Permit Reference: PPC/DC12 Dated: 12th January 2007 Process Type: Local Authority Pollution Prevention and Control Description: PG6/46 Dry cleaning Status: Permitted Positional Accuracy: Located by supplier to within 10m	A14NW (NE)	519	3	528777 184696
14	Local Authority Pollution Prevention and Controls Name: Eventech Ltd Location: 3 - 6 Spring Place, LONDON, NW5 3BA Authority: London Borough of Camden, Pollution Projects Team Permit Reference: PPC2 Dated: 30th April 1993 Process Type: Local Authority Pollution Prevention and Control Description: PG6/34 Respraying of road vehicles Status: Permitted Positional Accuracy: Manually positioned to the address or location	A18SE (NE)	565	3	528569 185005
15	Local Authority Pollution Prevention and Controls Name: W Starling Location: 9 -11 Leybourne Road, CAMDEN, NW1 8QY Authority: London Borough of Camden, Pollution Projects Team Permit Reference: PPC1 Dated: 9th January 1996 Process Type: Local Authority Pollution Prevention and Control Description: PG6/34 Respraying of road vehicles Status: Permitted Positional Accuracy: Automatically positioned to the address	A14SW (SE)	574	3	528811 184208
16	Local Authority Pollution Prevention and Controls Name: Hexagon Of Highgate Ltd Location: 1 Browns Lane, Regis Road, LONDON, NW5 3EX Authority: London Borough of Camden, Pollution Projects Team Permit Reference: PPC4 Dated: 30th April 1993 Process Type: Local Authority Pollution Prevention and Control Description: PG6/34 Respraying of road vehicles Status: Permitted Positional Accuracy: Automatically positioned to the address	A19SW (NE)	652	3	528626 185072
17	Local Authority Pollution Prevention and Controls Name: Visage Location: 171 Malden Road, London, Nw5 4ht Authority: London Borough of Camden, Pollution Projects Team Permit Reference: PPC/DC50 Dated: 1st February 2008 Process Type: Local Authority Pollution Prevention and Control Description: PG6/46 Dry cleaning Status: Permitted Positional Accuracy: Manually positioned to the address or location	A18SW (NW)	697	3	527961 185143

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
18	Local Authority Pollution Prevention and Controls Name: Chequers Textile Care Ltd Location: 48 Englands Lane, London, Nw3 4ue Authority: London Borough of Camden, Pollution Projects Team Permit Reference: PPC/DC47 Dated: 5th December 2006 Process Type: Local Authority Pollution Prevention and Control Description: PG6/46 Dry cleaning Status: Permitted Positional Accuracy: Located by supplier to within 10m	A12NW (W)	756	3	527498 184580
19	Local Authority Pollution Prevention and Controls Name: Royal Mail Property Holdings Ltd Location: 1 Regis Road, LONDON, NW5 3EW Authority: London Borough of Camden, Pollution Projects Team Permit Reference: Not Given Dated: Not Supplied Process Type: Local Authority Air Pollution Control Description: PG6/10 Coating manufacturing Status: Authorisation revokedRevoked Positional Accuracy: Manually positioned to the road within the address or location	A19SW (NE)	818	3	528875 185083
20	Local Authority Pollution Prevention and Controls Name: Paradise Cleaners Ltd Location: 58 Parkway, London, Nw1 7ah Authority: London Borough of Camden, Pollution Projects Team Permit Reference: PPC/DC39 Dated: 12th January 2007 Process Type: Local Authority Pollution Prevention and Control Description: PG6/46 Dry cleaning Status: Permitted Positional Accuracy: Located by supplier to within 10m	A9SW (SE)	821	3	528753 183762
21	Local Authority Pollution Prevention and Controls Name: Smart Dry Cleaners Location: 104 Parkway, London, Nw1 7an Authority: London Borough of Camden, Pollution Projects Team Permit Reference: PPC/DC20 Dated: 26th January 2007 Process Type: Local Authority Pollution Prevention and Control Description: PG6/46 Dry cleaning Status: Permitted Positional Accuracy: Located by supplier to within 10m	A9SW (SE)	859	3	528685 183676
21	Local Authority Pollution Prevention and Controls Name: Jet Petrol Station Location: 120 Parkway, LONDON, NW1 7NY Authority: London Borough of Camden, Pollution Projects Team Permit Reference: Not Given Dated: 11th December 1998 Process Type: Local Authority Air Pollution Control Description: PG1/14 Petrol filling station Status: Authorised Positional Accuracy: Manually positioned to the address or location	A9SW (SE)	878	3	528655 183640
22	Local Authority Pollution Prevention and Controls Name: Post Office Vehicle Services Location: Unit A Kentish Town Business Park, Regis Road, LONDON, NW5 3RR Authority: London Borough of Camden, Pollution Projects Team Permit Reference: PPC2 Dated: 27th February 1996 Process Type: Local Authority Pollution Prevention and Control Description: PG6/34 Respraying of road vehicles Status: Permitted Positional Accuracy: Automatically positioned to the address	A19NW (NE)	861	3	528820 185192
23	Local Authority Pollution Prevention and Controls Name: The Kleen Machine Location: 347 Kentish Town Road, London, Nw5 2tj Authority: London Borough of Camden, Pollution Projects Team Permit Reference: PPC/DC44 Dated: 26th January 2007 Process Type: Local Authority Pollution Prevention and Control Description: PG6/46 Dry cleaning Status: Permitted Positional Accuracy: Located by supplier to within 10m	A19NE (NE)	958	3	528988 185167

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
24	Local Authority Pollution Prevention and Controls Name: Camden Cleaners Location: 122 Camden Road, London, Nw1 9ee Authority: London Borough of Camden, Pollution Projects Team Permit Reference: PPC/DC32/06 Dated: 25th January 2007 Process Type: Local Authority Pollution Prevention and Control Description: PG6/46 Dry cleaning Status: Permitted Positional Accuracy: Located by supplier to within 10m	A14SE (E)	976	3	529240 184236
25	Local Authority Pollution Prevention and Controls Name: London Zoo Location: Regents Park, LONDON, NW1 4RY Authority: Westminster City Council, Environmental Health Department Permit Reference: Not Given Dated: 1st November 1992 Process Type: Local Authority Air Pollution Control Description: PG5/1 Clinical waste incineration processes under 1 tonne an hour Status: Authorisation has expiredExpired Positional Accuracy: Automatically positioned to the address	A8SW (S)	992	4	528016 183480
26	Local Authority Pollution Prevention and Control Enforcements Location: 3 - 6 Spring Place, London, Nw5 3ba Type: Air Pollution Control Enforcement Notice Reference: Not Given Date Issued: 16th November 2001 Enforcement Date: Not Supplied Details: Failure To Maintain Proper Paperwork For Organic Compounds Positional Accuracy: Manually positioned to the address or location	A18SE (NE)	565	3	528569 185005
	Nearest Surface Water Feature	A8NE (S)	461	-	528464 184011
27	Pollution Incidents to Controlled Waters Property Type: Not Given Location: Hampstead Road Lock, CAMDEN TOWN Authority: Environment Agency, Thames Region Pollutant: Oils - Unknown Note: Not Supplied Incident Date: 17th December 1998 Incident Reference: THNE1998041401 Catchment Area: Not Given Receiving Water: Not Given Cause of Incident: Not Given Incident Severity: Category 3 - Minor Incident Positional Accuracy: Located by supplier to within 100m	A8NW (SW)	515	2	528000 184000
28	Pollution Incidents to Controlled Waters Property Type: Not Given Location: Prince Albert Road Authority: Environment Agency, Thames Region Pollutant: Not Given Note: Confirmed incident Incident Date: 4th April 1999 Incident Reference: THNE1999043097 Catchment Area: Not Given Receiving Water: Not Given Cause of Incident: Not Given Incident Severity: Category 3 - Minor Incident Positional Accuracy: Approximate location provided by supplier	A8SE (S)	736	2	528300 183700
29	Pollution Incidents to Controlled Waters Property Type: Not Given Location: LONDON Authority: Environment Agency, Thames Region Pollutant: Oils - Unknown Note: Not Supplied Incident Date: 15th January 1996 Incident Reference: SE960036 Catchment Area: Not Given Receiving Water: Not Given Cause of Incident: Not Given Incident Severity: Category 3 - Minor Incident Positional Accuracy: Located by supplier to within 100m	A14SE (E)	836	2	529100 184250

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
30	Prosecutions Relating to Authorised Processes Location: Regents Park Road, London, NW1 Prosecution Text: Failure to comply with packaging waste regulations Prosecution Act: Pro97 Hearing Date: 6th September 2007 Verdict: Guilty Fine: 85000 Costs: 8836 Positional Accuracy: Manually positioned to the road within the address or location	A8SW (S)	679	2	528192 183763
31	Registered Radioactive Substances Name: Omnilabs (UK) Ltd Location: Bewlay House, 32 Jamestown Road, LONDON, Greater London, NW1 7BY Authority: Environment Agency, Thames Region Permit Reference: AE8755 Dated: 31st March 1991 Process Type: Authorisation under S13 RSA for the disposal of Radioactive waste (was RSA60 S7) Description: Authorisation under RSA Status: Authorisation either revoked or cancelledCancelled Positional Accuracy: Unknown	A9NW (SE)	547	2	528642 184022
31	Registered Radioactive Substances Name: Unilabs Clinical Pathology Location: Bewlay House, 32 Jamestown Road, LONDON, Greater London, NW1 7BY Authority: Environment Agency, Thames Region Permit Reference: BC2742 Dated: 21st October 1998 Process Type: Authorisation under S13 RSA for the disposal of Radioactive waste (was RSA60 S7) Description: Authorisation under RSA Status: Application made in error Positional Accuracy: Unknown	A9NW (SE)	569	2	528671 184018
32	Registered Radioactive Substances Name: Spirogen Ltd Location: 2, Royal College Street, London, NW1 0NH Authority: Environment Agency, Thames Region Permit Reference: CA5052 Dated: 20th December 2006 Process Type: Registration under S7 RSA for the keeping and use of Radioactive materials (was RSA60 S1) Description: Registration under the Act of an open source which is also the subject of an authorisation Status: Authorisation either revoked or cancelledCancelled Positional Accuracy: Automatically positioned to the address	A9SE (SE)	933	2	528965 183798
32	Registered Radioactive Substances Name: Spirogen Ltd Location: 2, Royal College Street, London, NW1 0NH Authority: Environment Agency, Thames Region Permit Reference: CA5079 Dated: 20th December 2006 Process Type: Authorisation under S13 RSA for the disposal of Radioactive waste (was RSA60 S7) Description: Authorisation under RSA Status: Authorisation either revoked or cancelledCancelled Positional Accuracy: Automatically positioned to the address	A9SE (SE)	933	2	528965 183798
33	Registered Radioactive Substances Name: Institute Of Zoology Location: Zoological Society Of London, Regents Park, LONDON, Greater London, NW1 4RY Authority: Environment Agency, Thames Region Permit Reference: AQ9405 Dated: 30th August 1995 Process Type: Authorisation under S13 RSA for the disposal of Radioactive waste (was RSA60 S7) Description: Minor variation to authorisation under RSA Status: Authorisation superseded by a substantial or non substantial variationSuperseded Positional Accuracy: Unknown	A8SW (S)	987	2	528016 183485

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
33	Registered Radioactive Substances Name: Institute Of Zoology Location: Regents Park, London, NW1 4RY Authority: Environment Agency, Thames Region Permit Reference: Bw7007 Dated: 1st December 2003 Process Type: Authorisation under S13 RSA for the disposal of Radioactive waste (was RSA60 S7) Description: Minor variation to authorisation under RSA Status: Application has been authorised and any conditions apply to the operatorAuthorised Positional Accuracy: Automatically positioned to the address	A8SW (S)	993	2	528011 183480
33	Registered Radioactive Substances Name: Institute Of Zoology Location: Zoological Society Of London, Regents Park, LONDON, Greater London, NW1 4RY Authority: Environment Agency, Thames Region Permit Reference: AC7596 Dated: 31st March 1991 Process Type: Registration under S7 RSA for the keeping and use of Radioactive materials (was RSA60 S1) Description: Registration under the Act of an open source which is also the subject of an authorisation Status: Authorisation superseded by a substantial or non substantial variationSuperseded Positional Accuracy: Unknown	A8SW (S)	993	2	528011 183480
33	Registered Radioactive Substances Name: Institute Of Zoology Location: London Zoo, Regents Park, LONDON, Greater London, NW1 4RY Authority: Environment Agency, Thames Region Permit Reference: AS7515 Dated: 21st December 1995 Process Type: Registration under S7 RSA for the keeping and use of Radioactive materials (was RSA60 S1) Description: Substantial variation to a registration under the Act of an open source which is also the subject of an authorisation Status: Application has been authorised and any conditions apply to the operatorAuthorised Positional Accuracy: Unknown	A8SW (S)	997	2	528016 183475
33	Registered Radioactive Substances Name: Institute Of Zoology Location: Zoological Society Of London, Regents Park, LONDON, Greater London, NW1 4RY Authority: Environment Agency, Thames Region Permit Reference: AC7588 Dated: 31st March 1991 Process Type: Authorisation under S13 RSA for the disposal of Radioactive waste (was RSA60 S7) Description: Authorisation under RSA Status: Authorisation superseded by a substantial or non substantial variationSuperseded Positional Accuracy: Unknown	A8SW (S)	998	2	528011 183475
	River Quality Name: Guc (Paddington Arm) GQA Grade: River Quality E Reach: Canal Feeder - Camden Road Estimated Distance (km): 10.5 Flow Rate: Flow greater than 80 cumecs Flow Type: Canal Year: 2000	A8NE (SE)	471	2	528540 184040
	River Quality Name: Guc (Regent'S Canal) GQA Grade: River Quality C Reach: Camden Road - Hertford Union Estimated Distance (km): 7.1 Flow Rate: Flow greater than 80 cumecs Flow Type: Canal Year: 2000	A9NE (SE)	978	2	529172 184024

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
34	Substantiated Pollution Incident Register Authority: Environment Agency - Thames Region, North East Area Incident Date: 9th February 2008 Incident Reference: 562771 Water Impact: Category 4 - No Impact Air Impact: Category 2 - Significant Incident Land Impact: Category 4 - No Impact Positional Accuracy: Located by supplier to within 10m Pollutant: Atmospheric Pollutants And Effects: Smoke	A14SW (SE)	514	2	528712 184151
35	Water Abstractions Operator: British Waterways Board Licence Number: 28/39/39/0173 Permit Version: 100 Location: Oval Road, Camden - Grand Union Regents Canal Authority: Environment Agency, Thames Region Abstraction: Other Industrial/Commercial/Public Services: Non-Evaporative Cooling Abstraction Type: Water may be abstracted from a single point Source: Surface Daily Rate (m3): 20 Yearly Rate (m3): 7000 Details: Land At Oval Road, Camden, London Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 8th December 1994 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m	A8NE (SE)	464	2	528490 184020
35	Water Abstractions Operator: Canal And River Trust Licence Number: 28/39/39/0164 Permit Version: 101 Location: Southampton Bridge, London, Nw8 - Regents Canal Authority: Environment Agency, Thames Region Abstraction: Amenity: Spray Irrigation - Direct Abstraction Type: Water may be abstracted from a single point Source: Surface Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Pipeline Alongside The Regents Canal, London Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 17th December 2007 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m	A8NE (SE)	468	2	528500 184020
35	Water Abstractions Operator: British Waterways Board Licence Number: 28/39/39/0164 Permit Version: 100 Location: Southampton Bridge, London, Nw8 - Regents Canal Authority: Environment Agency, Thames Region Abstraction: Amenity: Spray Irrigation - Direct Abstraction Type: Water may be abstracted from a single point Source: Surface Daily Rate (m3): 3840 Yearly Rate (m3): 1 Details: Pipeline Alongside The Regents Canal, London Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 25th April 1983 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m	A8NE (SE)	468	2	528500 184020
35	Water Abstractions Operator: British Waterways Licence Number: 28/39/39/0164B Permit Version: Not Supplied Location: Southampton Bridge, LONDON, Nw8 Authority: Environment Agency, Thames Region Abstraction: Industrial Cooling (Cegb) Abstraction Type: Not Supplied Source: River Daily Rate (m3): 3840 Yearly Rate (m3): 1 Details: Annual Abstraction Total Aggregated To Another Licence For Quantity Purposes. Authorised Start: Not Supplied Authorised End: Not Supplied Permit Start Date: Not Supplied Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 100m	A8NE (SE)	486	2	528500 184000

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
36	Water Abstractions Operator: Greenwich Leisure Limited Licence Number: 28/39/39/0091 Permit Version: 101 Location: Kentish Town Sports Centre, Prince Of Wales St Authority: Environment Agency, Thames Region Abstraction: Commercial/Industrial/Public Services: Drinking; Cooking; Sanitary; Washing; (Small Garden) Abstraction Type: Water may be abstracted from a single point Source: Groundwater Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Kentish Town Sports Centre, Prince Of Wales Road, London Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 25th May 2012 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 100m	A14NW (NE)	542	2	528800 184700
36	Water Abstractions Operator: Greenwich Leisure Limited Licence Number: 28/39/39/0091 Permit Version: 101 Location: Kentish Town Sports Centre, Prince Of Wales St Authority: Environment Agency, Thames Region Abstraction: Other Industrial/Commercial/Public Services: Process Water Abstraction Type: Water may be abstracted from a single point Source: Groundwater Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: St. Pancras Public Baths, Prince Of Wales Road, London Nw1 Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 25th May 2012 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 100m	A14NW (NE)	542	2	528800 184700
36	Water Abstractions Operator: Greenwich Leisure Ltd Licence Number: 28/39/39/0091 Permit Version: 101 Location: Two Bores At Kentish Town Sports Centre, Prince Of Wales St Authority: Environment Agency, Thames Region Abstraction: Other Industrial/Commercial/Public Services: Process Water Abstraction Type: Water may be abstracted from a single point Source: Groundwater Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: St. Pancras Public Baths, Prince Of Wales Road, London Nw1 Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 5th April 2012 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 100m	A14NW (NE)	542	2	528800 184700
36	Water Abstractions Operator: London Borough Of Camden Licence Number: 28/39/39/0091 Permit Version: 100 Location: Two Bores At Kentish Town Sports Centre, Prince Of Wales St Authority: Environment Agency, Thames Region Abstraction: Commercial/Industrial/Public Services: Drinking; Cooking; Sanitary; Washing; (Small Garden) Abstraction Type: Water may be abstracted from a single point Source: Groundwater Daily Rate (m3): 605 Yearly Rate (m3): 76509 Details: Kentish Town Sports Centre, Prince Of Wales Road, London Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 13th June 1966 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 100m	A14NW (NE)	542	2	528800 184700

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
36	Water Abstractions Operator: London Borough Of Camden Licence Number: 28/39/39/0091 Permit Version: 100 Location: Two Bores At Kentish Town Sports Centre, Prince Of Wales St Authority: Environment Agency, Thames Region Abstraction: Industrial; Commercial And Public Services: Laundry Use Abstraction Type: Water may be abstracted from a single point Source: Groundwater Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: St. Pancras Public Baths, Prince Of Wales Road, London Nw1 Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 13th June 1966 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m	A14NW (NE)	542	2	528800 184700
36	Water Abstractions Operator: London Borough Of Camden Licence Number: 28/39/39/0091 Permit Version: 100 Location: Two Bores At Kentish Town Sports Centre, Prince Of Wales St Authority: Environment Agency, Thames Region Abstraction: Other Industrial/Commercial/Public Services: Process Water Abstraction Type: Water may be abstracted from a single point Source: Groundwater Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: St. Pancras Public Baths, Prince Of Wales Road, London Nw1 Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 13th June 1966 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m	A14NW (NE)	542	2	528800 184700
37	Water Abstractions Operator: Thames Water Utilities Ltd Licence Number: Th/039/0039/058 Permit Version: 1 Location: Borehole At Barrow Hill Authority: Environment Agency, Thames Region Abstraction: Public Water Supply: Potable Water Supply - Direct Abstraction Type: Water may be abstracted from a single point Source: Groundwater Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Not Supplied Authorised Start: 01 April Authorised End: 31 March Permit Start Date: 1st April 2013 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m	A7SE (SW)	971	2	527636 183697
37	Water Abstractions Operator: Thames Water Utilities Ltd Licence Number: 28/39/39/0231 Permit Version: 1 Location: Barrow Hill Pumping Station - Borehole Authority: Environment Agency, Thames Region Abstraction: Public Water Supply: Potable Water Supply - Direct Abstraction Type: Water may be abstracted from a single point Source: Groundwater Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Barrow Hill Pumping Station Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 1st April 2007 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m	A7SE (SW)	974	2	527640 183690

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
37	Water Abstractions Operator: Thames Water Utilities Ltd Licence Number: 28/39/39/0202 Permit Version: 1 Location: Barrow Hill Pumping Station - Borehole Authority: Environment Agency, Thames Region Abstraction: Public Water Supply: Potable Water Supply - Direct Abstraction Type: Water may be abstracted from a single point Source: Groundwater Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Barrow Hill Pumping Station Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 26th September 2002 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m	A7SE (SW)	974	2	527640 183690
	Water Abstractions Operator: Zoological Society Of London Licence Number: 28/39/39/0035 Permit Version: 100 Location: Borehole At Regent'S Park, London Nw1 Authority: Environment Agency, Thames Region Abstraction: Zoos/Kennels/Stables: Animal Watering & General Use (Non Agricultural) Abstraction Type: Water may be abstracted from a single point Source: Groundwater Daily Rate (m3): 59 Yearly Rate (m3): 681 Details: Regent'S Park, London Nw1 Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 4th April 1966 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 100m	A3NW (S)	1073	2	528000 183400
	Water Abstractions Operator: London Borough Of Camden Licence Number: 28/39/39/0219 Permit Version: 1 Location: Swiss Cottage Open Space- Borehole Authority: Environment Agency, Thames Region Abstraction: Municipal Grounds: Spray Irrigation - Direct Abstraction Type: Water may be abstracted from a single point Source: Groundwater Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Swiss Cottage Open Space, Winchester Road, London. Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 1st April 2008 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m	A11SW (W)	1454	2	526800 184280
	Water Abstractions Operator: London Borough Of Camden Licence Number: Th/039/0039/087 Permit Version: 1 Location: Swiss Cottage Open Space- Borehole Authority: Environment Agency, Thames Region Abstraction: Municipal Grounds: Spray Irrigation - Direct Abstraction Type: Water may be abstracted from a single point Source: Groundwater Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Swiss Cottage Open Space, Winchester Road, London Authorised Start: 01 April Authorised End: 31 March Permit Start Date: 5th December 2013 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m	A11SW (W)	1506	2	526750 184261

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	Water Abstractions Operator: London Borough Of Camden Licence Number: Th/039/0039/087 Permit Version: 1 Location: Swiss Cottage Open Space- Borehole Authority: Environment Agency, Thames Region Abstraction: Municipal Grounds: General Washing/Process Washing Abstraction Type: Water may be abstracted from a single point Source: Groundwater Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Swiss Cottage Open Space, Winchester Road, London Authorised Start: 01 April Authorised End: 31 March Permit Start Date: 5th December 2013 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m	A11SW (W)	1506	2	526750 184261
	Water Abstractions Operator: London Borough Of Camden Licence Number: Th/039/0039/087 Permit Version: 1 Location: Swiss Cottage Open Space- Borehole Authority: Environment Agency, Thames Region Abstraction: Municipal Grounds: Lake And Pond Throughflow Abstraction Type: Water may be abstracted from a single point Source: Groundwater Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Swiss Cottage Open Space, Winchester Road, London Authorised Start: 01 April Authorised End: 31 March Permit Start Date: 5th December 2013 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m	A11SW (W)	1506	2	526750 184261
	Water Abstractions Operator: Hanson Quarry Products Europe Ltd Licence Number: Th/039/0039/027 Permit Version: 2 Location: Kings Cross Concrete Plant-Borehole Authority: Environment Agency, Thames Region Abstraction: Mineral Products: General use relating to Secondary Category (High Loss) Abstraction Type: Water may be abstracted from a single point Source: Groundwater Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Kings Cross Concrete Plant, Off York Way, London. Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 13th August 2012 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m	A10NE (E)	1683	2	529920 184040
	Water Abstractions Operator: Hanson Quarry Products Europe Ltd Licence Number: Th/039/0039/027 Permit Version: 1 Location: Kings Cross Concrete Plant-Borehole Authority: Environment Agency, Thames Region Abstraction: Mineral Products: General use relating to Secondary Category (High Loss) Abstraction Type: Water may be abstracted from a single point Source: Groundwater Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Kings Cross Concrete Plant, Off York Way, London. Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 21st April 2010 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m	A10NE (E)	1683	2	529920 184040

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	Water Abstractions Operator: Hanson Quarry Products Europe Ltd Licence Number: 28/39/39/0222 Permit Version: 1 Location: Kings Cross Concrete Plant-Borehole Authority: Environment Agency, Thames Region Abstraction: Mineral Products: General use relating to Secondary Category (High Loss) Abstraction Type: Water may be abstracted from a single point Source: Groundwater Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Kings Cross Concrete Plant, Off York Way, London. Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 31st August 2006 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m	A10NE (E)	1683	2	529920 184040
	Water Abstractions Operator: British Waterways Board Licence Number: 28/39/39/0172 Permit Version: 100 Location: Grand Union Canal At Camley Street Nature Park, London Authority: Environment Agency, Thames Region Abstraction: Environmental: Non-remedial River/Wetland Support: Make-Up or Top Up Water Abstraction Type: Water may be abstracted from a single point Source: Surface Daily Rate (m3): 16 Yearly Rate (m3): 2273 Details: Camley Street Nature Park, Camden, London, Nw1 Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 18th September 1991 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m	A10SE (SE)	1687	2	529750 183600
	Groundwater Vulnerability Soil Classification: Not classified Map Sheet: Sheet 39 West London Scale: 1:100,000	A13NE (NW)	0	2	528272 184477
	Drift Deposits None				
	Bedrock Aquifer Designations Aquifer Designation: Unproductive Strata	A13NE (NW)	0	1	528272 184477
	Superficial Aquifer Designations No Data Available				
38	Source Protection Zones Name: Barrow Hill Source: Environment Agency, Head Office Reference: Th405 Type: Zone II (Outer Protection Zone): Either 25% of the source area or a 400 day travel time whichever is greater.	A12SE (SW)	570	2	527759 184155
39	Source Protection Zones Name: Barrow Hill Source: Environment Agency, Head Office Reference: Th405 Type: Zone I (Inner Protection Zone): Travel time of 50 days or less to the groundwater source.	A7NE (SW)	749	2	527741 183899
40	Source Protection Zones Name: Barrow Hill Source: Environment Agency, Head Office Reference: Th405 Type: Groundwater Source	A7SE (SW)	974	2	527640 183690
	Extreme Flooding from Rivers or Sea without Defences None				
	Flooding from Rivers or Sea without Defences None				
	Areas Benefiting from Flood Defences None				
	Flood Water Storage Areas None				

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	Flood Defences None				
41	OS Water Network Lines Watercourse Form: Canal Watercourse Length: 2255.3 Watercourse Level: On ground surface Permanent: True Watercourse Name: Regents Canal Catchment Name: Thames Primacy: 1	A8NE (SE)	470	5	528502 184019
42	OS Water Network Lines Watercourse Form: Canal Watercourse Length: 35.1 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Thames Primacy: 2	A9NW (SE)	489	5	528644 184104
43	OS Water Network Lines Watercourse Form: Canal Watercourse Length: 135.4 Watercourse Level: On ground surface Permanent: True Watercourse Name: Grand Union Canal Catchment Name: Thames Primacy: 1	A9NW (SE)	521	5	528666 184081
44	OS Water Network Lines Watercourse Form: Canal Watercourse Length: 60.2 Watercourse Level: On ground surface Permanent: True Watercourse Name: Grand Union Canal Catchment Name: Thames Primacy: 2	A14SW (SE)	574	5	528783 184152
45	OS Water Network Lines Watercourse Form: Canal Watercourse Length: 58.7 Watercourse Level: On ground surface Permanent: True Watercourse Name: Grand Union Canal Catchment Name: Thames Primacy: 1	A14SW (SE)	578	5	528782 184141
46	OS Water Network Lines Watercourse Form: Canal Watercourse Length: 57.8 Watercourse Level: On ground surface Permanent: True Watercourse Name: Grand Union Canal Catchment Name: Thames Primacy: 1	A14SW (SE)	606	5	528829 184169
47	OS Water Network Lines Watercourse Form: Canal Watercourse Length: 79.7 Watercourse Level: On ground surface Permanent: True Watercourse Name: Grand Union Canal Catchment Name: Thames Primacy: 1	A14SW (SE)	661	5	528886 184161
48	OS Water Network Lines Watercourse Form: Canal Watercourse Length: 84.9 Watercourse Level: On ground surface Permanent: True Watercourse Name: Grand Union Canal Catchment Name: Thames Primacy: 2	A14SW (SE)	661	5	528886 184161
49	OS Water Network Lines Watercourse Form: Canal Watercourse Length: 702.3 Watercourse Level: On ground surface Permanent: True Watercourse Name: Grand Union Canal Catchment Name: Thames Primacy: 1	A9NE (SE)	737	5	528955 184130

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
50	Licensed Waste Management Facilities (Locations) Licence Number: 80482 Location: 28 Jamestown Road, London, NW1 7BY Operator Name: Camden London Borough Council Operator Location: Not Supplied Authority: Environment Agency - Thames Region, North East Area Site Category: Household Waste Amenity Sites Licence Status: Surrendered Issued: 15th October 1994 Last Modified: Not Supplied Expires: Not Supplied Suspended: Not Supplied Revoked: Not Supplied Surrendered: 25th July 1997 IPPC Reference: Not Supplied Positional Accuracy: Located by supplier to within 10m	A9NW (SE)	554	2	528667 184035
51	Licensed Waste Management Facilities (Locations) Licence Number: 80349 Location: Recycling Centre, Regis Road, Kentish Town, London, NW5 3EP Operator Name: LondonWaste Ltd Operator Location: Not Supplied Authority: Environment Agency - Thames Region, North East Area Site Category: Household Waste Amenity Sites Licence Status: Transferred Issued: 10th December 1996 Last Modified: 25th January 2002 Expires: Not Supplied Suspended: Not Supplied Revoked: Not Supplied Surrendered: Not Supplied IPPC Reference: Not Supplied Positional Accuracy: Located by supplier to within 10m	A19NW (NE)	798	2	528726 185181
	Local Authority Landfill Coverage Name: London Borough of Camden - Has no landfill data to supply		0	6	528272 184477
	Local Authority Landfill Coverage Name: Westminster City Council - Has supplied landfill data		755	4	528216 183684
52	Potentially Infilled Land (Non-Water) Bearing Ref: N Use: Unknown Filled Ground (Pit, quarry etc) Date of Mapping: 1996	A18NE (N)	866	8	528279 185382
53	Potentially Infilled Land (Water) Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1951	A8NE (SE)	517	8	528604 184029
54	Potentially Infilled Land (Water) Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1951	A9NW (SE)	525	8	528626 184037
55	Potentially Infilled Land (Water) Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1951	A9NW (SE)	542	8	528668 184053
56	Potentially Infilled Land (Water) Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1951	A8SE (S)	774	8	528334 183663
57	Potentially Infilled Land (Water) Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1951	A8SW (S)	918	8	528200 183522
58	Potentially Infilled Land (Water) Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1951	A8SW (S)	945	8	528126 183504

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
59	Registered Waste Transfer Sites Licence Holder: L.B. of Camden Licence Reference: DL251 Site Location: Jamestown Road Recycling Centre, 28 Jamestown Road, CAMDEN, London, NW1 Operator Location: Old Town Hall, Haverstock Hill, CAMDEN, London, NW3 4QP Authority: Environment Agency - Thames Region, North East Area Site Category: Transfer Max Input Rate: Small (Equal to or greater than 10,000 and less than 25,000 tonnes per year) Waste Source: No known restriction on source of waste Restrictions: Licence Status: Licence has completion certificateSurrendered Dated: 5th October 1994 Preceded By: DL251 Licence: Superseded By: Not Given Licence: Positional Accuracy: Manually positioned to the address or location Boundary Quality: Not Supplied Authorised Waste: Lead/Acid Batteries Lwra Cat. A = Inert Wastes Lwra Cat. Bi Gen.Non-Putresc Mineral Oils Mostlwra Cat. C 'Putresc' Some Lwra Cat Bii Gen. Scrap Metal W. W.For Recycling (Cats A, Bi, C) Prohibited Waste: Clinical - As In Coll/Disp.Regis Of '88 Special Wastes N.O.S. Waste N.O.S.	A9NW (SE)	581	2	528690 184020
59	Registered Waste Transfer Sites Licence Holder: L.B. of Camden Licence Reference: DL251 Site Location: 28 Jamestown Road, CAMDEN, London, NW1 Operator Location: Old Town Hall, Haverstock Hill, CAMDEN, London, NW3 4QP Authority: Environment Agency - Thames Region, North East Area Site Category: Transfer Max Input Rate: Very Small (Less than 10,000 tonnes per year) Waste Source: No known restriction on source of waste Restrictions: Licence Status: Record supersededSuperseded Dated: 1st April 1987 Preceded By: CR/018 Licence: Superseded By: DL251 Licence: Positional Accuracy: Manually positioned to the address or location Boundary Quality: Not Supplied Authorised Waste: Civic Amenity/Refuse Amenity Waste Max.Waste Permitted By Licence(Stated) Metal Scrap Waste Mineral Oil Prohibited Waste: Clinical Wastes Notifiable Wastes Special Wastes	A9NW (SE)	581	2	528690 184020
60	Registered Waste Transfer Sites Licence Holder: N.L.W.A. Licence Reference: CR/018 Site Location: Jamestown Road, CAMDEN, London, NW1 Operator Location: Camden Town Hall, Euston Road, CAMDEN, London, NW1 2RU Authority: Environment Agency - Thames Region, North East Area Site Category: Transfer - Road Max Input Rate: Medium (Equal to or greater than 25,000 and less than 75,000 tonnes per year) Waste Source: No known restriction on source of waste Restrictions: Licence Status: Record supersededSuperseded Dated: 1st June 1977 Preceded By: Not Given Licence: Superseded By: DL251 Licence: Positional Accuracy: Manually positioned to the road within the address or location Boundary Quality: Not Supplied Authorised Waste: Civic Amenity/Refuse Amenity Waste House, Com + Ind.Waste Waste Oil Prohibited Waste: Clinical Wastes Difficult Waste N.O.S	A9NW (SE)	638	2	528750 184000

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
61	Registered Waste Treatment or Disposal Sites Licence Holder: Camden L.B.C Licence Reference: T/NE/0475090 (CAM070) Site Location: Regis Road Recycling Centre, CAMDEN, London, NW5 3EP Operator Location: Environment Department, Town Hall Extension, Argyle Street, London, Greater London, Wc1h 8eq Authority: Environment Agency - Thames Region, North East Area Site Category: Recycling / Reclamation Max Input Rate: Very Small (Less than 10,000 tonnes per year) Waste Source: No known restriction on source of waste Restrictions: Licence Status: Operational as far as is knownOperational Dated: 10th December 1996 Preceded By: Not Given Licence: Superseded By: Not Given Licence: Positional Accuracy: Manually positioned to the road within the address or location Boundary Quality: Not Supplied Authorised Waste: Elec/Onic Compts/Fix/Fit/App/Photocopi Empty Used Containers Lead/Acid Batteries Lighting Lamps/Tubes/Fluorescents Lwra Cat Bii Gen. Scrap Metal Waste Lwra Cat. A = Inert Wastes Lwra Cat. Bi Gen.Non-Putresc Lwra Cat. C 'Putresc' Mineral Oils Prohibited Waste: Waste N.O.S.	A19SW (NE)	749	2	528700 185140

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	BGS 1:625,000 Solid Geology Description: Thames Group	A13NE (NW)	0	1	528272 184477
	BGS Estimated Soil Chemistry No data available				
	BGS Measured Urban Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Grid: 528324, 184426 Soil Sample Type: Topsoil Sample Area: London Arsenic Measured 14.20 mg/kg Concentration: Cadmium Measured 1.00 mg/kg Concentration: Chromium Measured 70.70 mg/kg Concentration: Lead Measured 1103.10 mg/kg Concentration: Nickel Measured 29.00 mg/kg Concentration:	A13SE (SE)	41	1	528324 184426
	BGS Measured Urban Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Grid: 528240, 184781 Soil Sample Type: Topsoil Sample Area: London Arsenic Measured 16.70 mg/kg Concentration: Cadmium Measured 0.50 mg/kg Concentration: Chromium Measured 73.90 mg/kg Concentration: Lead Measured 994.20 mg/kg Concentration: Nickel Measured 26.20 mg/kg Concentration:	A13NW (N)	266	1	528240 184781
	BGS Measured Urban Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Grid: 528802, 184667 Soil Sample Type: Topsoil Sample Area: London Arsenic Measured 11.60 mg/kg Concentration: Cadmium Measured 0.40 mg/kg Concentration: Chromium Measured 21.60 mg/kg Concentration: Lead Measured 22.20 mg/kg Concentration: Nickel Measured 9.00 mg/kg Concentration:	A14NW (E)	532	1	528802 184667
	BGS Measured Urban Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Grid: 527717, 184227 Soil Sample Type: Topsoil Sample Area: London Arsenic Measured 21.20 mg/kg Concentration: Cadmium Measured 0.60 mg/kg Concentration: Chromium Measured 77.40 mg/kg Concentration: Lead Measured 2046.50 mg/kg Concentration: Nickel Measured 33.50 mg/kg Concentration:	A12SE (SW)	574	1	527717 184227

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	BGS Measured Urban Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Grid: 528869, 184298 Soil Sample Type: Topsoil Sample Area: London Arsenic Measured 14.30 mg/kg Concentration: Cadmium Measured 0.30 mg/kg Concentration: Chromium Measured 87.80 mg/kg Concentration: Lead Measured 1419.80 mg/kg Concentration: Nickel Measured 27.60 mg/kg Concentration:	A14SW (E)	601	1	528869 184298
	BGS Measured Urban Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Grid: 527678, 184753 Soil Sample Type: Topsoil Sample Area: London Arsenic Measured 19.10 mg/kg Concentration: Cadmium Measured 0.70 mg/kg Concentration: Chromium Measured 90.00 mg/kg Concentration: Lead Measured 1533.10 mg/kg Concentration: Nickel Measured 31.00 mg/kg Concentration:	A12NE (NW)	625	1	527678 184753
	BGS Measured Urban Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Grid: 528266, 185227 Soil Sample Type: Topsoil Sample Area: London Arsenic Measured 25.00 mg/kg Concentration: Cadmium Measured 24.70 mg/kg Concentration: Chromium Measured 201.90 mg/kg Concentration: Lead Measured 430.60 mg/kg Concentration: Nickel Measured 68.10 mg/kg Concentration:	A18NW (N)	711	1	528266 185227
	BGS Measured Urban Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Grid: 528234, 183700 Soil Sample Type: Topsoil Sample Area: London Arsenic Measured 31.90 mg/kg Concentration: Cadmium Measured 1.80 mg/kg Concentration: Chromium Measured 81.40 mg/kg Concentration: Lead Measured 1497.70 mg/kg Concentration: Nickel Measured 46.30 mg/kg Concentration:	A8SW (S)	738	1	528234 183700
	BGS Measured Urban Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Grid: 528707, 183811 Soil Sample Type: Topsoil Sample Area: London Arsenic Measured 20.20 mg/kg Concentration: Cadmium Measured 0.60 mg/kg Concentration: Chromium Measured 63.00 mg/kg Concentration: Lead Measured 2415.00 mg/kg Concentration: Nickel Measured 30.00 mg/kg Concentration:	A9NW (SE)	754	1	528707 183811

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	BGS Measured Urban Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Grid: 527766, 183762 Soil Sample Type: Topsoil Sample Area: London Arsenic Measured 17.80 mg/kg Concentration: Cadmium Measured 0.50 mg/kg Concentration: Chromium Measured 86.20 mg/kg Concentration: Lead Measured 432.00 mg/kg Concentration: Nickel Measured 27.40 mg/kg Concentration:	A7SE (SW)	841	1	527766 183762
	BGS Measured Urban Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Grid: 529127, 184723 Soil Sample Type: Topsoil Sample Area: London Arsenic Measured 21.10 mg/kg Concentration: Cadmium Measured 0.50 mg/kg Concentration: Chromium Measured 96.30 mg/kg Concentration: Lead Measured 766.20 mg/kg Concentration: Nickel Measured 36.80 mg/kg Concentration:	A14NE (E)	860	1	529127 184723
	BGS Measured Urban Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Grid: 527669, 185211 Soil Sample Type: Topsoil Sample Area: London Arsenic Measured 18.20 mg/kg Concentration: Cadmium Measured 0.60 mg/kg Concentration: Chromium Measured 99.60 mg/kg Concentration: Lead Measured 936.90 mg/kg Concentration: Nickel Measured 25.60 mg/kg Concentration:	A17NE (NW)	913	1	527669 185211
	BGS Measured Urban Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Grid: 528958, 185156 Soil Sample Type: Topsoil Sample Area: London Arsenic Measured 15.60 mg/kg Concentration: Cadmium Measured 0.60 mg/kg Concentration: Chromium Measured 61.70 mg/kg Concentration: Lead Measured 625.40 mg/kg Concentration: Nickel Measured 23.20 mg/kg Concentration:	A19NE (NE)	928	1	528958 185156

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	BGS Urban Soil Chemistry Averages Source: British Geological Survey, National Geoscience Information Service Sample Area: London Count Id: 7209 Arsenic Minimum Concentration: 1.00 mg/kg Arsenic Average Concentration: 17.00 mg/kg Arsenic Maximum Concentration: 161.00 mg/kg Cadmium Minimum Concentration: 0.10 mg/kg Cadmium Average Concentration: 0.90 mg/kg Cadmium Maximum Concentration: 165.20 mg/kg Chromium Minimum Concentration: 13.00 mg/kg Chromium Average Concentration: 79.00 mg/kg Chromium Maximum Concentration: 2094.00 mg/kg Lead Minimum Concentration: 11.00 mg/kg Lead Average Concentration: 280.00 mg/kg Lead Maximum Concentration: 10000.00 mg/kg Nickel Minimum Concentration: 2.00 mg/kg Nickel Average Concentration: 28.00 mg/kg Nickel Maximum Concentration: 506.00 mg/kg	A13NE (NW)	0	1	528272 184477
	Coal Mining Affected Areas In an area that might not be affected by coal mining				
	Non Coal Mining Areas of Great Britain No Hazard				
	Potential for Collapsible Ground Stability Hazards Hazard Potential: Very Low Source: British Geological Survey, National Geoscience Information Service	A13NE (NW)	0	1	528272 184477
	Potential for Compressible Ground Stability Hazards Hazard Potential: No Hazard Source: British Geological Survey, National Geoscience Information Service	A13NE (NW)	0	1	528272 184477
	Potential for Ground Dissolution Stability Hazards Hazard Potential: No Hazard Source: British Geological Survey, National Geoscience Information Service	A13NE (NW)	0	1	528272 184477
	Potential for Landslide Ground Stability Hazards Hazard Potential: Very Low Source: British Geological Survey, National Geoscience Information Service	A13NE (NW)	0	1	528272 184477
	Potential for Landslide Ground Stability Hazards Hazard Potential: Low Source: British Geological Survey, National Geoscience Information Service	A13SE (SE)	190	1	528371 184267
	Potential for Landslide Ground Stability Hazards Hazard Potential: Low Source: British Geological Survey, National Geoscience Information Service	A13SE (SE)	239	1	528427 184244
	Potential for Running Sand Ground Stability Hazards Hazard Potential: No Hazard Source: British Geological Survey, National Geoscience Information Service	A13NE (NW)	0	1	528272 184477
	Potential for Shrinking or Swelling Clay Ground Stability Hazards Hazard Potential: Moderate Source: British Geological Survey, National Geoscience Information Service	A13NE (NW)	0	1	528272 184477
	Radon Potential - Radon Affected Areas Affected Area: The property is in a Lower probability radon area (less than 1% of homes are estimated to be at or above the Action Level). Source: British Geological Survey, National Geoscience Information Service	A13NE (NW)	0	1	528272 184477
	Radon Potential - Radon Protection Measures Protection Measure: No radon protective measures are necessary in the construction of new dwellings or extensions Source: British Geological Survey, National Geoscience Information Service	A13NE (NW)	0	1	528272 184477

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
62	Contemporary Trade Directory Entries Name: Marine Ices Location: 8, Haverstock Hill, London, NW3 2BL Classification: Ice Cream Manufacturers & Suppliers Status: Inactive Positional Accuracy: Automatically positioned to the address	A13SW (SW)	54	-	528197 184426
62	Contemporary Trade Directory Entries Name: Marine Ices Location: 8, Haverstock Hill, London, NW3 2BL Classification: Ice Cream Manufacturers & Suppliers Status: Inactive Positional Accuracy: Automatically positioned to the address	A13SW (SW)	54	-	528197 184426
63	Contemporary Trade Directory Entries Name: S B Z Foods Location: 10a Belmont St, London, NW1 8HH Classification: Food Products - Manufacturers Status: Inactive Positional Accuracy: Manually positioned to the address or location	A13SE (SE)	70	-	528344 184399
63	Contemporary Trade Directory Entries Name: Austrian Sausage Centre Location: 10a, Belmont Street, London, NW1 8HH Classification: Meat Product Manufacturers & Wholesalers Status: Inactive Positional Accuracy: Automatically positioned to the address	A13SE (SE)	70	-	528344 184399
63	Contemporary Trade Directory Entries Name: Infectious Distribution Location: 25, Ferdinand Street, London, NW1 8EU Classification: Distribution Services Status: Inactive Positional Accuracy: Automatically positioned to the address	A13SE (SE)	107	-	528387 184403
64	Contemporary Trade Directory Entries Name: Chalk Farm Ford Location: 74-77, Chalk Farm Road, London, NW1 8AN Classification: Car Dealers Status: Inactive Positional Accuracy: Automatically positioned to the address	A13SE (S)	83	-	528314 184358
64	Contemporary Trade Directory Entries Name: Chalk Farm Tyres Location: 66, Chalk Farm Road, London, NW1 8AN Classification: Tyre Dealers Status: Inactive Positional Accuracy: Automatically positioned to the address	A13SE (SE)	114	-	528359 184350
65	Contemporary Trade Directory Entries Name: 365 Cleaning Camden Location: 155 Regents Park Road, London, NW1 8BB Classification: Cleaning Services - Domestic Status: Active Positional Accuracy: Automatically positioned to the address	A13SW (SW)	105	-	528167 184382
65	Contemporary Trade Directory Entries Name: 1 A Pest Control Location: Call Centre, Regents Pk Rd, London, NW1 8BB Classification: Pest & Vermin Control Status: Inactive Positional Accuracy: Manually positioned to the road within the address or location	A13SW (SW)	119	-	528166 184364
66	Contemporary Trade Directory Entries Name: Chalk Farm Location: 18 Haverstock Hill, London, NW3 2BL Classification: Cleaning Services - Domestic Status: Active Positional Accuracy: Manually positioned to the address or location	A13SW (W)	130	-	528117 184427
66	Contemporary Trade Directory Entries Name: American Dry Cleaners Location: 4, Chalk Farm Parade, Adelaide Road, LONDON, NW3 2BN Classification: Dry Cleaners Status: Active Positional Accuracy: Automatically positioned to the address	A13SW (W)	165	-	528085 184411
67	Contemporary Trade Directory Entries Name: Camden Cleaners Location: 2, Malden Road, London, NW5 3HR Classification: Cleaning Services - Domestic Status: Inactive Positional Accuracy: Automatically positioned to the address	A13NE (NE)	135	-	528339 184640

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
67	Contemporary Trade Directory Entries Name: Malden Dry Cleaner Location: 8, Malden Road, London, NW5 3HR Classification: Dry Cleaners Status: Inactive Positional Accuracy: Automatically positioned to the address	A13NE (N)	148	-	528331 184656
67	Contemporary Trade Directory Entries Name: Cam Autos Ltd Location: 4, Newbury Mews, London, NW5 3HP Classification: Garage Services Status: Inactive Positional Accuracy: Automatically positioned to the address	A13NE (NE)	156	-	528350 184658
67	Contemporary Trade Directory Entries Name: Antique Restorations Location: 13-15, Newbury Mews, London, NW5 3HP Classification: Antiques - Repairing & Restoring Status: Inactive Positional Accuracy: Automatically positioned in the proximity of the address	A13NE (NE)	164	-	528352 184665
68	Contemporary Trade Directory Entries Name: Marine Ices Location: 61, Chalk Farm Road, London, NW1 8AN Classification: Ice Cream Manufacturers & Suppliers Status: Active Positional Accuracy: Automatically positioned to the address	A13SE (SE)	141	-	528386 184337
68	Contemporary Trade Directory Entries Name: Reject Pot Shop Location: 56, Chalk Farm Road, London, NW1 8AN Classification: Catering Equipment Status: Active Positional Accuracy: Automatically positioned to the address	A13SE (SE)	162	-	528407 184330
68	Contemporary Trade Directory Entries Name: Reject Pot Shop Location: 56, Chalk Farm Road, London, NW1 8AN Classification: Tableware Status: Inactive Positional Accuracy: Automatically positioned to the address	A13SE (SE)	162	-	528408 184330
68	Contemporary Trade Directory Entries Name: Select Canvas Location: The Stables Market, Chalk Farm Rd, London, NW1 8AH Classification: Printers Status: Inactive Positional Accuracy: Manually positioned to the road within the address or location	A13SE (SE)	162	-	528392 184314
69	Contemporary Trade Directory Entries Name: Stonegate Cleaning Location: Flat 4, Stonegate, St. Silas Place, London, NW5 3QP Classification: Commercial Cleaning Services Status: Inactive Positional Accuracy: Automatically positioned to the address	A13NW (N)	144	-	528235 184657
70	Contemporary Trade Directory Entries Name: Kajima Community Location: 24, Haverstock Hill, London, NW3 2BQ Classification: Catering Equipment Status: Active Positional Accuracy: Automatically positioned to the address	A13NW (W)	168	-	528081 184497
71	Contemporary Trade Directory Entries Name: Fax Repair Co Location: Flat 25, Beauvale, Ferdinand Street, London, NW1 8EY Classification: Fax Machines Status: Inactive Positional Accuracy: Automatically positioned to the address	A13SE (E)	179	-	528467 184433
72	Contemporary Trade Directory Entries Name: A Aspinall Rubbish Clearance Location: 62, Juniper Crescent, London, NW1 8HQ Classification: Waste Disposal Services Status: Active Positional Accuracy: Automatically positioned to the address	A13SE (S)	192	-	528350 184255
73	Contemporary Trade Directory Entries Name: W M Morrisons Petrol Station Location: The Goods Yard, Chalk Farm Road, London, NW1 8AA Classification: Petrol Filling Stations Status: Active Positional Accuracy: Manually positioned to the address or location	A13SE (SE)	206	-	528420 184280

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
74	Contemporary Trade Directory Entries Name: Hope & Piaget Location: Unit 12/13, Burmarsh Workshops, 71, Marsden Street, London, NW5 3JA Classification: Antiques - Repairing & Restoring Status: Inactive Positional Accuracy: Automatically positioned to the address	A13NW (N)	235	-	528192 184738
74	Contemporary Trade Directory Entries Name: Jayne Ormonde Ltd Location: Unit 14, Burmarsh Workshops, 71, Marsden Street, London, NW5 3JA Classification: Candle Manufacturers & Suppliers Status: Inactive Positional Accuracy: Automatically positioned to the address	A13NW (N)	235	-	528192 184738
74	Contemporary Trade Directory Entries Name: Stop The Press Location: Unit 2, Burmarsh Workshops, 71, Marsden Street, London, NW5 3JA Classification: Screen Process Printers Status: Inactive Positional Accuracy: Manually positioned to the address or location	A13NW (N)	235	-	528192 184738
75	Contemporary Trade Directory Entries Name: Central London Building Supplies Location: 19, Talacre Road, London, NW5 3PH Classification: Builders' Merchants Status: Inactive Positional Accuracy: Automatically positioned to the address	A13NE (NE)	244	-	528429 184714
76	Contemporary Trade Directory Entries Name: Crystal Express Services Location: 46, Malden Road, London, NW5 3HG Classification: Dry Cleaners Status: Inactive Positional Accuracy: Automatically positioned to the address	A13NW (N)	274	-	528270 184790
76	Contemporary Trade Directory Entries Name: R P M Motors Location: Malden Rd, London, NW5 3HP Classification: Garage Services Status: Inactive Positional Accuracy: Manually positioned to the road within the address or location	A18SW (N)	306	-	528235 184820
77	Contemporary Trade Directory Entries Name: Hazara Enterprise Location: 14D The Stables Market, Chalk Farm Rd, London, NW1 8AH Classification: Furniture - Repairing & Restoring Status: Inactive Positional Accuracy: Manually positioned within the geographical locality	A13SE (SE)	280	-	528478 184234
77	Contemporary Trade Directory Entries Name: Hard Floor Cleaning Camden Location: Unit 90, The Stables Market, Chalk Farm Road, London, NW1 8AH Classification: Floor Cleaning & Polishing Equipment - Manufacturers & Distributors Status: Inactive Positional Accuracy: Automatically positioned to the address	A13SE (SE)	291	-	528483 184223
77	Contemporary Trade Directory Entries Name: Marquel Location: Unit 521, The Stables Market, Chalk Farm Road, London, NW1 8AH Classification: Jewellery Manufacturers & Repairers Status: Active Positional Accuracy: Automatically positioned to the address	A13SE (SE)	319	-	528524 184225
77	Contemporary Trade Directory Entries Name: X-Ray Fog Location: Unit 711, The Stables Market, Chalk Farm Rd, London, NW1 8AH Classification: T-Shirts Status: Inactive Positional Accuracy: Manually positioned within the geographical locality	A13SE (SE)	319	-	528524 184225
77	Contemporary Trade Directory Entries Name: Eye On Design Location: The Stables Market, Chalk Farm Rd, London, NW1 8AH Classification: Homefurnishings - Manufacturers Status: Inactive Positional Accuracy: Manually positioned within the geographical locality	A13SE (SE)	320	-	528524 184224
77	Contemporary Trade Directory Entries Name: Hooky Location: The Stables Market, Chalk Farm Rd, London, NW1 8AH Classification: Printers Textile Status: Inactive Positional Accuracy: Manually positioned within the geographical locality	A13SE (SE)	320	-	528524 184224

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
77	Contemporary Trade Directory Entries Name: Cactus London Location: The Stables Market, Chalk Farm Road, London, NW1 8AH Classification: Leather Merchants & Wholesalers Status: Active Positional Accuracy: Automatically positioned to the address	A13SE (SE)	332	-	528545 184230
77	Contemporary Trade Directory Entries Name: Tribu Location: Unit 99e, The Stables Market, Chalk Farm Road, London, NW1 8AH Classification: Jewellery Manufacturers & Repairers Status: Inactive Positional Accuracy: Automatically positioned to the address	A13SE (SE)	332	-	528545 184230
77	Contemporary Trade Directory Entries Name: Urban Clothing Location: The Stables Market, Chalk Farm Road, London, NW1 8AH Classification: Printers Textile Status: Inactive Positional Accuracy: Automatically positioned to the address	A13SE (SE)	332	-	528545 184230
77	Contemporary Trade Directory Entries Name: 2m Design Location: 2 Camon Lock Market, London, NW1 8AH Classification: Mirrors & Decorative Glass Status: Inactive Positional Accuracy: Manually positioned within the geographical locality	A13SE (SE)	353	-	528523 184176
78	Contemporary Trade Directory Entries Name: Stitch & Clean Location: 71, Prince of Wales Road, London, NW5 3LT Classification: Dry Cleaners Status: Active Positional Accuracy: Automatically positioned to the address	A13NE (NE)	294	-	528562 184625
79	Contemporary Trade Directory Entries Name: Oven Clean Team Location: Rhyl Street, London, NW5 3HB Classification: Oven cleaning Status: Inactive Positional Accuracy: Manually positioned within the geographical locality	A18SE (N)	311	-	528334 184823
80	Contemporary Trade Directory Entries Name: Ariel Medical Ltd Location: 4, Maitland Park Road, London, NW3 2ES Classification: Medical Equipment Manufacturers Status: Inactive Positional Accuracy: Automatically positioned to the address	A13NW (NW)	311	-	527991 184676
81	Contemporary Trade Directory Entries Name: Chalk Farm Service Station Location: 29 Chalk Farm Rd, London, NW1 8AJ Classification: Petrol Filling Stations - 24 Hour Status: Inactive Positional Accuracy: Manually positioned to the address or location	A13SE (SE)	317	-	528567 184291
82	Contemporary Trade Directory Entries Name: Mercantile Radio Services Ltd Location: 134a, Gloucester Avenue, London, NW1 8JA Classification: Telecommunications Equipment & Systems Status: Inactive Positional Accuracy: Automatically positioned to the address	A13SW (SW)	317	-	528056 184199
82	Contemporary Trade Directory Entries Name: London Communications Plc Location: 134-136, Gloucester Avenue, London, NW1 8JA Classification: Radio Communication Equipment Status: Inactive Positional Accuracy: Automatically positioned to the address	A13SW (SW)	317	-	528056 184199
82	Contemporary Trade Directory Entries Name: London Communications Plc Location: 134-136, Gloucester Avenue, London, NW1 8JA Classification: Radio Communication Equipment Status: Inactive Positional Accuracy: Automatically positioned to the address	A13SW (SW)	317	-	528056 184199
83	Contemporary Trade Directory Entries Name: Volvo Cars Regents Park Location: 1, Dumpton Place, London, NW1 8JB Classification: Garage Services Status: Inactive Positional Accuracy: Automatically positioned to the address	A8NW (S)	318	-	528166 184138

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
83	Contemporary Trade Directory Entries Name: Oven Cleaning Primrose Hill Location: 90, Gloucester Avenue, London, NW1 8HX Classification: Oven cleaning Status: Inactive Positional Accuracy: Automatically positioned to the address	A8NW (S)	331	-	528158 184128
84	Contemporary Trade Directory Entries Name: Ireson Associates Location: 110, Gloucester Avenue, London, NW1 8HX Classification: Stained Glass Designers & Producers Status: Inactive Positional Accuracy: Automatically positioned to the address	A13SW (SW)	325	-	528106 184158
85	Contemporary Trade Directory Entries Name: Georgiou Bros Location: 1-5, Harmood Grove, London, NW1 8DH Classification: Clothing & Fabrics - Manufacturers Status: Inactive Positional Accuracy: Automatically positioned to the address	A13SE (E)	334	-	528607 184350
85	Contemporary Trade Directory Entries Name: Lead & Light Location: 35a, Hartland Road, London, NW1 8DB Classification: Stained Glass Designers & Producers Status: Active Positional Accuracy: Automatically positioned to the address	A14SW (E)	349	-	528626 184366
85	Contemporary Trade Directory Entries Name: Ottolenghi Ltd Location: Unit 22, Hartland Rd Arches, Hartland Rd, London, NW1 8HR Classification: Food Products - Manufacturers Status: Inactive Positional Accuracy: Manually positioned to the road within the address or location	A14SW (E)	382	-	528659 184358
86	Contemporary Trade Directory Entries Name: H R Owen Location: 46-50, Gloucester Avenue, London, NW1 8JD Classification: Garage Services Status: Inactive Positional Accuracy: Automatically positioned to the address	A8NW (S)	341	-	528218 184101
87	Contemporary Trade Directory Entries Name: Buttle'S Location: London, NW1 8SY Classification: Builders' Merchants Status: Inactive Positional Accuracy: Automatically positioned to the address	A14SW (E)	348	-	528645 184472
88	Contemporary Trade Directory Entries Name: T A Location: Flat 24, Langridge, Rhyl Street, London, NW5 4LY Classification: Cleaning Materials & Equipment Status: Inactive Positional Accuracy: Automatically positioned to the address	A18SE (N)	352	-	528380 184855
89	Contemporary Trade Directory Entries Name: Morrisons Petrol Station Location: Chalk Farm Road, London, NW1 8AA Classification: Petrol Filling Stations Status: Active Positional Accuracy: Automatically positioned to the address	A8NE (S)	357	-	528412 184102
90	Contemporary Trade Directory Entries Name: Solus Norwich Union Location: 102a, Grafton Road, London, NW5 4BA Classification: Car Body Repairs Status: Inactive Positional Accuracy: Automatically positioned to the address	A13NE (NE)	365	-	528596 184707
91	Contemporary Trade Directory Entries Name: For Your Ears Only Ltd Location: Unit 88, The Stables Market, Chalk Farm Road, London, NW1 8AH Classification: Radio Communication Equipment Status: Inactive Positional Accuracy: Automatically positioned to the address	A13SE (SE)	378	-	528574 184192
91	Contemporary Trade Directory Entries Name: Unique Home London Location: Unit 53, The Stables Market, Chalk Farm Road, LONDON, NW1 8AH Classification: Lighting Manufacturers Status: Active Positional Accuracy: Automatically positioned to the address	A13SE (SE)	378	-	528574 184192

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
91	Contemporary Trade Directory Entries Name: Big Teezar Location: Unit 406, The Stables Market, Chalk Farm Road, LONDON, NW1 8AH Classification: T-Shirts Status: Active Positional Accuracy: Automatically positioned to the address	A13SE (SE)	378	-	528574 184192
92	Contemporary Trade Directory Entries Name: Butcher Ltd Location: 8, Fitzroy Road, London, NW1 8TX Classification: Plaster Manufacturers & Suppliers Status: Inactive Positional Accuracy: Automatically positioned to the address	A8NW (SW)	385	-	528090 184099
93	Contemporary Trade Directory Entries Name: Pink Piranha Location: 21, Chalk Farm Road, London, NW1 8AG Classification: Laundries & Launderettes Status: Inactive Positional Accuracy: Automatically positioned to the address	A14SW (SE)	391	-	528622 184238
94	Contemporary Trade Directory Entries Name: Primrose Scaffolders Location: 3, Fitzroy Road, London, NW1 8TU Classification: Scaffolding & Work Platforms Status: Inactive Positional Accuracy: Automatically positioned to the address	A8NW (S)	411	-	528154 184044
95	Contemporary Trade Directory Entries Name: Camden Town Brewery Location: Units 55-59, Wilkin Street Mews, London, NW5 3NN Classification: Brewers Status: Active Positional Accuracy: Automatically positioned to the address	A13NE (NE)	415	-	528584 184804
95	Contemporary Trade Directory Entries Name: Bill Bright'S Location: Former 54-56, Wilkin Street Mews, London, NW5 3NN Classification: Garage Services Status: Inactive Positional Accuracy: Automatically positioned to the address	A13NE (NE)	415	-	528585 184804
95	Contemporary Trade Directory Entries Name: Seb Ford (Coachworks) Ltd Location: 57-59, Wilkin Street Mews, Wilkin Street, London, NW5 3NN Classification: Car Body Repairs Status: Inactive Positional Accuracy: Automatically positioned in the proximity of the address	A13NE (NE)	416	-	528585 184804
95	Contemporary Trade Directory Entries Name: L G Coachworks Location: 61-65, Wilkin Street Mews, Wilkin Street, London, NW5 3NN Classification: Car Body Repairs Status: Inactive Positional Accuracy: Automatically positioned in the proximity of the address	A13NE (NE)	416	-	528585 184804
95	Contemporary Trade Directory Entries Name: Jack Bedoyian Location: 66, Wilkin Street Mews, Wilkin Street, London, NW5 3NN Classification: Garage Services Status: Inactive Positional Accuracy: Automatically positioned to the address	A13NE (NE)	418	-	528586 184807
95	Contemporary Trade Directory Entries Name: D P Enamellers Location: Imperial Works, Perren Street, London, NW5 3ED Classification: Powder Coatings Status: Inactive Positional Accuracy: Automatically positioned to the address	A14NW (NE)	421	-	528611 184784
95	Contemporary Trade Directory Entries Name: Best Cleaners Kentish Town Location: Flat 4,4 Perren Street, London, NW5 3EF Classification: Cleaning Services - Domestic Status: Inactive Positional Accuracy: Automatically positioned to the address	A14NW (NE)	438	-	528647 184764
96	Contemporary Trade Directory Entries Name: Dry Cleaners Of Hampstead Location: 80, Haverstock Hill, London, NW3 2BE Classification: Dry Cleaners Status: Active Positional Accuracy: Automatically positioned to the address	A12NE (NW)	416	-	527875 184684

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
96	Contemporary Trade Directory Entries Name: The Ranelagh Press Location: 84, Haverstock Hill, London, NW3 2BD Classification: Printers Status: Inactive Positional Accuracy: Automatically positioned to the address	A12NE (NW)	429	-	527864 184691
96	Contemporary Trade Directory Entries Name: Browns Industrial Group Ltd Location: 75, Haverstock Hill, London, NW3 4SL Classification: Sheet Metal Work Status: Inactive Positional Accuracy: Manually positioned to the address or location	A12NE (NW)	449	-	527831 184662
97	Contemporary Trade Directory Entries Name: Melrose & Morgan Location: Unit 23, Hartland Road Arches, Hartland Road, London, NW1 8HR Classification: Food Products - Manufacturers Status: Inactive Positional Accuracy: Automatically positioned to the address	A14SW (E)	418	-	528696 184358
98	Contemporary Trade Directory Entries Name: Pristine Location: 21, Cheriton, Queens Crescent, London, NW5 4EZ Classification: Dry Cleaners Status: Inactive Positional Accuracy: Automatically positioned to the address	A18SW (N)	423	-	528144 184920
99	Contemporary Trade Directory Entries Name: P H Factor Location: 172, Regents Park Road, London, NW1 8XN Classification: Toiletries Status: Inactive Positional Accuracy: Automatically positioned to the address	A13SW (SW)	427	-	527949 184145
99	Contemporary Trade Directory Entries Name: The Studio Location: 170, Regents Park Road, London, NW1 8XN Classification: Perfume Suppliers Status: Inactive Positional Accuracy: Automatically positioned to the address	A13SW (SW)	432	-	527946 184141
100	Contemporary Trade Directory Entries Name: Carpet Cleaning Nw5 Location: Flat 18, Priestley House, Wilkin Street, London, NW5 4LP Classification: Carpet, Curtain & Upholstery Cleaners Status: Inactive Positional Accuracy: Automatically positioned to the address	A18SE (NE)	444	-	528541 184879
100	Contemporary Trade Directory Entries Name: Piers Tarrant-Willis Location: Flat 3, Leonard Day House, Athlone Street, London, NW5 4LN Classification: French Polishing Status: Inactive Positional Accuracy: Automatically positioned to the address	A18SE (NE)	464	-	528556 184893
100	Contemporary Trade Directory Entries Name: Piers Tarrant Willis Location: Flat 3, Leonard Day House, Athlone Street, London, NW5 4LN Classification: Antiques - Repairing & Restoring Status: Inactive Positional Accuracy: Automatically positioned to the address	A18SE (NE)	464	-	528556 184893
100	Contemporary Trade Directory Entries Name: Athlone Press Location: 61, Grafton Road, London, NW5 3EN Classification: Printers Status: Inactive Positional Accuracy: Automatically positioned to the address	A18SE (NE)	505	-	528576 184929
100	Contemporary Trade Directory Entries Name: Christo Print & Design Ltd Location: 61, Grafton Road, London, NW5 3EN Classification: Printers Status: Active Positional Accuracy: Automatically positioned to the address	A18SE (NE)	505	-	528576 184929
101	Contemporary Trade Directory Entries Name: Clothing Co Location: 6, Erskine Road, London, NW3 3AJ Classification: Clothing & Fabrics - Manufacturers Status: Inactive Positional Accuracy: Manually positioned to the address or location	A12SE (SW)	451	-	527883 184184

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
101	Contemporary Trade Directory Entries Name: Blossom & Browne Sycamore Location: 160, Regents Park Road, London, NW1 8XN Classification: Dry Cleaners Status: Active Positional Accuracy: Automatically positioned to the address	A7NE (SW)	460	-	527928 184120
101	Contemporary Trade Directory Entries Name: Mel-Art Graphics Location: 158, Regents Park Road, London, NW1 8XN Classification: Printers Status: Inactive Positional Accuracy: Automatically positioned to the address	A7NE (SW)	466	-	527925 184115
101	Contemporary Trade Directory Entries Name: D & Mc Automobiles Location: A, 89, Regents Park Road, London, NW1 8UY Classification: Car Dealers Status: Inactive Positional Accuracy: Automatically positioned to the address	A12SE (SW)	471	-	527890 184144
101	Contemporary Trade Directory Entries Name: R J Welsh Location: 156, Regents Park Road, London, NW1 8XN Classification: Hardware Status: Inactive Positional Accuracy: Automatically positioned to the address	A7NE (SW)	471	-	527922 184111
101	Contemporary Trade Directory Entries Name: Northern Extremes Ltd Location: 4, Erskine Road, London, NW3 3AJ Classification: Footwear Manufacturers Status: Inactive Positional Accuracy: Automatically positioned to the address	A12SE (SW)	480	-	527860 184166
101	Contemporary Trade Directory Entries Name: Fara Kids Charity Shop Location: 83 Park Road, Primrose Hill, London, NW1 8UY Classification: Mechanical Engineers Status: Active Positional Accuracy: Manually positioned within the geographical locality	A7NE (SW)	497	-	527881 184114
102	Contemporary Trade Directory Entries Name: Heathcote & Ivory Location: Unit 1c, Utopia Village, 7, Chalcot Road, London, NW1 8LH Classification: Perfume Suppliers Status: Active Positional Accuracy: Automatically positioned to the address	A8NW (S)	453	-	528221 183987
102	Contemporary Trade Directory Entries Name: H & I Toiletries Location: Unit 1c, Utopia Village, 7, Chalcot Road, London, NW1 8LH Classification: Toiletries Status: Inactive Positional Accuracy: Automatically positioned to the address	A8NW (S)	453	-	528221 183987
102	Contemporary Trade Directory Entries Name: Saf (Uk) Ltd Location: Studio 1, Utopia Village, 7, Chalcot Road, London, NW1 8LH Classification: T-Shirts Status: Inactive Positional Accuracy: Manually positioned to the address or location	A8NW (S)	467	-	528198 183977
102	Contemporary Trade Directory Entries Name: 78 International Location: Studio 1, Utopia Village, 7, Chalcot Road, London, NW1 8LH Classification: Printers Status: Inactive Positional Accuracy: Manually positioned to the address or location	A8NW (S)	467	-	528198 183977
102	Contemporary Trade Directory Entries Name: Movers & Shapers Location: 9, Chalcot Road, London, NW1 8LH Classification: Leisure & Sportswear Manufacturers & Wholesalers Status: Inactive Positional Accuracy: Automatically positioned to the address	A8NW (S)	490	-	528187 183956
103	Contemporary Trade Directory Entries Name: Bubbles Launderette Location: 106, Malden Road, London, NW5 4DA Classification: Dry Cleaners Status: Inactive Positional Accuracy: Automatically positioned to the address	A18SW (N)	460	-	528187 184969

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
103	Contemporary Trade Directory Entries Name: Moderna Dry Cleaners Location: 70, Queens Crescent, London, NW5 4EE Classification: Dry Cleaners Status: Inactive Positional Accuracy: Automatically positioned to the address	A18SW (N)	497	-	528213 185010
103	Contemporary Trade Directory Entries Name: N T A Cleaning Services Ltd Location: 78, Queens Crescent, London, NW5 4EB Classification: Cleaning Services - Domestic Status: Active Positional Accuracy: Automatically positioned to the address	A18SW (N)	518	-	528243 185034
104	Contemporary Trade Directory Entries Name: Wheels Abroad Ltd Location: 68-70 Wilkin St, London, NW5 3NP Classification: Classic Car Specialists Status: Inactive Positional Accuracy: Manually positioned to the road within the address or location	A18SE (NE)	466	-	528591 184868
104	Contemporary Trade Directory Entries Name: Delbanco Meyer & Co Ltd Location: Portland House, Ryland Road, London, NW5 3EB Classification: Linen Manufacturers & Wholesalers Status: Inactive Positional Accuracy: Automatically positioned to the address	A18SE (NE)	469	-	528604 184861
104	Contemporary Trade Directory Entries Name: Art World Shipping Ltd Location: Ryland House, 24a, Ryland Road, London, NW5 3EH Classification: Freight Forwarders Status: Inactive Positional Accuracy: Automatically positioned to the address	A19SW (NE)	494	-	528631 184869
105	Contemporary Trade Directory Entries Name: Silk Shop Location: 45/46, Middle Yard, Camden Lock Place, London, NW1 8AF Classification: Clothing & Fabrics - Manufacturers Status: Inactive Positional Accuracy: Automatically positioned to the address	A9NW (SE)	481	-	528651 184124
105	Contemporary Trade Directory Entries Name: A B R Carpets Location: 73 West Yard, Camden Lock Place, London, NW1 8AF Classification: Breakdown and Recovery Status: Active Positional Accuracy: Automatically positioned to the address	A9NW (SE)	483	-	528624 184092
105	Contemporary Trade Directory Entries Name: Scrap Yard In Camden Town Location: Camden Lock Place, London, nw1 8af Classification: Car Breakers & Dismantlers Status: Inactive Positional Accuracy: Manually positioned within the geographical locality	A9NW (SE)	493	-	528630 184084
105	Contemporary Trade Directory Entries Name: Car Scraping Scrap Yards In North West London Location: 94, West Yard, Camden Lock Place, London, NW1 8AF Classification: Car Breakers & Dismantlers Status: Inactive Positional Accuracy: Automatically positioned to the address	A9NW (SE)	494	-	528630 184084
105	Contemporary Trade Directory Entries Name: World Panorama Ltd Location: West Yard, Camden Lock Pl, London, NW1 8AF Classification: Photo & Digital Imaging Bureaus Status: Inactive Positional Accuracy: Manually positioned to the address or location	A9NW (SE)	494	-	528630 184083
106	Contemporary Trade Directory Entries Name: Rileys Electricians Ltd Location: 210, Camden High Street, London, NW1 8QR Classification: Domestic Appliances - Servicing, Repairs & Parts Status: Inactive Positional Accuracy: Automatically positioned to the address	A14SW (SE)	493	-	528679 184140
107	Contemporary Trade Directory Entries Name: Abbas Location: 85, Haverstock Hill, London, NW3 4RL Classification: Brass & Copper Manufacturers & Suppliers Status: Inactive Positional Accuracy: Automatically positioned to the address	A12NE (NW)	494	-	527792 184687

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
108	Contemporary Trade Directory Entries Name: Fabric Lab Location: 54, Ainger Road, London, NW3 3AH Classification: Textile Manufacturing Status: Inactive Positional Accuracy: Automatically positioned to the address	A12SE (SW)	506	-	527822 184175
108	Contemporary Trade Directory Entries Name: Cork & Bottle Wines Ltd Location: 47, Ainger Road, London, NW3 3AH Classification: Bottle Manufacturers & Suppliers Status: Active Positional Accuracy: Automatically positioned to the address	A12SE (SW)	546	-	527797 184141
109	Contemporary Trade Directory Entries Name: Cameron Graphics Services Ltd Location: Studio 10, James Cameron House, Castlehaven Rd, London, NW1 8QW Classification: Digital Printing Status: Inactive Positional Accuracy: Manually positioned to the address or location	A14SW (SE)	513	-	528752 184224
110	Contemporary Trade Directory Entries Name: Bearoak Ltd Location: 73, Regents Park Road, London, NW1 8UY Classification: Cleaning Services - Commercial Status: Inactive Positional Accuracy: Automatically positioned to the address	A7NE (SW)	518	-	527872 184093
110	Contemporary Trade Directory Entries Name: Andrew Moor Associates Location: 14, Chamberlain Street, London, NW1 8XB Classification: Stained Glass Designers & Producers Status: Active Positional Accuracy: Automatically positioned to the address	A7NE (SW)	526	-	527862 184093
110	Contemporary Trade Directory Entries Name: New Brooms Location: 11, Chamberlain Street, London, NW1 8XB Classification: Cleaning Services - Domestic Status: Inactive Positional Accuracy: Automatically positioned to the address	A7NE (SW)	536	-	527846 184095
110	Contemporary Trade Directory Entries Name: R Danzig & Sons Ltd Location: 65, Regents Park Road, London, NW1 8XD Classification: Furriers Status: Inactive Positional Accuracy: Automatically positioned to the address	A7NE (SW)	545	-	527862 184066
110	Contemporary Trade Directory Entries Name: Gale Furs Location: 65, Regents Park Road, London, NW1 8XD Classification: Furriers Status: Inactive Positional Accuracy: Automatically positioned to the address	A7NE (SW)	545	-	527862 184066
111	Contemporary Trade Directory Entries Name: Primrose Carpet Cleaners Ltd Location: 4a, Manley Street, London, NW1 8LT Classification: Carpet, Curtain & Upholstery Cleaners Status: Inactive Positional Accuracy: Automatically positioned to the address	A8NW (S)	519	-	528134 183938
112	Contemporary Trade Directory Entries Name: Prince Of Wales Location: 17, Prince of Wales Road, London, NW5 3LH Classification: Dry Cleaners Status: Inactive Positional Accuracy: Automatically positioned to the address	A14NW (NE)	519	-	528777 184696
113	Contemporary Trade Directory Entries Name: Spellbound Entertainment Ltd Location: 6, Primrose Mews, Sharpleshall Street, London, NW1 8YW Classification: Television & Video Manufacturers & Wholesalers Status: Inactive Positional Accuracy: Automatically positioned to the address	A7NE (SW)	533	-	527925 184028
114	Contemporary Trade Directory Entries Name: Chico Ltd Location: 110-114, Grafton Road, London, NW5 4BA Classification: Clothing & Fabrics - Manufacturers Status: Inactive Positional Accuracy: Automatically positioned to the address	A18SE (NE)	539	-	528530 184996

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
114	Contemporary Trade Directory Entries Name: Zem Ltd Location: 110-114, Grafton Road, London, NW5 4BA Classification: Clothing & Fabrics - Manufacturers Status: Inactive Positional Accuracy: Automatically positioned to the address	A18SE (NE)	539	-	528530 184996
114	Contemporary Trade Directory Entries Name: Mimonc Ltd Location: 118-122, Grafton Road, London, NW5 4BA Classification: Footwear Manufacturers & Wholesale Status: Inactive Positional Accuracy: Automatically positioned to the address	A18SE (NE)	547	-	528511 185014
115	Contemporary Trade Directory Entries Name: Beacon Scaffolding Ltd Location: 36, Gloucester Avenue, London, NW1 7BB Classification: Scaffolding & Work Platforms Status: Inactive Positional Accuracy: Automatically positioned to the address	A8NE (S)	547	-	528426 183907
116	Contemporary Trade Directory Entries Name: Davey Autos Ltd Location: 6, Haven Street, London, NW1 8QX Classification: Garage Services Status: Inactive Positional Accuracy: Automatically positioned to the address	A14SW (SE)	557	-	528782 184184
116	Contemporary Trade Directory Entries Name: A J Autos Location: 6, Haven Street, London, NW1 8QX Classification: Car Engine Tuning & Diagnostic Services Status: Inactive Positional Accuracy: Automatically positioned to the address	A14SW (SE)	557	-	528782 184184
116	Contemporary Trade Directory Entries Name: Totos Car Clinic Location: 10-11 Leybourne Rd, London, NW1 8QY Classification: Car Body Repairs Status: Inactive Positional Accuracy: Manually positioned to the address or location	A14SW (SE)	573	-	528810 184208
116	Contemporary Trade Directory Entries Name: F & A Motors Location: 10, Leybourne Road, London, NW1 8QY Classification: Garage Services Status: Inactive Positional Accuracy: Automatically positioned to the address	A14SW (SE)	574	-	528811 184208
116	Contemporary Trade Directory Entries Name: W Starling Location: 9-11, Leybourne Road, London, NW1 8QY Classification: Car Body Repairs Status: Inactive Positional Accuracy: Automatically positioned to the address	A14SW (SE)	574	-	528811 184208
116	Contemporary Trade Directory Entries Name: Ardi Location: 9-11, Leybourne Road, London, NW1 8QY Classification: Garage Services Status: Inactive Positional Accuracy: Automatically positioned to the address	A14SW (SE)	574	-	528811 184208
116	Contemporary Trade Directory Entries Name: K & P Coachwork Location: 12, Leybourne Road, London, NW1 8QY Classification: Car Body Repairs Status: Inactive Positional Accuracy: Automatically positioned to the address	A14SW (SE)	579	-	528817 184209
116	Contemporary Trade Directory Entries Name: R J Motors Location: 8, Leybourne Road, London, NW1 8QY Classification: Car Body Repairs Status: Inactive Positional Accuracy: Automatically positioned in the proximity of the address	A14SW (SE)	583	-	528830 184230
116	Contemporary Trade Directory Entries Name: Morton Stockwell Location: 14, Leybourne Road, London, NW1 8QY Classification: Classic Car Specialists Status: Inactive Positional Accuracy: Automatically positioned to the address	A14SW (SE)	591	-	528831 184210

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
117	Contemporary Trade Directory Entries Name: Siciliana Dry Cleaners Location: 27, Princess Road, London, NW1 8JR Classification: Dry Cleaners Status: Active Positional Accuracy: Automatically positioned to the address	A8NW (S)	563	-	528239 183875
118	Contemporary Trade Directory Entries Name: E & D Scaffold Co Ltd Location: 128-130, Grafton Road, London, NW5 4BA Classification: Scaffolding & Work Platforms Status: Inactive Positional Accuracy: Automatically positioned to the address	A18SE (N)	564	-	528495 185040
118	Contemporary Trade Directory Entries Name: The Fibre-Base Location: Spring House, 10, Spring Place, London, NW5 3BH Classification: Photographic Processors Status: Inactive Positional Accuracy: Manually positioned to the address or location	A18SE (N)	604	-	528505 185079
118	Contemporary Trade Directory Entries Name: The Fielding Group Ltd Location: Spring House, 10, Spring Place, London, NW5 3BH Classification: Clothing & Fabrics - Manufacturers Status: Inactive Positional Accuracy: Manually positioned to the address or location	A18SE (N)	604	-	528505 185079
118	Contemporary Trade Directory Entries Name: Aktiva Location: Spring House, 10, Spring Place, London, NW5 3BH Classification: Lighting Manufacturers Status: Active Positional Accuracy: Automatically positioned to the address	A18SE (N)	605	-	528505 185079
119	Contemporary Trade Directory Entries Name: Serviceteam Ltd Location: Offices and Premises at 3rd Floor Rear, Camden Wharf, 28, Jamestown Road, London, NW1 7BY Classification: Waste Disposal Services Status: Inactive Positional Accuracy: Automatically positioned to the address	A9NW (SE)	580	-	528693 184024
119	Contemporary Trade Directory Entries Name: Dr Clive Medical Ltd Location: Apartment 303, 226, Arlington Road, London, NW1 7HY Classification: Pharmaceutical Manufacturers & Distributors Status: Inactive Positional Accuracy: Automatically positioned to the address	A9NW (SE)	622	-	528736 184009
120	Contemporary Trade Directory Entries Name: Adnina Trading Location: 163, Queens Crescent, London, NW5 4EA Classification: Toiletries Status: Inactive Positional Accuracy: Automatically positioned to the address	A18SW (N)	585	-	528262 185102
121	Contemporary Trade Directory Entries Name: James Phelps Ltd Location: 9, Hawley Road, London, NW1 8RP Classification: Builders' Merchants Status: Inactive Positional Accuracy: Automatically positioned to the address	A14SW (E)	589	-	528852 184278
121	Contemporary Trade Directory Entries Name: Phelps Location: 9, Hawley Road, London, NW1 8RP Classification: Builders' Merchants Status: Inactive Positional Accuracy: Automatically positioned to the address	A14SW (E)	589	-	528852 184278
121	Contemporary Trade Directory Entries Name: Croc Textile Location: New Hawley Primary School Development Site, 3, Hawley Road, London, NW1 8RP Classification: Clothing & Fabrics - Manufacturers Status: Inactive Positional Accuracy: Automatically positioned to the address	A14SW (E)	626	-	528884 184256

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
121	Contemporary Trade Directory Entries Name: Tower Garments Ltd Location: 1, Hawley Road, London, NW1 8RP Classification: Clothing & Fabrics - Manufacturers Status: Inactive Positional Accuracy: Automatically positioned to the address	A14SW (E)	636	-	528899 184273
122	Contemporary Trade Directory Entries Name: Max Fordham Llp Location: 42-43, Gloucester Crescent, London, NW1 7PE Classification: Engineering Services Status: Active Positional Accuracy: Automatically positioned to the address	A8NE (SE)	596	-	528580 183918
123	Contemporary Trade Directory Entries Name: Tom Thumb Location: 52, Auden Place, London, NW1 8ND Classification: Homefurnishings - Manufacturers Status: Active Positional Accuracy: Automatically positioned to the address	A8NW (S)	600	-	528162 183849
124	Contemporary Trade Directory Entries Name: Remapol Location: Flat 18, Hornbeam House, Maitland Park Villas, London, NW3 2EJ Classification: Furniture - Repairing & Restoring Status: Inactive Positional Accuracy: Automatically positioned to the address	A17SE (NW)	603	-	527890 184991
125	Contemporary Trade Directory Entries Name: Imedia Print (City) Ltd Location: 2, Centric Close, Oval Road, London, NW1 7EP Classification: Copying & Duplicating Services Status: Inactive Positional Accuracy: Automatically positioned to the address	A8NE (S)	615	-	528521 183868
125	Contemporary Trade Directory Entries Name: Lightning Graphics Location: 1, Centric Close, Oval Road, London, NW1 7EP Classification: Printers Status: Inactive Positional Accuracy: Automatically positioned to the address	A8NE (S)	628	-	528529 183857
126	Contemporary Trade Directory Entries Name: Leather Land Location: 230, Camden High Street, London, NW1 8QS Classification: Leather Garments & Products Status: Inactive Positional Accuracy: Automatically positioned to the address	A9NW (SE)	618	-	528791 184081
126	Contemporary Trade Directory Entries Name: Metalhead Location: 220, Camden High Street, London, NW1 8QR Classification: T-Shirts Status: Inactive Positional Accuracy: Automatically positioned to the address	A9NW (SE)	659	-	528819 184049
126	Contemporary Trade Directory Entries Name: Leather Clad Location: 247, Camden High Street, London, NW1 7BU Classification: Leather Garments & Products Status: Inactive Positional Accuracy: Manually positioned to the address or location	A9NW (SE)	678	-	528807 184004
126	Contemporary Trade Directory Entries Name: Master N V Biotech Ltd Location: 4, Stucley Place, London, NW1 8NS Classification: Laboratories Status: Inactive Positional Accuracy: Automatically positioned to the address	A9NW (SE)	690	-	528859 184054
127	Contemporary Trade Directory Entries Name: Harry Motors Location: 17, Leybourne Road, London, NW1 8QY Classification: Garage Services Status: Inactive Positional Accuracy: Automatically positioned to the address	A14SW (SE)	622	-	528866 184214
127	Contemporary Trade Directory Entries Name: Jacks Motors Location: 2, Torbay Street, London, NW1 8RR Classification: Mot Testing Centres Status: Inactive Positional Accuracy: Automatically positioned to the address	A14SW (E)	626	-	528876 184230

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
127	Contemporary Trade Directory Entries Name: J F S Location: 2a, Torbay Street, London, NW1 8RR Classification: Car Body Repairs Status: Inactive Positional Accuracy: Automatically positioned to the address	A14SW (E)	626	-	528876 184230
127	Contemporary Trade Directory Entries Name: Prowers Place Autos Location: 2, Torbay Street, London, NW1 8RR Classification: Car Body Repairs Status: Inactive Positional Accuracy: Automatically positioned to the address	A14SW (E)	626	-	528876 184230
127	Contemporary Trade Directory Entries Name: The Fremantle Corporation Location: 2, Water Lane, London, NW1 8NZ Classification: Distribution Services Status: Inactive Positional Accuracy: Automatically positioned to the address	A14SW (SE)	649	-	528886 184192
127	Contemporary Trade Directory Entries Name: E Supplier Ltd Location: 49, Kentish Town Road, London, NW1 8NX Classification: T-Shirts Status: Inactive Positional Accuracy: Automatically positioned to the address	A14SW (E)	667	-	528914 184217
127	Contemporary Trade Directory Entries Name: Adam Engineering Ltd Location: 49, Kentish Town Road, London, NW1 8NX Classification: Metal Workers Status: Inactive Positional Accuracy: Automatically positioned to the address	A14SW (E)	667	-	528914 184217
127	Contemporary Trade Directory Entries Name: Victory Motorcycles Location: 49, Kentish Town Road, London, NW1 8NX Classification: Motor Cycle Repairs Status: Inactive Positional Accuracy: Automatically positioned to the address	A14SW (E)	667	-	528914 184217
127	Contemporary Trade Directory Entries Name: Arthur'S Location: 49 Kentish Town Rd, London, NW1 8NX Classification: Car Body Repairs Status: Inactive Positional Accuracy: Automatically positioned to the address	A14SW (SE)	689	-	528930 184194
127	Contemporary Trade Directory Entries Name: Stars Digital Ltd Location: 47, Kentish Town Road, London, NW1 8NX Classification: Photo & Digital Imaging Bureaus Status: Inactive Positional Accuracy: Automatically positioned to the address	A14SW (SE)	690	-	528930 184194
127	Contemporary Trade Directory Entries Name: Cross Design & Print Location: 47, Kentish Town Road, London, NW1 8NX Classification: Printers Status: Inactive Positional Accuracy: Manually positioned to the address or location	A14SW (SE)	690	-	528930 184194
128	Contemporary Trade Directory Entries Name: Modern Motors Ltd Location: 95, Adelaide Road, London, NW3 3XX Classification: Garage Services Status: Active Positional Accuracy: Automatically positioned to the address	A12SE (W)	626	-	527628 184339
128	Contemporary Trade Directory Entries Name: Modern Motors Ltd Location: 95 Adelaide Rd, London, NW3 3QB Classification: Mot Testing Centres Status: Inactive Positional Accuracy: Manually positioned to the address or location	A12SE (W)	626	-	527628 184339
129	Contemporary Trade Directory Entries Name: Layal Location: 10, St. Georges Terrace, London, NW1 8XH Classification: Lingerie & Hosiery Manufacturers & Wholesalers Status: Inactive Positional Accuracy: Automatically positioned to the address	A7NE (SW)	626	-	527800 184012

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
130	Contemporary Trade Directory Entries Name: Plycraft Industries Location: 7, Parkhill Road, London, NW3 2YH Classification: Furniture Manufacturers - Home & Office Status: Inactive Positional Accuracy: Automatically positioned to the address	A17SE (NW)	635	-	527746 184892
131	Contemporary Trade Directory Entries Name: Better Sound Ltd Location: 31, Cathcart Street, London, NW5 3BJ Classification: Sound Equipment Systems Manufacturers Status: Inactive Positional Accuracy: Automatically positioned to the address	A19SW (NE)	644	-	528758 184953
132	Contemporary Trade Directory Entries Name: Queens Location: 201, Queens Crescent, London, NW5 4DS Classification: Dry Cleaners Status: Inactive Positional Accuracy: Automatically positioned to the address	A18NE (N)	648	-	528351 185160
132	Contemporary Trade Directory Entries Name: Cufflinks Location: 201, Queens Crescent, London, NW5 4DS Classification: Laundries & Launderettes Status: Inactive Positional Accuracy: Automatically positioned to the address	A18NE (N)	648	-	528351 185160
132	Contemporary Trade Directory Entries Name: A A Gold Location: 155-161, Grafton Road, London, NW5 4AY Classification: Car Dealers Status: Inactive Positional Accuracy: Automatically positioned to the address	A18NE (N)	675	-	528335 185189
132	Contemporary Trade Directory Entries Name: West Hampstead Motors Ltd Location: 155-161, Grafton Road, London, NW5 4AY Classification: Car Customisation & Conversion Specialists Status: Active Positional Accuracy: Automatically positioned to the address	A18NE (N)	675	-	528335 185189
133	Contemporary Trade Directory Entries Name: Parkway Filling Station Location: Oval Rd, London, NW1 7EB Classification: Petrol Filling Stations - 24 Hour Status: Inactive Positional Accuracy: Manually positioned to the road within the address or location	A8NE (SE)	649	-	528580 183858
134	Contemporary Trade Directory Entries Name: Spire B M W Highgate Location: 1, Browns Lane, London, NW5 3EX Classification: Car Dealers Status: Active Positional Accuracy: Automatically positioned to the address	A19SW (NE)	652	-	528626 185072
134	Contemporary Trade Directory Entries Name: Spire Automotive Location: 1, Browns Lane, London, NW5 3EX Classification: Garage Services Status: Active Positional Accuracy: Automatically positioned to the address	A19SW (NE)	652	-	528626 185072
135	Contemporary Trade Directory Entries Name: Spick 'N' Span Location: 121, Kentish Town Road, London, NW1 8PB Classification: Dry Cleaners Status: Inactive Positional Accuracy: Automatically positioned to the address	A14SE (E)	660	-	528958 184474
135	Contemporary Trade Directory Entries Name: D Webster & Son Location: 109, Kentish Town Road, London, NW1 8PB Classification: Joinery Manufacturers Status: Inactive Positional Accuracy: Automatically positioned to the address	A14SE (E)	664	-	528960 184442
135	Contemporary Trade Directory Entries Name: Dewhirst Location: Flat 6, 106-110, Kentish Town Road, London, NW1 9PX Classification: Clothing & Fabrics - Manufacturers Status: Active Positional Accuracy: Automatically positioned to the address	A14SE (E)	690	-	528987 184460

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
136	Contemporary Trade Directory Entries Name: Komodo Location: 77c, King Henrys Road, London, NW3 3QU Classification: Clothing & Fabrics - Manufacturers Status: Active Positional Accuracy: Automatically positioned to the address	A12SE (SW)	666	-	527629 184199
136	Contemporary Trade Directory Entries Name: Komodo Location: 77, King Henrys Road, London, NW3 3QU Classification: Clothing & Fabrics - Manufacturers Status: Inactive Positional Accuracy: Automatically positioned to the address	A12SE (SW)	666	-	527629 184199
136	Contemporary Trade Directory Entries Name: Cameron Design House Location: Unit 2, Primrose Hill Workshops, Oppidans Road, London, NW3 3AG Classification: Lighting Manufacturers Status: Active Positional Accuracy: Automatically positioned to the address	A12SE (SW)	677	-	527634 184161
137	Contemporary Trade Directory Entries Name: D S M Location: Flat 1, Carlton Chapel House, 1, Arctic Street, London, NW5 4DJ Classification: Commercial Vehicle Bodybuilders & Repairers Status: Inactive Positional Accuracy: Automatically positioned to the address	A18SE (N)	670	-	528515 185145
137	Contemporary Trade Directory Entries Name: Arctic Motors Location: Unit 1 Arctic Street, London, NW5 4DJ Classification: Garage Services Status: Active Positional Accuracy: Manually positioned to the address or location	A18SE (N)	672	-	528514 185148
137	Contemporary Trade Directory Entries Name: The Car Surgery Ltd Location: 2, Arctic Street, London, NW5 4DJ Classification: Garage Services Status: Active Positional Accuracy: Automatically positioned to the address	A18SE (N)	675	-	528517 185150
137	Contemporary Trade Directory Entries Name: Lewis Motors Location: 3, Arctic Street, London, NW5 4DJ Classification: Car Body Repairs Status: Inactive Positional Accuracy: Automatically positioned to the address	A18NE (N)	680	-	528522 185153
138	Contemporary Trade Directory Entries Name: Kall Kwik Location: 191, Kentish Town Road, London, NW5 2JU Classification: Printers Status: Active Positional Accuracy: Automatically positioned to the address	A14NW (E)	671	-	528928 184725
139	Contemporary Trade Directory Entries Name: Camden Metal Recycling Location: 49a Kentish Town Road, 1 The Arches, London, NW1 8NX Classification: Scrap Metal Merchants Status: Inactive Positional Accuracy: Manually positioned within the geographical locality	A14SW (E)	675	-	528926 184225
140	Contemporary Trade Directory Entries Name: Court Service Station Location: 160a, Malden Road, London, NW5 4BT Classification: Mot Testing Centres Status: Active Positional Accuracy: Automatically positioned to the address	A18NW (N)	677	-	528053 185158
141	Contemporary Trade Directory Entries Name: Kentish Town Scaffolders Location: Malden Rd, Kentish Town, London, NW5 4HT Classification: Scaffolding & Work Platforms Status: Inactive Positional Accuracy: Manually positioned within the geographical locality	A18SW (NW)	679	-	527984 185133
141	Contemporary Trade Directory Entries Name: Visage Dry Cleaners Location: 171, Malden Road, London, NW5 4HT Classification: Dry Cleaners Status: Active Positional Accuracy: Automatically positioned to the address	A18SW (NW)	692	-	527961 185137

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
142	Contemporary Trade Directory Entries Name: Cleaning Services Kentish Town Location: 6, Anglers Lane, London, NW5 3DG Classification: Cleaning Services - Domestic Status: Inactive Positional Accuracy: Automatically positioned to the address	A14NW (NE)	681	-	528909 184795
142	Contemporary Trade Directory Entries Name: Pro Cleaners Kentish Town Location: 207-209, Kentish Town Road, London, NW5 2JU Classification: Cleaning Services - Domestic Status: Inactive Positional Accuracy: Automatically positioned to the address	A14NW (NE)	704	-	528936 184792
143	Contemporary Trade Directory Entries Name: J D Cleaning Location: 140-142, Kentish Town Road, London, NW1 9QB Classification: Cleaning Services - Domestic Status: Inactive Positional Accuracy: Automatically positioned to the address	A14NE (E)	689	-	528966 184668
143	Contemporary Trade Directory Entries Name: Franchi Location: 144-146, Kentish Town Road, London, NW1 9QB Classification: Hardware Status: Active Positional Accuracy: Automatically positioned to the address	A14NE (E)	690	-	528963 184680
143	Contemporary Trade Directory Entries Name: Smart Line Location: 142, Kentish Town Road, London, NW1 9QB Classification: Dry Cleaners Status: Active Positional Accuracy: Manually positioned to the address or location	A14NE (E)	690	-	528964 184674
144	Contemporary Trade Directory Entries Name: North London Cleaners Location: 46, Rochester Road, London, NW1 9JJ Classification: Cleaning Services - Domestic Status: Inactive Positional Accuracy: Automatically positioned to the address	A14NE (E)	700	-	528991 184590
144	Contemporary Trade Directory Entries Name: Jewson Location: 2a, Bartholomew Road, London, NW5 2AJ Classification: Builders' Merchants Status: Active Positional Accuracy: Automatically positioned to the address	A14NE (E)	723	-	529008 184635
145	Contemporary Trade Directory Entries Name: Luckys Deluxe Ltd Location: 129, Weedington Road, London, NW5 4PQ Classification: Ice Cream Manufacturers & Suppliers Status: Inactive Positional Accuracy: Automatically positioned in the proximity of the address	A18NW (N)	702	-	528231 185218
145	Contemporary Trade Directory Entries Name: D Schuman Location: 129 Weedington Rd, London, NW5 4PQ Classification: Garage Services Status: Inactive Positional Accuracy: Manually positioned to the address or location	A18NW (N)	703	-	528231 185218
146	Contemporary Trade Directory Entries Name: Hampstead Crash Repairs Location: 75, Holmes Road, London, NW5 3AU Classification: Car Body Repairs Status: Inactive Positional Accuracy: Automatically positioned to the address	A19SW (NE)	703	-	528762 185033
146	Contemporary Trade Directory Entries Name: Magnet Trade Location: 75, Holmes Road, London, NW5 3AU Classification: Joinery Manufacturers Status: Inactive Positional Accuracy: Automatically positioned to the address	A19SW (NE)	703	-	528762 185033
146	Contemporary Trade Directory Entries Name: Magnet Trade Location: 75, Holmes Road, London, NW5 3AU Classification: Joinery Manufacturers Status: Inactive Positional Accuracy: Automatically positioned to the address	A19SW (NE)	703	-	528762 185033

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
146	Contemporary Trade Directory Entries Name: Carmel Clothing Location: 55-57, Holmes Road, LONDON, NW5 3AN Classification: Clothing & Fabrics - Manufacturers Status: Active Positional Accuracy: Automatically positioned to the address	A19SW (NE)	723	-	528792 185033
146	Contemporary Trade Directory Entries Name: Pc Clothing Ltd Location: Flat 14, 55-57, Holmes Road, London, NW5 3AN Classification: Clothing & Fabrics - Manufacturers Status: Inactive Positional Accuracy: Automatically positioned to the address	A19SW (NE)	723	-	528792 185033
146	Contemporary Trade Directory Entries Name: Olive Maintenance Location: 32, Holmes Road, London, NW5 3AB Classification: Air Conditioning Equipment & Systems Status: Inactive Positional Accuracy: Automatically positioned to the address	A19SW (NE)	773	-	528829 185066
147	Contemporary Trade Directory Entries Name: Holmes Road Coachworks Location: A, 74, Holmes Road, London, NW5 3AT Classification: Car Body Repairs Status: Inactive Positional Accuracy: Automatically positioned to the address	A19SW (NE)	705	-	528729 185063
147	Contemporary Trade Directory Entries Name: M A Motors Location: A, 74, Holmes Road, London, NW5 3AT Classification: Car Body Repairs Status: Inactive Positional Accuracy: Automatically positioned to the address	A19SW (NE)	705	-	528729 185063
148	Contemporary Trade Directory Entries Name: K C J Builders Location: 12, Inkerman Road, London, NW5 3BT Classification: Damp & Dry Rot Control Status: Active Positional Accuracy: Automatically positioned to the address	A19SW (NE)	707	-	528846 184947
149	Contemporary Trade Directory Entries Name: Switch Clothing Co Ltd Location: 22, Inverness Street, London, NW1 7HJ Classification: Clothing & Fabrics - Manufacturers Status: Inactive Positional Accuracy: Automatically positioned to the address	A9NW (SE)	710	-	528785 183932
150	Contemporary Trade Directory Entries Name: Allchin Pharmacy Location: 28, Englands Lane, London, NW3 4UE Classification: Pharmaceutical Manufacturers & Distributors Status: Inactive Positional Accuracy: Automatically positioned to the address	A12NW (W)	727	-	527536 184627
150	Contemporary Trade Directory Entries Name: Red Grey Ltd Location: 32, Englands Lane, London, NW3 4UE Classification: Electrical Goods Sales, Manufacturers & Wholesalers Status: Inactive Positional Accuracy: Automatically positioned to the address	A12NW (W)	740	-	527522 184625
151	Contemporary Trade Directory Entries Name: R K P Hardware D I Y Location: 51, Englands Lane, LONDON, NW3 4YD Classification: Hardware Status: Inactive Positional Accuracy: Automatically positioned to the address	A12NW (W)	734	-	527517 184557
151	Contemporary Trade Directory Entries Name: Chequers Dry Cleaners Location: 48, Englands Lane, London, NW3 4UE Classification: Dry Cleaners Status: Inactive Positional Accuracy: Automatically positioned to the address	A12NW (W)	752	-	527502 184579
151	Contemporary Trade Directory Entries Name: Chase Dry Cleaners Location: 74 Whitton, Primrose Hill Rd, London, NW3 4AB Classification: Dry Cleaners Status: Inactive Positional Accuracy: Manually positioned to the road within the address or location	A12NW (W)	755	-	527493 184534

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
152	Contemporary Trade Directory Entries Name: Featherclean Location: 3, Grand Union Walk, Kentish Town Road, London, NW1 9LP Classification: Cleaning Services - Domestic Status: Active Positional Accuracy: Automatically positioned to the address	A9NE (SE)	749	-	528957 184106
153	Contemporary Trade Directory Entries Name: Urgent Detergent Location: 160, Camden Street, London, NW1 9PT Classification: Commercial Cleaning Services Status: Inactive Positional Accuracy: Automatically positioned to the address	A14SE (E)	750	-	529006 184233
153	Contemporary Trade Directory Entries Name: Urgent Detergent Location: 160, Camden Street, London, NW1 9PT Classification: Cleaning Services - Domestic Status: Inactive Positional Accuracy: Automatically positioned to the address	A14SE (E)	750	-	529006 184233
154	Contemporary Trade Directory Entries Name: Unity Kitchen H Q Location: 60, Holmes Road, London, NW5 3AQ Classification: Car Customisation & Conversion Specialists Status: Active Positional Accuracy: Automatically positioned to the address	A19SW (NE)	755	-	528759 185104
154	Contemporary Trade Directory Entries Name: Magnet Trade Location: Mary Brancker House, 54-74, Holmes Road, London, NW5 3AQ Classification: Joinery Manufacturers Status: Inactive Positional Accuracy: Manually positioned to the address or location	A19SW (NE)	755	-	528759 185104
154	Contemporary Trade Directory Entries Name: Henry Bertrand Ltd Location: 52, Holmes Road, London, NW5 3AB Classification: Clothing & Fabrics - Manufacturers Status: Inactive Positional Accuracy: Automatically positioned to the address	A19SW (NE)	765	-	528789 185093
154	Contemporary Trade Directory Entries Name: Get Location: Alpha House, Regis Road, London, NW5 3EW Classification: Clothing & Fabrics - Manufacturers Status: Inactive Positional Accuracy: Manually positioned to the address or location	A19SW (NE)	792	-	528777 185137
155	Contemporary Trade Directory Entries Name: M D A Motors Location: 60, Rochester Place, London, NW1 9JX Classification: Garage Services Status: Active Positional Accuracy: Automatically positioned to the address	A14NE (E)	769	-	529067 184516
155	Contemporary Trade Directory Entries Name: Mda Motors Location: 50, Rochester Place, London, NW1 9JX Classification: Garage Services Status: Inactive Positional Accuracy: Automatically positioned to the address	A14NE (E)	799	-	529097 184492
156	Contemporary Trade Directory Entries Name: Moth Trap Location: Regis Rd, London, NW5 3EW Classification: Pest & Vermin Control Status: Inactive Positional Accuracy: Manually positioned within the geographical locality	A19SW (NE)	769	-	528723 185148
157	Contemporary Trade Directory Entries Name: Sansone Location: A, 24, Bartholomew Villas, London, NW5 2LL Classification: Antiques - Repairing & Restoring Status: Inactive Positional Accuracy: Automatically positioned to the address	A14NE (E)	777	-	529038 184732
158	Contemporary Trade Directory Entries Name: S & A Electricals Location: 245, Kentish Town Road, London, NW5 2JT Classification: Domestic Appliances - Servicing, Repairs & Parts Status: Inactive Positional Accuracy: Automatically positioned to the address	A19SE (NE)	777	-	528964 184897

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
158	Contemporary Trade Directory Entries Name: S & A Electricals Location: 245, Kentish Town Road, London, NW5 2JT Classification: Domestic Appliances - Servicing, Repairs & Parts Status: Inactive Positional Accuracy: Automatically positioned to the address	A19SE (NE)	777	-	528964 184897
158	Contemporary Trade Directory Entries Name: Greetings From The Heart Location: 251, Kentish Town Road, London, NW5 2JT Classification: Greeting Card Publishers & Wholesalers Status: Inactive Positional Accuracy: Manually positioned to the address or location	A19SE (NE)	784	-	528960 184915
158	Contemporary Trade Directory Entries Name: Superdrug Location: 218-220, Kentish Town Road, London, NW5 2AD Classification: Chemists' & Pharmacists' Suppliers & Wholesalers Status: Active Positional Accuracy: Automatically positioned to the address	A19SE (NE)	824	-	529000 184927
159	Contemporary Trade Directory Entries Name: Caraselle Ltd Location: Unit 4, Kentish Town Industrial Estate, Regis Road, London, NW5 3EW Classification: Laundry & Dry Cleaning Supplies Status: Inactive Positional Accuracy: Automatically positioned to the address	A19NW (NE)	785	-	528670 185201
159	Contemporary Trade Directory Entries Name: Caraselle Location: Unit 4, Kentish Town Industrial Estate, Regis Road, London, NW5 3EW Classification: Laundries & Launderettes Status: Inactive Positional Accuracy: Automatically positioned to the address	A19NW (NE)	785	-	528670 185201
159	Contemporary Trade Directory Entries Name: Caraselle Location: Unit 4, Kentish Town Industrial Estate, Regis Road, London, NW5 3EW Classification: Laundry & Dry Cleaning Supplies Status: Inactive Positional Accuracy: Automatically positioned to the address	A19NW (NE)	785	-	528670 185201
159	Contemporary Trade Directory Entries Name: Caraselle Location: Unit 4, Kentish Town Industrial Estate, Regis Road, London, NW5 3EW Classification: Clothing Accessory Manufacturers Status: Inactive Positional Accuracy: Automatically positioned to the address	A19NW (NE)	785	-	528670 185201
159	Contemporary Trade Directory Entries Name: E K O Location: Unit 1-3, Kentish Town Industrial Estate, Regis Road, London, NW5 3EW Classification: Office Furniture & Equipment Status: Active Positional Accuracy: Automatically positioned to the address	A19NW (NE)	791	-	528652 185218
160	Contemporary Trade Directory Entries Name: Think Tank Media Location: 7-8, Jeffreys Place, London, NW1 9PP Classification: Printers Status: Inactive Positional Accuracy: Automatically positioned to the address	A14SE (E)	789	-	529057 184277
160	Contemporary Trade Directory Entries Name: Motorweld Location: 11-14, Ivor Street, London, NW1 9PJ Classification: Garage Services Status: Inactive Positional Accuracy: Automatically positioned in the proximity of the address	A14SE (E)	805	-	529064 184233
160	Contemporary Trade Directory Entries Name: Sun & Seed Ltd Location: 7, Ivor Street, London, NW1 9PL Classification: Food Products - Manufacturers Status: Active Positional Accuracy: Automatically positioned to the address	A14SE (E)	805	-	529071 184264

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
160	Contemporary Trade Directory Entries Name: Warren Evans Location: 3a, Prowse Place, London, NW1 9PH Classification: Bed & Mattress Manufacturers Status: Inactive Positional Accuracy: Automatically positioned to the address	A14SE (E)	818	-	529063 184184
161	Contemporary Trade Directory Entries Name: Elizabeth Street Antiques & Restoration Services Location: 22, Holmes Road, London, NW5 3AB Classification: Antiques - Repairing & Restoring Status: Inactive Positional Accuracy: Automatically positioned to the address	A19SW (NE)	791	-	528865 185056
162	Contemporary Trade Directory Entries Name: Cresta Motors Location: 3, Patshull Road, London, NW5 2JX Classification: Garage Services Status: Active Positional Accuracy: Automatically positioned to the address	A19SE (NE)	793	-	529018 184828
163	Contemporary Trade Directory Entries Name: Acquisitions Location: 24-26, Holmes Road, London, NW5 3AB Classification: Fireplaces & Mantelpieces Status: Active Positional Accuracy: Automatically positioned to the address	A19SW (NE)	793	-	528856 185067
163	Contemporary Trade Directory Entries Name: Howden'S Joinery Ltd Location: Regis Road, London, NW5 3EW Classification: Builders' Merchants Status: Inactive Positional Accuracy: Automatically positioned to the address	A19SW (NE)	839	-	528879 185109
164	Contemporary Trade Directory Entries Name: Foot Locker (Uk) Ltd Location: 195, Camden High Street, London, NW1 7BT Classification: Leisure & Sportswear Manufacturers & Wholesalers Status: Inactive Positional Accuracy: Automatically positioned to the address	A9NW (SE)	794	-	528864 183893
165	Contemporary Trade Directory Entries Name: Cleaning Services Camden Location: 13, Kentish Town Road, London, NW1 8NH Classification: Carpet, Curtain & Upholstery Cleaners Status: Inactive Positional Accuracy: Automatically positioned to the address	A9NW (SE)	795	-	528916 183953
166	Contemporary Trade Directory Entries Name: North London Cleaners Location: 46 Rochester Road, London, Nw1 9JJ Classification: Cleaning Services - Domestic Status: Inactive Positional Accuracy: Manually positioned within the geographical locality	A14NE (E)	798	-	529090 184597
167	Contemporary Trade Directory Entries Name: Pest Control Camden Location: 196 Malden Rd, London, NW5 4BS Classification: Pest & Vermin Control Status: Inactive Positional Accuracy: Manually positioned to the address or location	A17NE (NW)	801	-	527897 185227
168	Contemporary Trade Directory Entries Name: Cleaners Of Camden Location: 34, Primrose Gardens, London, NW3 4TN Classification: Carpet, Curtain & Upholstery Cleaners Status: Inactive Positional Accuracy: Automatically positioned to the address	A12NW (W)	806	-	527485 184753
169	Contemporary Trade Directory Entries Name: Service Point Location: 46-52, Parkway, London, NW1 7AH Classification: Printers Status: Inactive Positional Accuracy: Automatically positioned to the address	A9SW (SE)	818	-	528770 183777
169	Contemporary Trade Directory Entries Name: Paradise Cleaners Location: 58, Parkway, London, NW1 7AH Classification: Dry Cleaners Status: Active Positional Accuracy: Automatically positioned to the address	A9SW (SE)	825	-	528756 183759

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
169	Contemporary Trade Directory Entries Name: London Boys Scrap Yards In Camden Town Location: 33, Parkway, London, NW1 7PN Classification: Car Breakers & Dismantlers Status: Inactive Positional Accuracy: Automatically positioned to the address	A9SW (SE)	837	-	528809 183784
169	Contemporary Trade Directory Entries Name: It Green Location: Unit5 Parkway, London, NW1 7AH Classification: Computer Recycling & Disposal Status: Inactive Positional Accuracy: Manually positioned to the road within the address or location	A9SW (SE)	840	-	528769 183750
170	Contemporary Trade Directory Entries Name: D 2 W Location: 61-63, Rochester Place, London, NW1 9JU Classification: Printers Status: Active Positional Accuracy: Automatically positioned to the address	A14SE (E)	821	-	529116 184432
170	Contemporary Trade Directory Entries Name: Brian Crisp Location: 1, Wilmot Place, London, NW1 9JS Classification: Photographic Processors Status: Inactive Positional Accuracy: Automatically positioned to the address	A14SE (E)	847	-	529141 184414
171	Contemporary Trade Directory Entries Name: Kara Services Location: 38, Fellows Road, London, NW3 3LH Classification: Cleaning Services - Domestic Status: Inactive Positional Accuracy: Automatically positioned to the address	A12SW (W)	827	-	527417 184459
172	Contemporary Trade Directory Entries Name: Animal Affinity Location: 31, Cressfield Close, London, NW5 4BN Classification: Pet Foods & Animal Feeds Status: Inactive Positional Accuracy: Automatically positioned to the address	A18NE (N)	831	-	528438 185333
173	Contemporary Trade Directory Entries Name: Diamond Roach Location: 1a, Bonny Street, London, NW1 9PE Classification: Printers Status: Inactive Positional Accuracy: Automatically positioned to the address	A14SE (E)	832	-	529074 184173
173	Contemporary Trade Directory Entries Name: Cleaning Services Camden Town Location: 13, Bonny Street, London, NW1 9PE Classification: Commercial Cleaning Services Status: Inactive Positional Accuracy: Automatically positioned to the address	A14SE (E)	861	-	529110 184190
173	Contemporary Trade Directory Entries Name: Cleaning Services Camden Town Location: 13, Bonny Street, London, NW1 9PE Classification: Commercial Cleaning Services Status: Active Positional Accuracy: Automatically positioned to the address	A14SE (E)	861	-	529110 184190
174	Contemporary Trade Directory Entries Name: K T Auto Services Location: Bartholomew Rd, London, NW5 2AR Classification: Garage Services Status: Inactive Positional Accuracy: Manually positioned to the road within the address or location	A14NE (E)	835	-	529120 184642
175	Contemporary Trade Directory Entries Name: Cleaning Services (Belsize Park) Location: 64, Parkhill Road, London, NW3 2YT Classification: Cleaning Services - Domestic Status: Inactive Positional Accuracy: Automatically positioned to the address	A17NE (NW)	839	-	527761 185189
176	Contemporary Trade Directory Entries Name: S Dawson Location: 4, Vicars Road, London, NW5 4NL Classification: Antiques - Repairing & Restoring Status: Inactive Positional Accuracy: Automatically positioned to the address	A18NW (N)	839	-	528191 185352

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
176	Contemporary Trade Directory Entries Name: J C Press Location: A, 12, Vicars Road, London, NW5 4NL Classification: Printers Status: Inactive Positional Accuracy: Automatically positioned to the address	A18NW (N)	839	-	528191 185352
176	Contemporary Trade Directory Entries Name: P R Leer Location: 2, Vicars Road, London, NW5 4NL Classification: Cabinet Makers Status: Inactive Positional Accuracy: Automatically positioned to the address	A18NW (N)	839	-	528191 185352
177	Contemporary Trade Directory Entries Name: 1st Option Representation Location: 1, Parkway, London, NW1 7PG Classification: Photographic Processors Status: Inactive Positional Accuracy: Manually positioned to the address or location	A9NW (SE)	852	-	528891 183837
178	Contemporary Trade Directory Entries Name: Infolink Communications Ltd Location: 2, Camden Road, London, NW1 9DL Classification: Telecommunications Equipment & Systems Status: Inactive Positional Accuracy: Automatically positioned to the address	A9NE (SE)	857	-	528954 183902
179	Contemporary Trade Directory Entries Name: Philippe Dubreuille Custom Guitars Location: 96, Parkway, London, NW1 7AN Classification: Musical Instrument - Manufacturers Status: Active Positional Accuracy: Automatically positioned to the address	A9SW (SE)	858	-	528702 183686
179	Contemporary Trade Directory Entries Name: Echo Sourcing Ltd Location: 110-112, Parkway, London, NW1 7AN Classification: Clothing Accessory Manufacturers Status: Inactive Positional Accuracy: Automatically positioned to the address	A9SW (SE)	867	-	528678 183664
179	Contemporary Trade Directory Entries Name: Smart Dry Cleaners Location: 104, Parkway, London, NW1 7AN Classification: Dry Cleaners Status: Inactive Positional Accuracy: Automatically positioned to the address	A9SW (SE)	867	-	528692 183671
179	Contemporary Trade Directory Entries Name: Smarts Dry Cleaners Location: 104, Parkway, London, NW1 7AN Classification: Dry Cleaners Status: Active Positional Accuracy: Automatically positioned to the address	A9SW (SE)	867	-	528692 183671
179	Contemporary Trade Directory Entries Name: Kb Export Location: 81, Parkway, London, NW1 7PP Classification: Scrap Metal Merchants Status: Inactive Positional Accuracy: Automatically positioned to the address	A9SW (SE)	882	-	528726 183672
179	Contemporary Trade Directory Entries Name: Wallace & Sons Repointing Location: Flat 1, 89-95, Parkway, London, NW1 7PP Classification: Blast Cleaning Status: Active Positional Accuracy: Automatically positioned to the address	A9SW (SE)	897	-	528713 183648
180	Contemporary Trade Directory Entries Name: Snappy Snaps 170 Location: 299 Kentish Town Rd, London, NW5 2TJ Classification: Photographic Processors Status: Inactive Positional Accuracy: Manually positioned to the address or location	A19SE (NE)	861	-	528976 185030
181	Contemporary Trade Directory Entries Name: 24 Hour Mobile Tyres Location: 61, Parkway, London, NW1 7PP Classification: Tyre Repairs & Retreading Status: Active Positional Accuracy: Automatically positioned to the address	A9SW (SE)	868	-	528753 183705

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
182	Contemporary Trade Directory Entries Name: Rapha Racing Location: 22-24, Camden Road, London, NW1 9DP Classification: Leisure & Sportswear Manufacturers & Wholesalers Status: Inactive Positional Accuracy: Automatically positioned to the address	A9NE (SE)	873	-	529009 183949
183	Contemporary Trade Directory Entries Name: Transformation Location: 17-19, Bonny Street, London, NW1 9PE Classification: Refrigeration Equipment - Commercial Status: Inactive Positional Accuracy: Automatically positioned to the address	A14SE (E)	878	-	529127 184187
183	Contemporary Trade Directory Entries Name: Clearest Colour Print Location: 17-19, Bonny Street, London, NW1 9PE Classification: Printers Status: Inactive Positional Accuracy: Automatically positioned to the address	A14SE (E)	878	-	529127 184187
183	Contemporary Trade Directory Entries Name: Compass & Diamond Print Solutions Ltd Location: 17-19, Bonny Street, London, NW1 9PE Classification: Printers Status: Active Positional Accuracy: Automatically positioned to the address	A14SE (E)	878	-	529127 184187
183	Contemporary Trade Directory Entries Name: The Transfer Works Location: 17-19, Bonny Street, London, NW1 9PE Classification: Printers Status: Active Positional Accuracy: Automatically positioned to the address	A14SE (E)	879	-	529127 184186
184	Contemporary Trade Directory Entries Name: Parcelworld Uk Ltd Location: 233, Royal College Street, London, NW1 9LT Classification: Freight Forwarders Status: Inactive Positional Accuracy: Automatically positioned to the address	A14SE (E)	886	-	529149 184241
184	Contemporary Trade Directory Entries Name: Terminix Peter Cox Ltd Location: 231, Royal College Street, London, NW1 9LT Classification: Damp & Dry Rot Control Status: Inactive Positional Accuracy: Automatically positioned to the address	A14SE (E)	891	-	529153 184235
185	Contemporary Trade Directory Entries Name: J A Harnett Location: 4, Lancaster Stables, Lambolle Place, London, NW3 4PH Classification: Antiques - Repairing & Restoring Status: Inactive Positional Accuracy: Automatically positioned to the address	A12NW (W)	888	-	527379 184661
185	Contemporary Trade Directory Entries Name: Haywood Motors Location: A, 23, Lambolle Place, London, NW3 4PG Classification: Garage Services Status: Active Positional Accuracy: Automatically positioned to the address	A12NW (W)	905	-	527361 184663
185	Contemporary Trade Directory Entries Name: Belsize Motors Location: A, 23, Lambolle Place, London, NW3 4PG Classification: Garage Services Status: Inactive Positional Accuracy: Automatically positioned to the address	A12NW (W)	905	-	527361 184663
186	Contemporary Trade Directory Entries Name: Express Dry Cleaners Location: 48, Camden Road, London, NW1 9DR Classification: Dry Cleaners Status: Active Positional Accuracy: Automatically positioned to the address	A9NE (SE)	889	-	529058 183998
187	Contemporary Trade Directory Entries Name: Frank W Marshall & Co Ltd Location: 25, Wolsey Mews, London, NW5 2DX Classification: Joinery Manufacturers Status: Inactive Positional Accuracy: Automatically positioned to the address	A19SE (NE)	892	-	529040 184992

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
188	Contemporary Trade Directory Entries Name: Aderin Trading Co Location: 31, Wood Field, Parkhill Road, London, NW3 2YA Classification: Leather Merchants & Wholesalers Status: Inactive Positional Accuracy: Automatically positioned to the address	A17NE (NW)	898	-	527701 185217
189	Contemporary Trade Directory Entries Name: Gayle Mcvay Location: 52, Belsize Park Gardens, London, NW3 4ND Classification: Hats & Caps - Manufacturers Status: Inactive Positional Accuracy: Automatically positioned to the address	A12NW (W)	901	-	527379 184728
190	Contemporary Trade Directory Entries Name: Hmc Fleet Maintenance Centre Location: 3, Eton Garages, Lambolle Place, London, NW3 4PE Classification: Garage Services Status: Inactive Positional Accuracy: Automatically positioned to the address	A12NW (W)	907	-	527346 184585
190	Contemporary Trade Directory Entries Name: Little & Pace Location: 3, Eton Garages, Lambolle Place, London, NW3 4PE Classification: Garage Services Status: Inactive Positional Accuracy: Automatically positioned to the address	A12NW (W)	907	-	527346 184585
190	Contemporary Trade Directory Entries Name: Little & Pace Location: 3, Eton Garages, Lambolle Place, London, NW3 4PE Classification: Garage Services Status: Active Positional Accuracy: Automatically positioned to the address	A12NW (W)	907	-	527346 184585
190	Contemporary Trade Directory Entries Name: Little & Pace Motors Location: 2-3 Eton Garages, Lambolle Pl, London, NW3 4PE Classification: Garage Services Status: Inactive Positional Accuracy: Manually positioned to the address or location	A12NW (W)	909	-	527346 184596
190	Contemporary Trade Directory Entries Name: Mark One Motors Location: 5-6, Eton Garages, Lambolle Place, London, NW3 4PE Classification: Garage Services Status: Inactive Positional Accuracy: Automatically positioned to the address	A12NW (W)	912	-	527339 184570
190	Contemporary Trade Directory Entries Name: Beta Lighting Ltd Location: 19, Eton Garages, Lambolle Place, London, NW3 4PE Classification: Lighting Manufacturers Status: Inactive Positional Accuracy: Automatically positioned to the address	A12NW (W)	925	-	527332 184610
190	Contemporary Trade Directory Entries Name: Rayden Location: 17, Eton Garages, Lambolle Place, London, NW3 4PE Classification: Car Body Repairs Status: Inactive Positional Accuracy: Automatically positioned to the address	A12NW (W)	929	-	527326 184596
190	Contemporary Trade Directory Entries Name: Porsheworx Engineering Ltd Location: 2, Lambolle Place, London, NW3 4PD Classification: Garage Services Status: Active Positional Accuracy: Automatically positioned to the address	A12NW (W)	953	-	527303 184607
190	Contemporary Trade Directory Entries Name: Belsize Motors Location: 3, Lambolle Place, London, NW3 4PD Classification: Car Engine Tuning & Diagnostic Services Status: Inactive Positional Accuracy: Automatically positioned to the address	A12NW (W)	956	-	527299 184600
190	Contemporary Trade Directory Entries Name: Autotech Hamstead Location: 3, Lambolle Place, London, NW3 4PD Classification: Garage Services Status: Active Positional Accuracy: Automatically positioned to the address	A12NW (W)	956	-	527299 184600

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
190	Contemporary Trade Directory Entries Name: Hampstead Motor Services Uk Ltd Location: 4, Lambolle Place, London, NW3 4PD Classification: Garage Services Status: Active Positional Accuracy: Automatically positioned to the address	A12NW (W)	958	-	527295 184591
191	Contemporary Trade Directory Entries Name: D J Nicholls Location: 28c, Bartholomew Road, London, NW5 2AJ Classification: Cleaning Services - Commercial Status: Inactive Positional Accuracy: Automatically positioned to the address	A14NE (E)	915	-	529200 184650
192	Contemporary Trade Directory Entries Name: N K Print & Design Location: 186, Royal College Street, London, NW1 9NN Classification: Printers Status: Active Positional Accuracy: Automatically positioned to the address	A14SE (E)	918	-	529181 184240
192	Contemporary Trade Directory Entries Name: Radiance Printers Location: Execo House, 182, Royal College Street, London, NW1 9NN Classification: Printers Status: Inactive Positional Accuracy: Automatically positioned to the address	A14SE (E)	927	-	529189 184234
192	Contemporary Trade Directory Entries Name: Swedbrand Location: 180, Royal College Street, London, NW1 9NN Classification: Boxes & Cartons Status: Active Positional Accuracy: Automatically positioned to the address	A14SE (E)	933	-	529195 184232
192	Contemporary Trade Directory Entries Name: Jansen Uk Location: 65, Camden Road, London, NW1 9EU Classification: Hardware Status: Active Positional Accuracy: Automatically positioned to the address	A14SE (E)	937	-	529203 184251
192	Contemporary Trade Directory Entries Name: D Jansen Location: 65, Camden Road, London, NW1 9EU Classification: Gas Suppliers Status: Inactive Positional Accuracy: Automatically positioned to the address	A14SE (E)	937	-	529203 184251
192	Contemporary Trade Directory Entries Name: Home Cleaning (London) Location: 69, Camden Road, London, NW1 9EU Classification: Cleaning Services - Domestic Status: Inactive Positional Accuracy: Automatically positioned to the address	A14SE (E)	946	-	529214 184257
192	Contemporary Trade Directory Entries Name: Heaven Dry Cleaners Location: 112, Camden Road, London, NW1 9EE Classification: Dry Cleaners Status: Active Positional Accuracy: Automatically positioned to the address	A14SE (E)	965	-	529222 184208
192	Contemporary Trade Directory Entries Name: Camden Scaffolding Location: 114, Camden Road, London, NW1 9EE Classification: Scaffolding & Work Platforms Status: Inactive Positional Accuracy: Automatically positioned to the address	A14SE (E)	967	-	529224 184211
193	Contemporary Trade Directory Entries Name: Fads Location: 159-161, Camden High Street, London, NW1 7JY Classification: Wallpapers & Wall Coverings Status: Inactive Positional Accuracy: Automatically positioned to the address	A9SW (SE)	919	-	528926 183778
193	Contemporary Trade Directory Entries Name: Camden Town Carpet Cleaners Ltd Location: 157a, Camden High Street, London, NW1 7JY Classification: Cleaning Services - Domestic Status: Inactive Positional Accuracy: Automatically positioned to the address	A9SW (SE)	931	-	528932 183767