



Mr P Roberts
PLP Construction Ltd
30 Rochdale Lane
Heywood
Lancs
OL10 1PF

BY EMAIL

Our Ref: NW191/01/L1/Ogjc

4th June 2026

Dear Paul

Smithybridge Pub
Landscape Soils Validation

In accordance with your instruction, we visited the above site on the 28th April 2026 to collect subsoil samples and again on the 6th May 2026 to confirm the soil cover system thickness in landscape area in the vicinity of TP2.

Background

The Remediation Statement (NW149/02remV2), prepared by ARP Geotechnical Limited, dated 7th February 2024, recommends the placement of a minimum 0.6m thickness of clean cover soils in soft landscape areas at /around TP2.

The topsoil (approximately 100t) was confirmed as a manufactured multipurpose topsoil produced from a PAS 100 compost and sand blend at the Bryn Gates Lane facility in Wigan. This material is certified to BS 3882:2015. The subsoil was imported from Shire Hill Quarry. Test certificates for the subsoil and topsoil were reviewed prior to the material being imported to site.

Validation Site Work

First validation Visit

On arrival at site on the 28th April 2026, a stockpile of imported subsoil was present at the centre of the site. The subsoil was described as brown slightly gravelly slightly clayey sand with occasional cobbles of sandstone. The visual description was consistent with the soil texture results provided prior to import. The stockpile was covered in tarpaulin. A total of three samples were collected from the stockpile.

The area of the proposed landscaping near TP2 had been stripped at the time of the site visit down to approximately 0.5m depth below the level of concrete at the base of the retaining wall which is to be retained. Natural clay was present across much of the base of the strip, with granular made ground also present.



Second validation visit

On arrival at site on 6th May 2026, a stockpile of imported topsoil was present at the centre of the site. The topsoil was described as dark brown slightly silty slightly clayey sandy topsoil with rare gravel of sandstone. The visual description was consistent with the soil texture results provided prior to import. The stockpile was covered in tarpaulin. A total of three samples were collected from the stockpile. At the time of the second validation visit the soft landscaped area along the southern boundary with Smithybridge Road had largely been completed.

In areas where the installation of clean cover was complete along the south and southwestern boundary trial pits were hand excavated logged, sampled and photographed and backfilled by the ARP engineer. In hand pit HP1 the clean cover thickness was confirmed to be 0.6m depth. The clean cover comprised topsoil to 0.3m overlying brown slightly gravelly slightly clayey sandy subsoil (consistent with subsoil previously sampled) proven to 0.6m depth. In hand pit HP2 topsoil the clean cover comprised topsoil to 0.35m depth over lying stiff brown slightly gravelly sandy clay (natural soil) to at least 0.5m depth. Not possible to dig any deeper due to the stiffness of the clay.

A third hand pit was excavated, HP3, where subsoil had been placed but was still awaiting application of the final topsoil cover. At this location, the subsoil layer thickness was confirmed to be 0.2m depth, comprising brown slightly gravelly sandy subsoil with rare cobbles of sandstone. A black geotextile liner was visually verified and documented at the base of this subsoil layer, marking the boundary with the underlying formation.

The proposed landscape area in the vicinity of TP2 was incomplete on the 6th May 2026 due to ongoing drainage installation. However, a photographic record provided by the contractor following the final application of clean cover in this area (Photograph 21 attached) confirms that the topsoil has been placed above the baseline concrete visible in Photograph 2. This clearly demonstrates that the clean cover exceeds the 0.6m requirement.

Laboratory Testing

A total of three samples of subsoil and three samples of topsoil were dispatched to a UKAS accredited Laboratory, for testing for a standard suite of determinands. The test certificates and screening values, which are appended, indicate that all determinands are below appropriate screening values (residential without home grown produce), and there is no asbestos present. Therefore, the topsoil and subsoil are considered environmentally suitable for placement in the landscaped area, in terms of human health.

Conclusion

In the light of the above, it is concluded that an appropriate depth of clean cover has been placed, and laboratory testing of the topsoil and subsoil present indicates they are suitable for use on the plots, in terms of human health.



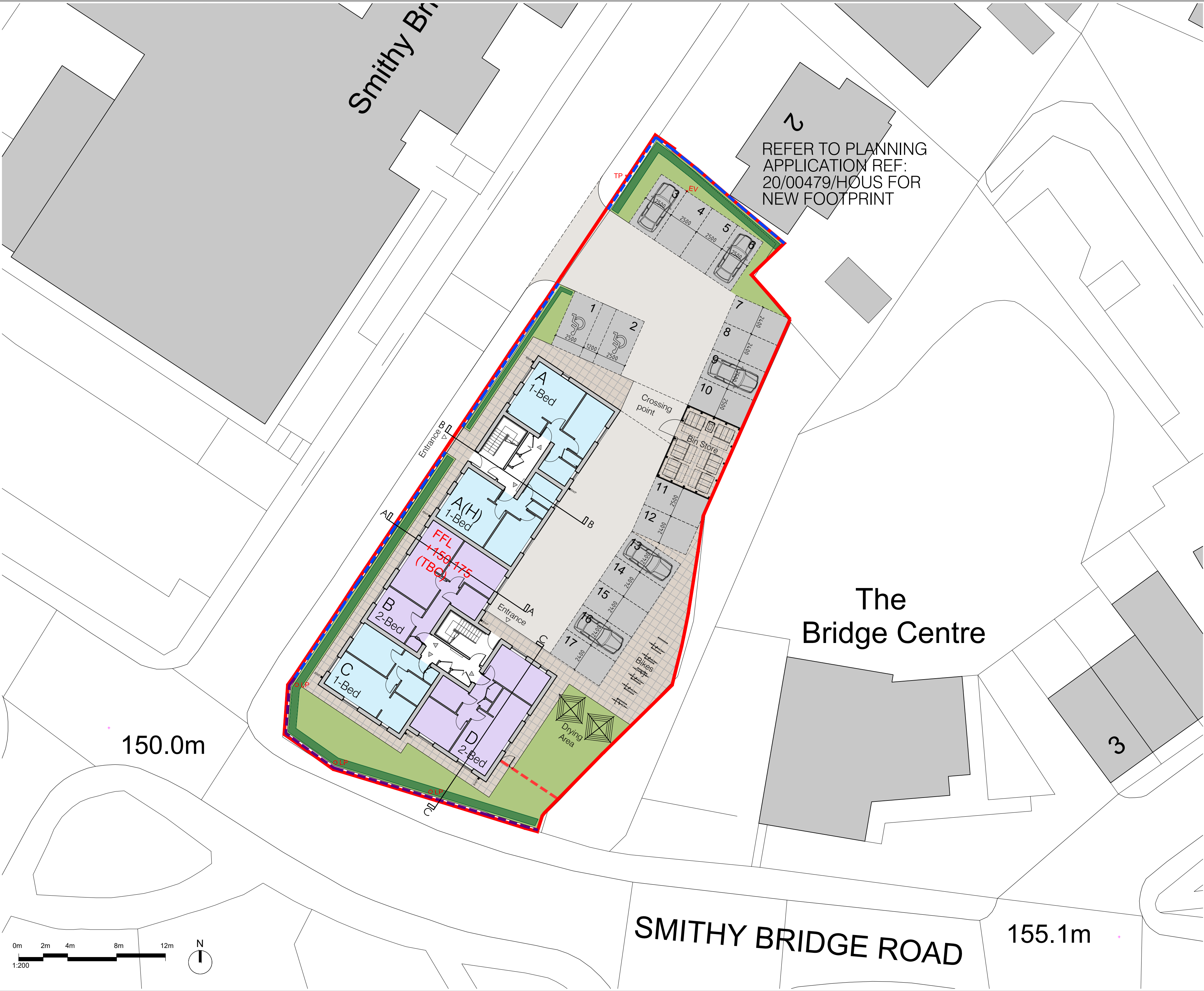
We trust the above and attachments are satisfactory, but should you have any queries, please do not hesitate to contact us.

Yours sincerely
for ARP (NORTH WEST)

A handwritten signature in black ink, appearing to be 'O Gwilym'.

O Gwilym

Encs



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- CHECK ALL DIMENSIONS ON SITE.
- DRAWING TO BE READ IN CONJUNCTION WITH THE HEALTH & SAFETY PLAN, AND ALL RELEVANT RISK ASSESSMENTS AND THE FOLLOWING DRAWINGS:

Schedule of Accommodation

Housetype	Description	Area/m2	Total
A	1B2P Apartment	42.7	2
A(H)	1B2P Apartment	42.7	2
B	2B4P Apartment	60.1	2
C	1B2P Apartment	44.1	2
D	2B4P Apartment	59.7	2
E	1B2P Apartment	43.7	1
F	1B2P Apartment	43.4	1
G	1B2P Apartment	45.4	1
H	1B2P Apartment	45.1	1
Total			14 units
Car parking : 19No (136% Parking)			

Landscape Key

- | | | | |
|--|---------------------------------------|--|-----------------------------------|
| | Car Park Space (Permeable surface) | | Bin Location |
| | Tarmac | | Buff Paving (450x450 Paving) |
| | Grass | | Existing Telephone Pole relocated |
| | New Hedge | | Existing Lamppost relocated |
| | IP Rated 13A double electrical socket | | Site Boundary (0.12Ha) |

Boundary Treatments

- | | |
|--|---|
| | 900MM HIGH RAILINGS & METAL POSTS |
| | LOW RETAINING WALL UPSTAND WITH 1100MM RAILINGS ABOVE (FALL PROTECTION) |
| | 2100MM HIGH CONCRETE POST AND amended. Entrance to Stair 1 amended. |

Rev Date By Remarks

Client: Armstrong Projects Ltd

Project Name: The Smithybridge Pub, Littleborough

Drawing Name: Proposed Site Plan

Drawing Purpose: PLANNING

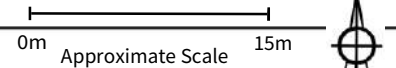
Project Drawing Number: Revision: 20.02.21 04 A

Project Origin Val / Sys level Type Role Number

Status: Scale @ A2: 1:200@A2 Drawn: AJD Checked: BPM Date: JULY 2021



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- KEY**
- Windowless Sample Boreholes (2021)
 - Dynamic probe (2021)
 - Hand Pits (2021)
 - Cable Percussive boreholes (2024)
 - Post demolition trial pits (2024)
 - Post demolition hand pits surrounding WS4 (2024)



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Project	THE FORMER SMITHYBRIDGE PUB LITTLEBOROUGH	
Client	ARMSTRONG PROJECTS LTD	
Title	COMBINED SITE INVESTIGATION PLAN	
Date	JANUARY 2024	
Drawn	OG	Scale AS SHOWN
Job No.	NW149/02	



ARP GEOTECHNICAL LIMITED
SOIL CONTAMINANT SCREENING VALUES
RESIDENTIAL WITHOUT HOME-GROWN PRODUCE

Determinand	S4UL (mg/kg)			C4SL (mg/kg)		
Arsenic	40			40		
Cadmium	85			150		
Chromium (trivalent)	910					
Chromium (hexavalent)	6			21		
Copper	7100					
Lead				310		
Inorganic Mercury	56			300		
Nickel	180					
Selenium	430					
Zinc	40000					
Acidity (pH)	*Should be Greater Than 5			*Should be Greater Than 5		
	1% SOM	2.5% SOM	6% SOM	1% SOM	2.5% SOM	6% SOM
Naphthalene	2.3	5.6	13	15	36	85
Acenaphthylene	2900	4600	6000			
Acenaphthene	3000	4700	6000			
Fluorene	2800	3800	4500			
Phenanthrene	1300	1500	1500			
Anthracene	31000	35000	37000			
Fluoranthene	1500	1600	1600			
Pyrene	3700	3800	3800			
Benzo(a)anthracene	11	14	15			
Chrysene	30	31	32			
Benzo(b)fluoranthene	3.9	4	4			
Benzo(k)fluoranthene	110	110	110			
Benzo(a)pyrene	3.2	3.2	3.2			5.3
Indeno(1,2,3-cd)pyrene	45	46	46			
Dibenzo(a,h)anthracene	0.31	0.32	0.32			
Benzo(g,h,i)perylene	360	360	360			
Phenols	440	690	1200			
Total TPH	*Above 500, speciate and compare with values below:					
C5 to C6 Aliphatic	42	78	160			
C6 to C8 Aliphatic	100	230	530			
C8 to C10 Aliphatic	27	65	150			
C10 to C12 Aliphatic	130	330	770			
C12 to C16 Aliphatic	1100	2400	4400			
C16 to C35 Aliphatic	65000	92000	110000			
C35 TO C44 Aliphatic	65000	92000	110000			
C5 to C7 Aromatic (Benzene)	370	690	1400			
C7 to C8 Aromatic (Toluene)	860	1800	3900			
C8 to C10 Aromatic	47	110	270			
C10 to C12 Aromatic	250	590	1200			
C12 to C16 Aromatic	1800	2300	2500			
C16 to C21 Aromatic	1900	1900	1900			
C21 TO C35 Aromatic	1900	1900	1900			
C35 TO C44 Aromatic	1900	1900	1900			
Asbestos	*Should be None Detected			*Should be None Detected		

* In House Value/Approach S4UL = Suitable 4 Use Level, CIEH/LQM 2014 C4SL = Cat 4 Screening Level, DEFRA, 2014

Blank cell indicates no published value or in-house value. Some values presented are above saturation limits.

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ARP GEOTECHNICAL LIMITED
SOIL CONTAMINANT SCREENING VALUES
PUBLIC OPEN SPACE NEAR RESIDENTIAL

Determinand	S4UL (mg/kg)			C4SL (mg/kg)		
Arsenic	79			79		
Cadmium	120			220		
Chromium (trivalent)	1500					
Chromium (hexavalent)	7.7			21		
Copper	12000					
Lead				630		
Inorganic Mercury	120			610		
Nickel	230					
Selenium	1100					
Zinc	81000					
Acidity (pH)	*Should be Greater Than 5					
	1% SOM	2.5% SOM	6% SOM	1% SOM	2.5% SOM	6% SOM
Naphthalene**	4900	4900	4900	11,000	15,000	17,000
Acenaphthylene	15000	15000	15000			
Acenaphthene	15000	15000	15000			
Fluorene	9900	9900	9900			
Phenanthrene	3100	3100	3100			
Anthracene	74000	74000	74000			
Fluoranthene	3100	3100	3100			
Pyrene	7400	7400	7400			
Benzo(a)anthracene	29	29	29			
Chrysene	57	57	57			
Benzo(b)fluoranthene	7.1	7.2	7.2			
Benzo(k)fluoranthene	190	190	190			
Benzo(a)pyrene	5.7	5.7	5.7			10
Indeno(1,2,3-cd)pyrene	82	82	82			
Dibenzo(a,h)anthracene	0.57	0.57	0.57			
Benzo(g,h,i)perylene	640	640	640			
Phenols	440	690	1300			
Total TPH	*Above 3,800, speciate and compare with values below:					
C5 to C6 Aliphatic	570000	590000	600000			
C6 to C8 Aliphatic	600000	610000	620000			
C8 to C10 Aliphatic	13000	13000	13000			
C10 to C12 Aliphatic	13000	13000	13000			
C12 to C16 Aliphatic	13000	13000	13000			
C16 to C35 Aliphatic	250000	250000	250000			
C35 TO C44 Aliphatic	250000	250000	250000			
C5 to C7 Aromatic (Benzene)	56000	56000	56000			
C7 to C8 Aromatic (Toluene)	56000	56000	56000			
C8 to C10 Aromatic	5000	5000	5000			
C10 to C12 Aromatic	5000	5000	5000			
C12 to C16 Aromatic	5100	5100	5000			
C16 to C21 Aromatic	3800	3800	3800			
C21 TO C35 Aromatic	3800	3800	3800			
C35 TO C44 Aromatic	3800	3800	3800			
Asbestos	*Should be None Detected			*Should be None Detected		

* In House Value/Approach S4UL = Suitable 4 Use Level, CIEH/LQM 2014 C4SL = Cat 4 Screening Level, DEFRA, 2014

Blank cell indicates no published value or in-house value. Some values presented are above saturation limits.

considered separately.

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Analytical Report Number : 25-054498

Project / Site name:	Shire Hill Quarry	Samples received on:	08/10/2025
Your job number:	MSSHQ SUB SOIL	Samples instructed on/ Analysis started on:	08/10/2025
Your order number:	MSSHQ 09 25	Analysis completed by:	20/10/2025
Report Issue Number:	1	Report issued on:	20/10/2025
Samples Analysed:	1 soil sample		



Signed:

Anna Goc
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
air	- once the analysis is complete

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

Retention period for records and reports is minimum 6 years from the date of issue of the final report.
Some records may be kept for longer according to other legal/best practice requirements.

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: 25-054498

Project / Site name: Shire Hill Quarry

Your Order No: MSSHQ 09 25

Lab Sample Number	709319			
Sample Reference	MSSHQ			
Sample Number	None Supplied			
Water Matrix	N/A			
Depth (m)	None Supplied			
Date Sampled	26/09/2025			
Time Taken	1125			
Analytical Parameter (Soil Analysis)	Units	Test Limit of detection	Test Accreditation Status	

Stone Content	%	0.1	NONE	< 0.1
Moisture Content	%	0.01	NONE	9
Total mass of sample received	kg	0.1	NONE	2

Asbestos

Asbestos in Soil Detected/Not Detected	Type	N/A	ISO 17025	Not-detected
Asbestos Analyst ID	N/A	N/A	N/A	SPU
Analysis completed	N/A	N/A	N/A	17/10/2025

General Inorganics

Organic Matter (automated)	%	0.1	MCERTS	0.7
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Speciated PAHs

Naphthalene	mg/kg	0.05	MCERTS	0.11
Acenaphthylene	mg/kg	0.05	MCERTS	< 0.05
Acenaphthene	mg/kg	0.05	MCERTS	< 0.05
Fluorene	mg/kg	0.05	MCERTS	< 0.05
Phenanthrene	mg/kg	0.05	MCERTS	0.15
Anthracene	mg/kg	0.05	MCERTS	< 0.05
Fluoranthene	mg/kg	0.05	MCERTS	0.24
Pyrene	mg/kg	0.05	MCERTS	0.19
Benzo(a)anthracene	mg/kg	0.05	MCERTS	0.15
Chrysene	mg/kg	0.05	MCERTS	0.15
Benzo(b)fluoranthene	mg/kg	0.05	ISO 17025	0.16
Benzo(k)fluoranthene	mg/kg	0.05	ISO 17025	0.07
Benzo(a)pyrene	mg/kg	0.05	MCERTS	0.1
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	0.09
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	< 0.05
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	0.09

Total PAH

Speciated Total EPA-16 PAHs	mg/kg	0.8	ISO 17025	1.49
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Heavy Metals / Metalloids

Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	3.4
Boron (water soluble)	mg/kg	0.2	MCERTS	< 0.2
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	0.4
Chromium (hexavalent)	mg/kg	1.8	MCERTS	< 1.8
Chromium (III)	mg/kg	1	NONE	25
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	25
Copper (aqua regia extractable)	mg/kg	1	MCERTS	19
Lead (aqua regia extractable)	mg/kg	1	MCERTS	29
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	< 0.3
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	27
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	76

Analytical Report Number: 25-054498

Project / Site name: Shire Hill Quarry

Your Order No: MSSHQ 09 25

Lab Sample Number				709319
Sample Reference				MSSHQ
Sample Number				None Supplied
Water Matrix				N/A
Depth (m)				None Supplied
Date Sampled				26/09/2025
Time Taken				1125
Analytical Parameter (Soil Analysis)	Units	Test Limit of detection	Test Accreditation Status	

Petroleum Hydrocarbons

TPHCWG - Aliphatic >EC5 - EC6 _{HS_1D_AL}	mg/kg	0.01	MCERTS	< 0.010
TPHCWG - Aliphatic >EC6 - EC8 _{HS_1D_AL}	mg/kg	0.01	MCERTS	< 0.010
TPHCWG - Aliphatic >EC8 - EC10 _{HS_1D_AL}	mg/kg	0.01	MCERTS	< 0.010
TPHCWG - Aliphatic >EC10 - EC12 _{EH_CU_1D_AL}	mg/kg	1	MCERTS	< 1.0
TPHCWG - Aliphatic >EC12 - EC16 _{EH_CU_1D_AL}	mg/kg	2	MCERTS	< 2.0
TPHCWG - Aliphatic >EC16 - EC21 _{EH_CU_1D_AL}	mg/kg	8	MCERTS	< 8.0
TPHCWG - Aliphatic >EC21 - EC35 _{EH_CU_1D_AL}	mg/kg	8	MCERTS	< 8.0
TPHCWG - Aliphatic >EC35 - EC40 _{EH_CU_1D_AL}	mg/kg	10	NONE	< 10
TPHCWG - Aliphatic >EC5 - EC40 _{EH_CU+HS_1D_AL}	mg/kg	10	NONE	< 10

TPHCWG - Aromatic >EC5 - EC7 _{HS_1D_AR}	mg/kg	0.01	MCERTS	< 0.010
TPHCWG - Aromatic >EC7 - EC8 _{HS_1D_AR}	mg/kg	0.01	MCERTS	< 0.010
TPHCWG - Aromatic >EC8 - EC10 _{HS_1D_AR}	mg/kg	0.02	MCERTS	< 0.020
TPHCWG - Aromatic >EC10 - EC12 _{EH_CU_1D_AR}	mg/kg	1	MCERTS	< 1.0
TPHCWG - Aromatic >EC12 - EC16 _{EH_CU_1D_AR}	mg/kg	2	MCERTS	< 2.0
TPHCWG - Aromatic >EC16 - EC21 _{EH_CU_1D_AR}	mg/kg	10	MCERTS	< 10
TPHCWG - Aromatic >EC21 - EC35 _{EH_CU_1D_AR}	mg/kg	10	MCERTS	< 10
TPHCWG - Aromatic >EC35 - EC40 _{EH_CU_1D_AR}	mg/kg	10	NONE	< 10
TPHCWG - Aromatic >EC5 - EC40 _{EH_CU+HS_1D_AR}	mg/kg	10	NONE	< 10

TPH Total >EC5 - EC40 _{EH_CU+HS_1D_TOTAL}	mg/kg	10	NONE	< 10
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VOCs

MTBE (Methyl Tertiary Butyl Ether)	µg/kg	5	MCERTS	< 5.0
Benzene	µg/kg	5	MCERTS	< 5.0
Toluene	µg/kg	5	MCERTS	< 5.0
Ethylbenzene	µg/kg	5	MCERTS	< 5.0
p & m-Xylene	µg/kg	8	MCERTS	< 8.0
o-Xylene	µg/kg	5	MCERTS	< 5.0

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected



Analytical Report Number : 25-054498

Project / Site name: Shire Hill Quarry

* 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 *
709319	MSSHQ	None Supplied	None Supplied	Brown clay and sand with gravel

Analytical Report Number : 25-054498

Project / Site name: Shire Hill Quarry

Water matrix abbreviations:

Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters Heating/Cooling (PrW) DI Process Water (DI PrW)

Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Asbestos identification in Soil	Asbestos Identification with the use of polarised light microscopy in conjunction with dispersion staining techniques	In-house method based on HSG 248, 2021	A001B	D	ISO 17025
Organic matter (Automated) in soil	Determination of organic matter in soil by oxidising with potassium dichromate followed by titration with iron (II) sulphate (Walkley Black Method)	In-house method	L009B	D	MCERTS
Moisture Content	Moisture content, determined gravimetrically (up to 30°C)	In-house method	L019B	W	NONE
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.	L019B	D	NONE
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	L038B	D	MCERTS
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	L038B	D	MCERTS
Speciated PAHs and/or Semi-volatile organic compounds in soil	Determination of semi-volatile organic compounds (including PAH) in soil by extraction in dichloromethane and hexane followed by GC-MS	In-house method based on USEPA 8270	L064B	D	MCERTS
BTEX and/or Volatile organic compounds in soil	Determination of volatile organic compounds in soil by headspace GC-MS	In-house method based on USEPA 8260	L073B	W	MCERTS
Total petroleum hydrocarbons with carbon banding by GC-FID in soil	Determination of total petroleum hydrocarbons in soil by GC-FID with carbon banding aliphatic and aromatic	In-house method	L076B	D	MCERTS
Chromium III in soil	In-house method by calculation from total Cr and Cr VI	In-house method by calculation	L080-PL/L130B	W	NONE
Hexavalent chromium in soil	Determination of hexavalent chromium in soil by extraction in NaOH and addition of 1,5 diphenylcarbazide followed by colorimetry	In-house method	L080-PL	W	MCERTS
Total petroleum hydrocarbons with carbon banding by HS-GC/MS in soil	Determination of total petroleum hydrocarbons in soil by HS-GC/MS with carbon banding aliphatic and aromatic	In-house method	L088-PL	W	MCERTS
Total petroleum hydrocarbons with carbon banding by GC-FID/GC-MS HS in soil (Summed Bands)	Determination of total petroleum hydrocarbons in soil by GC-FID/GC-MS HS with carbon banding aliphatic and aromatic (Summed Bands).	Calculation	L076B/L088-PL	D/W	NONE

Analytical Report Number : 25-054498

Project / Site name: Shire Hill Quarry

Water matrix abbreviations:

Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters Heating/Cooling (PrW) DI Process Water (DI PrW)

Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Soil Descriptions	Textural classification	In-house method	L019B	W	NONE

For method numbers ending in 'UK' or 'A' analysis have been carried out in our laboratory in the United Kingdom (Watford).

For method numbers ending in 'F' analysis have been carried out in our laboratory in the United Kingdom (East Kilbride).

For method numbers ending in 'PL' or 'B' 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.

Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.

Quality control parameter failure associated with individual result applies to calculated sum of individuals.

The result for sum should be interpreted with caution

Analytical Report Number : 25-054498

Project / Site name: Shire Hill Quarry

This deviation report indicates the sample and test deviations that apply to the samples submitted for analysis. Please note that the associated result(s) may be unreliable and should be interpreted with care.

Key: a - No sampling date b - Incorrect container/Insufficient material provided c - Holding time d - Headspace e - Temperature

Sample ID	Other ID	Sample Type	Lab Sample Number	Sample Deviation	Test Name	Test Ref	Test Deviation
MSSHQ	N/A	S	709319	c	BTEX and/or Volatile organic compounds in soil	L073B	c
MSSHQ	N/A	S	709319	c	Speciated PAHs and/or Semi-volatile organic compounds in soil	L064B	c
MSSHQ	N/A	S	709319	c	Total petroleum hydrocarbons with carbon banding by GC-FID in soil	L076B	c

TEST CERTIFICATE

SPECIFICATION FOR SUBSOIL
In-house method based on: BS 8601: 2013



Client: Marchington Stone Ltd
Client Address: 105 Buxton Road, High Lane,
Stockport, Cheshire,
SK6 8DX

Contact: Jeff Dean-Barlas
Site Address: Shire Hill Quarry

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

Client Reference: MSSHQ SUB SOIL

Job Number: 25-054499-1

Date Sampled: 26/09/2025

Date Received: 08/10/2025

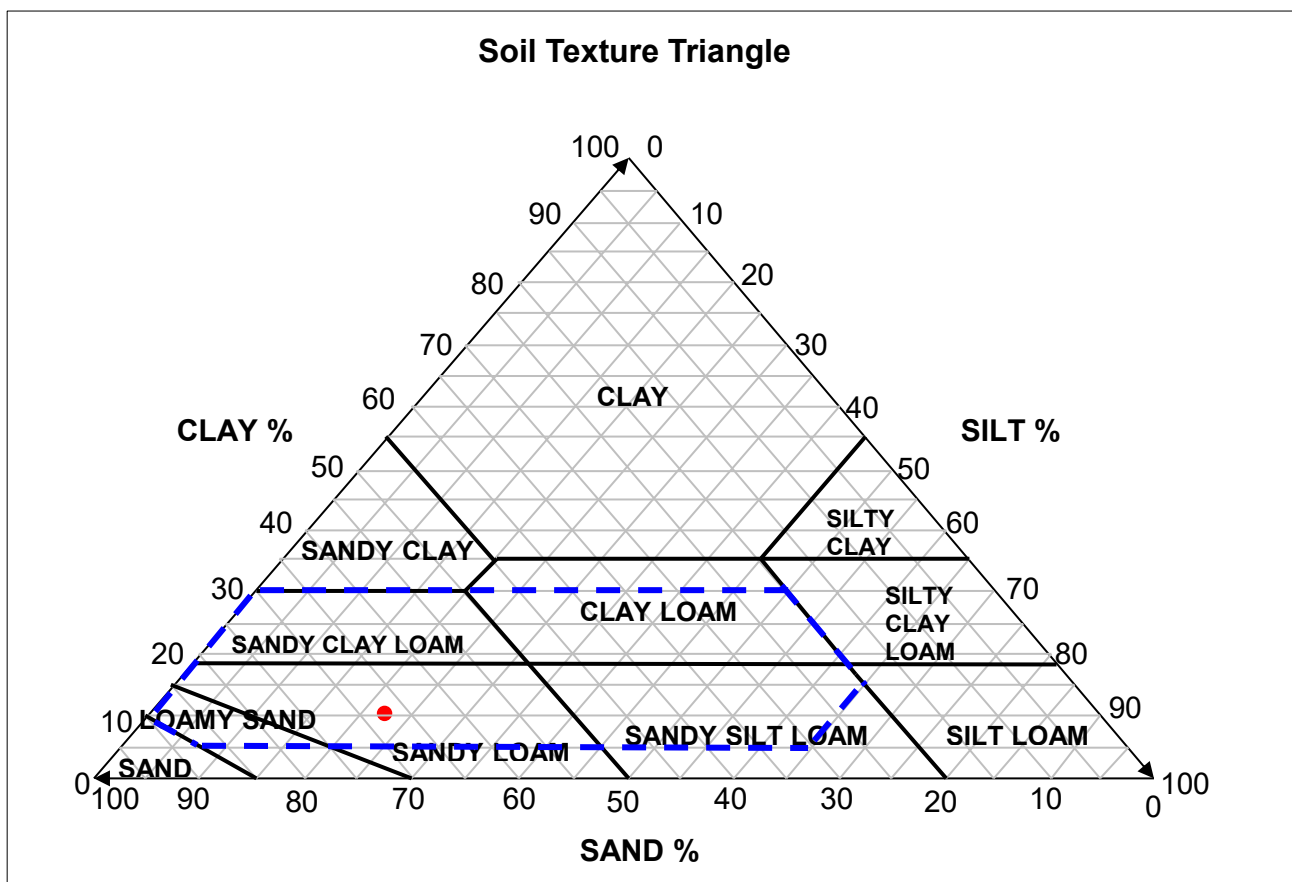
Date Tested: 13/10/2025

Sampled By: Not Given

Test Results:

Laboratory Reference: 709320
Hole No.: MSSHQ
Sample Reference: Not Given
Sample Description: SANDY LOAM

Depth Top [m]: 0.00
Depth Base [m]: Not Given
Sample Type: D



Sample Proportion	% dry mass
Sand	67.9
Silt	20.6
Clay	11.5

Texture within acceptable area (Y/N)

Remarks:

Signed:

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.

Katarzyna Koziel

Katarzyna Koziel
Geotechnical Reporting Team Leader
for and on behalf of i2 Analytical Ltd

Marchington Stone Ltd
105 Buxton Road
High Lane
Stockport
Cheshire
SK6 8DX

i2 Analytical Ltd.
7 Woodshots Meadow,
Croxley Green
Business Park,
Watford,
Herts,
WD18 8YS

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e: jeff@marchington.net

t: 01923 225404
f: 01923 237404
e: info-i2analytical@normecgroup.com

Analytical Report Number : 25-054499

Project / Site name:	Shire Hill Quarry	Samples received on:	08/10/2025
Your job number:	MSSHQ SUB SOIL	Samples instructed on/ Analysis started on:	08/10/2025
Your order number:	MSSHQ 09 25	Analysis completed by:	20/10/2025
Report Issue Number:	1	Report issued on:	20/10/2025
Samples Analysed:	1 soil sample		



Signed:

Anna Goc
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
air	- once the analysis is complete

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

Retention period for records and reports is minimum 6 years from the date of issue of the final report.
Some records may be kept for longer according to other legal/best practice requirements.

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.

i2 Analytical

7 Woodshots Meadow
Croxley Green Business Park
Watford, WD18 8YS

Telephone: 01923 225404

Fax: 01923 237404

email:reception@i2analytical.com

Certificate of Analysis						
BS 8601:2013 Specification For Subsoil						
Report No:	25-054499			Marchington Stone Ltd 105 Buxton RoadHigh LaneStockportCheshireSK6 8DX		
Location	Shire Hill Quarry					
Lab Reference (Sample Number)	709320					
Sampling Date	2025-09-26					
Sample ID	MSSHQ					
Depth (m)	-					
		unit	Result	Compliant with range (Y/N)		
Texture	Clay	%w/w	12.00	Multipurpose subsoil	Specific purpose subsoil	
	Silt	%w/w	21.00		Acidic	Calcareous
	Sand	%w/w	68.00			
	Texture Class		SANDY LOAM		Y	Y
Mass Loss on Ignition		%	1.88	Y	N	N
Coarse fragment content	>2mm	%w/w	5.20	Y	Y	Y
	>20mm	%w/w	0.00	Y	Y	Y
	>75mm	%w/w	0.00	Y	Y	Y
Soil pH		pH	7.00	Y	N	N
Carbonate		%	2.90	-	-	Y
Exchangable Sodium Percentage		%	1.10	Y	Y	Y
Phytotoxic contaminants	Total Zinc	mg/kg	76.00	Y	Y	Y
	Total Copper	mg/kg	18.00	Y	Y	Y
	Total Nickel	mg/kg	28.00	Y	Y	Y
Visible contaminants	>2mm	%w/w	0.00	Y	Y	Y
	Plastics	%w/w	0.00	Y	Y	Y
	Sharps	%w/w	0.00	Y	Y	Y
Available plant nutrients	Phosphorus	mg/l	4.20			
	Potassium	mg/l	90.70			
	Magnesium	mg/l	740.00			
Additional analysis	Available Sodium	mg/l	41.00			
	Available Calcium	mg/l	1800.00			
	Conductivity	µS/cm	2500.00			
	Conductivity CaSO4 Adj.	µS/cm	490.00			
Compliance				Pass	Pass	Pass
Pass BS 8601						

Results are expressed on a dry weight basis, after correction for moisture content where applicable
Stated limits are for guidance only and i2 cannot be held responsible for any discrepancies with current legislation

*= UKAS accredited

** = MCERTS accredited

Analytical Report Number : 25-054499

Project / Site name: Shire Hill Quarry

* 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 *
709320	MSSHQ	None Supplied	None Supplied	Brown clay and sand with gravel

Analytical Report Number : 25-054499

Project / Site name: Shire Hill Quarry

Water matrix abbreviations:

Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters Heating/Cooling (PrW) DI Process Water (DI PrW)

Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Coarse Fragment and Contaminant Analysis	Determination of >2mm contaminants	BS3882:2007 & BS8601:2013 & PAS 100:2005	L019B	D	NONE
Moisture Content	Moisture content, determined gravimetrically (up to 30°C)	In-house method	L019B	W	NONE
75 mm Coarse Fraction - BS8601 Subsoil	Determination of > 75 mm fraction by gravimetry.	BS8601:2013	L019B	D	NONE
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.	L019B	D	NONE
Conductivity (BS 3882/BS 8601)	Determination of the conductivity of soil in accordance with BS 3882:2007 methodology	BS 3882:2007 & BS 8601:2013	L031B	D	NONE
Conductivity CaSO ₄ adj - BS8601 Subsoil	Determination of Electrical Conductivity on CaSO ₄ extract, adjusted	Method based on BS 8601:2013	L031B	D	NONE
Carbonate - BS 8601 Subsoil	Determination of soil carbonate content	BS 8601:2013	L034-PL	D	NONE
Extractable/Available Metals (BS 3882/BS 8601)	Determination of the extractable metals in soil, in accordance with BS 3882:2007 methodology	BS3882:2007 & BS8601:2013	L038B	D	NONE
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	L038B	D	MCERTS
Loss on Ignition - BS8601	Determination of Loss on Ignition as defined in BS 8601	Method based on BS 8601:2013	L047-PL	D	NONE
Phosphorus as PO ₄ (BS 3882/BS 8601)	Determination of the extractable phosphorus in soil, in accordance with BS 3882:2007 methodology	Method based on BS 3882:2015 & BS 8601:2013	L048B	D	NONE
pH (BS 3882/BS 8601)	Determination of the pH of soil in accordance with BS 3882:2007 methodology	BS 3882:2007 & BS 8601:2013	L099-PL	D	NONE
Subsoil (BS 8601:2013)	Specification for subsoil	BS 8601:2013	PL		NONE
Textural Classification Diagram (BS 8601:2013)	BS 8601:2013	BS 8601:2013	PL		NONE
Geotechnical Testing	See attached geotechnical report	See attached geotechnical report	PL		NONE
Subsoil Prep		In-house method	L019B	D	NONE

Analytical Report Number : 25-054499

Project / Site name: Shire Hill Quarry

Water matrix abbreviations:

Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters Heating/Cooling (PrW) DI Process Water (DI PrW)

Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Soil Descriptions	Textural classification	In-house method	L019B	W	NONE

For method numbers ending in 'UK' or 'A' analysis have been carried out in our laboratory in the United Kingdom (Watford).

For method numbers ending in 'F' analysis have been carried out in our laboratory in the United Kingdom (East Kilbride).

For method numbers ending in 'PL' or 'B' 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.

Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.

Quality control parameter failure associated with individual result applies to calculated sum of individuals.

The result for sum should be interpreted with caution



Certificate of Analysis

Client: MARCHINGTON STONE LTD
(T283) 105 BUXTON ROAD
 HIGH LANE
 STOCKPORT
 SK6 8DX

Originator: TOPSOIL - MSBH

Lab ID: 35357 - 780211
Sample ID: TOPSOIL - MSBH
Sample Weight: 1958g

Date Received: 12/01/2026
Date Reported: 26/01/2026

BS 3882 : 2015 SPECIFICATION FOR TOPSOIL Multipurpose Grade

				Compliant with range (Y/N)					
				Multi-P	Acid	Calc	Low-F	Low-F Acid	Low-F Calc
Texture:	Clay	% w/w	18						
	Silt	% w/w	17						
	Sand	% w/w	65						
	Textural Class		Sandy Loam	Y	Y	Y	Y	Y	Y
					<i>See area of permitted soil textural classes in Fig. 1.</i>				
Organic Matter:		% w/w	8.4	Y	Y	Y	Y	Y	Y
Coarse	>2 mm	% w/w	1.5	Y	Y	Y	Y	Y	Y
Fragment	>20 mm	% w/w	0.0	Y	Y	Y	Y	Y	Y
Content:	>50 mm	% w/w	0.0	Y	Y	Y	Y	Y	Y
Soil pH:			7.8	Y	N	Y	Y	N	Y
Carbonate:		% w/w	36.4			Y			Y
Available	Nitrogen	% w/w	0.318	Y	Y	Y			
Plant	Phosphorus	mg/l	81.4 (5)*	Y	Y	Y	N	N	N
Nutrients:	Potassium	mg/l	129.7 (2-)*	Y	Y	Y			
	Magnesium	mg/l	128.6 (3)*	Y	Y	Y			
Carbon:Nitrogen Ratio:		:1	15.3	Y	Y	Y	Y	Y	Y
Exchangeable Sodium Percentage:		%	1.1						
Phytotoxic	Total Zinc	mg/kg	76.3	Y	Y	Y	Y	Y	Y
Contaminants:	Total Copper	mg/kg	24.1	Y	Y	Y	Y	Y	Y
	Total Nickel	mg/kg	13.9	Y	Y	Y	Y	Y	Y
Visible	> 2mm	% w/w	0.02	Y	Y	Y	Y	Y	Y
Contaminants:	Plastics	% w/w	0.00	Y	Y	Y	Y	Y	Y
	Number of Sharps		0	Y	Y	Y	Y	Y	Y
Additional	Available Sodium	mg/l	33.5						
Analysis:	Available Calcium	mg/l	2295.0						
	Conductivity	uS/cm	2310	Y					
Compliance:				Y	N	Y	N	N	N

Results are expressed on a dry matter basis.

* Soil indices from RB209

Released by:

Teresa Clyne

Date: 26/01/2026

DECLARATION:

I certify that this sample has been analysed by NRM in accordance with BS 3882 Specification for Topsoil (2015).

NRM Coopers Bridge, Braziers Lane, Bracknell, Berkshire RG42 6NS

Tel: +44 (0) 1344 886338 **Fax:** +44 (0) 1344 890972 **Email:** enquiries@nrm.uk.com **www:** nrm.uk.com

Analytical Report

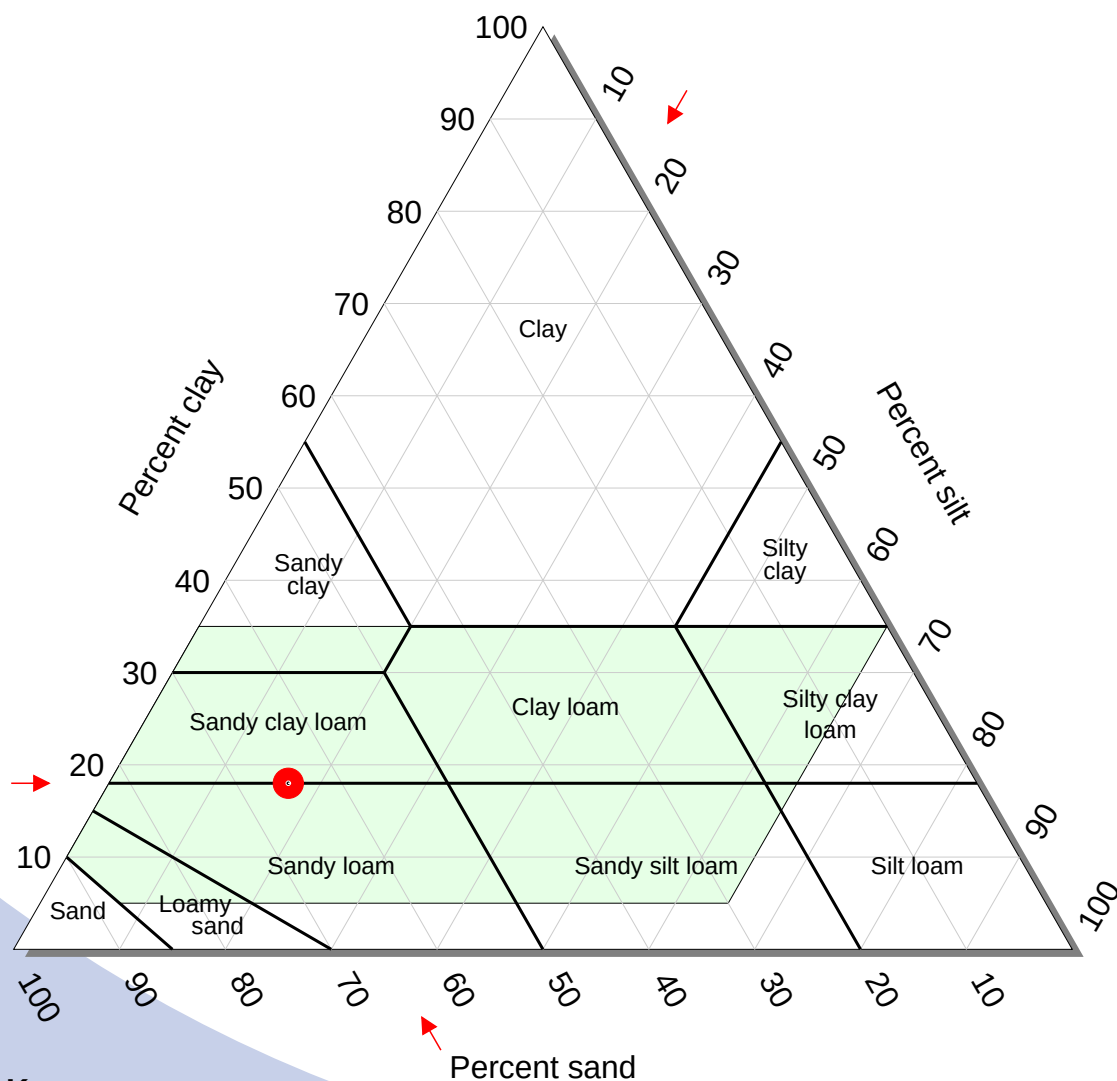
Client: MARCHINGTON STONE LTD
(T283) 105 BUXTON ROAD
HIGH LANE
STOCKPORT
SK6 8DX

Originator: TOPSOIL - MSBH

Lab ID: 35357 - 780211
Sample ID: TOPSOIL
Sample Weight: 1958g

Date Received: 12/01/2026
Date Reported: 26/01/2026

Fig. 1. Textural Class: Sandy Loam (compliant)



Key

 Area within which texture of topsoil is required to fall.

Analytical Notes

Final page must indicate end of report. Page 3

Accreditation and method details

NRM is a UKAS-accredited testing laboratory (No 2334), accredited to BS EN ISO 17025:2005. This accreditation demonstrates technical competence for a defined scope and the operation of a laboratory quality management system (refer joint ISO-ILAC-IAF communique dated April 2017). <http://ilac.org/?ddownload=120917>

NRM is accredited for particular determinands in specific matrices as set out in the laboratory's current UKAS schedule of accreditation

https://www.ukas.com/wp-content/uploads/schedule_uploads/00002/2334Testing-Multiple.pdf

Accreditation applies to the following parameters in this report and is applicable to SOIL samples only. All other tests within this report are unaccredited.

Test	Analysis SOP	Method Description
Fluoride	JAS-487	Sulphuric acid extraction (1:10 ratio) and determination by ion selective electrode
Arsenic	JAS-510 / JAS-300	Aqua regia digest on hot block and determination by ICP-OES
Barium		
Beryllium		
Cadmium		
Chromium		
Cobalt		
Copper		
Lead		
Molybdenum		
Mercury		
Nickel		
Vanadium		
Zinc		
Selenium	JAS-510 / JAS-455	Aqua regia digest on hot block and determination by AFS

Analysis Notes

Analysis is carried out on the air-dried (<30°C) and ground sample.

The results as reported relate only to the item(s) submitted for testing.

The results are presented on a dry matter basis.

Indices are derived solely from the numerical value and test result without reference to measurement uncertainty.

Document Control

This test report shall not be reproduced, except in full, without the written approval of the laboratory.

We cannot offer interpretation or opinions for results.

Sampling information

BS ISO 18512:2007 (Soil quality – Guidance on long and short-term storage of soil samples) states that for pH the period of stability and therefore holding time for a wet or 'fresh' soil sample is one week from sampling. Other determinants in the fresh sample may be considered stable for up to a month. Once the sample has been dried the sample may then be considered stable for up to 3 years. No records are maintained by NRM on date sampled or date dried so all samples within this report are considered not to be meeting the requirements of this BS / ISO. Consequently, all pH results given are those of the as-received sample and may not reflect the pH value of the sample when taken.

Conformity Assessment

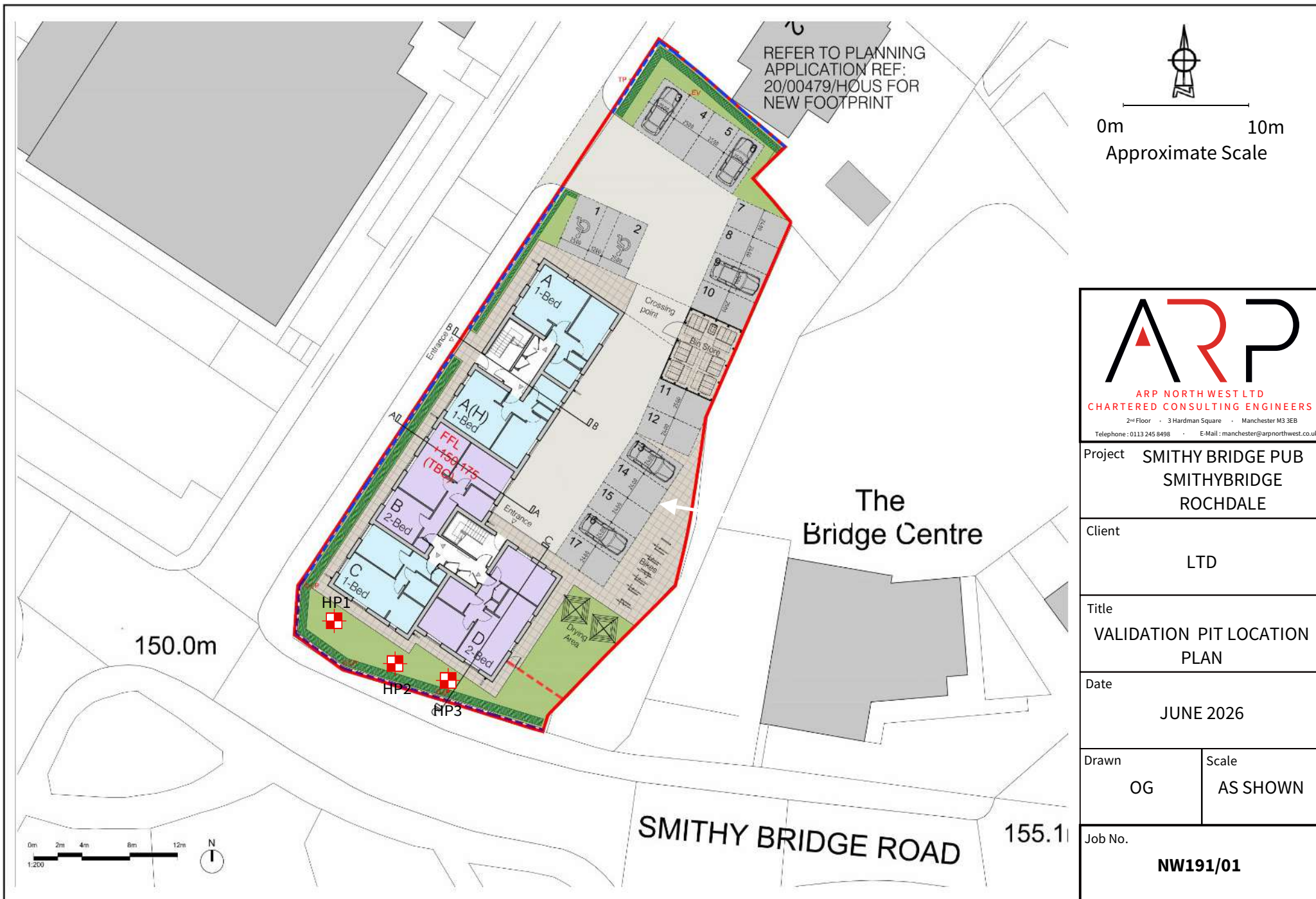
Where a result has been converted to an index or if it has been classified as a pass or fail to a certain specification anywhere in this report a rule has been applied to convert the analytical result to that index or a pass/fail. Statistically the rule is a simple acceptance rule which does not account for uncertainty and therefore has a zero guard band which nominally has a width w=0. This means there is a 50% probability that a result exactly equal to the specification limit will be outside the specification.

The uncertainty of measurement has been calculated for the tests in this report. This value can provide further information on the validity of conformity statements close to the specification limit and is available from the laboratory on request.

Customer-supplied information

The following information in this report has been supplied by the customer: customer details; client details; quotation number / analysis required; order number; sampling date (if present); sample identifications.

END OF REPORT





Photograph 1: Area of proposed soft landscaping following site strip - 28/04/2026



Photograph 2: Area of proposed soft landscaping following site strip - - 28/04/2026



Photograph 3: Stockpile of imported subsoil - - 28/04/2026



Photograph 3: Location of subsample 1 sample - 28/04/2026



Photograph 5: Location of subsample 2 sample - - 28/04/2026



Photograph 6: Location of subsample 2 sample - - 28/04/2026



Photograph 7: Area of proposed landscaping along the southern boundary of the site - - 28/04/2026



Photograph 8: Imported topsoil stockpiled on site prior to application. 6/5/2026



Photograph 9: Close up of imported topsoil stockpile - 6/5/2026.



Photograph 10: Partial application of subsoil and topsoil to the front of the building along Smithybridge Road - 6/5/2026.



Photograph 11: Partial application of subsoil and topsoil to the front of the building along Smithybridge Road - 6/5/2026.



Photograph 12: Area of full subsoil and topsoil application to the front of the building along Smithybridge Road - 6/5/2026.



Photograph 13: Area of full subsoil and topsoil application to the front of the building along Smithybridge Road - 6/5/2026.



Photograph 14: Installation of drainage along the side of the building – 6/5/2026



Photograph 15: Distant view of validation Pit 1 – 6/5/2026



Photograph 16: Close up view of validation Pit 1 – 6/5/2026



Photograph 15: Distant view of validation Pit 1 – 6/5/2026



Photograph 16: Close up view of validation Pit 1 – 6/5/2026



Photograph 17: Validation Pit 3, located in area with subsoil cover but prior to application of topsoil – 6/5/2026.



Photograph 18: Close up of validation pit 3. Geotextile barrier visible at the base – 6/5/2026.



Photograph 19: Stockpile of subsoil tested during previous validation visit – 6/5/2026.



Photograph 20: Area of proposed soft landscaping adjacent to the building prior to application of clean cover – 6/5/2026.



Photograph 21: Final Application of clean cover to landscaped area to the side of the building. Photographs supplied by the contractor on the 1/6/2026.



ARP Geotechnical Ltd
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Servia Hill
Leeds
LS6 2QH

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e: info-i2analytical@normecgroup.com

Analytical Report Number : 26-022655

Project / Site name: Smithybridge Pub

Samples received on: 29/04/2026

Your job number: NW191 01

**Samples instructed on/
Analysis started on:** 29/04/2026

Your order number: NW191 01

Analysis completed by: 11/05/2026

Report Issue Number: 1

Report issued on: 11/05/2026

Samples Analysed: 3 soil samples

Signed:

Dominika Liana
Junior Reporting Specialist
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
air	- once the analysis is complete

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Some records may be kept for longer according to other legal/best practice requirements.

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: 26-022655
Project / Site name: Smithybridge Pub
Your Order No: NW191 01

Lab Sample Number	904407			904408	904409	
Sample Reference	Sub soil stockpile 1			Sub soil stockpile 2	Sub soil stockpile 3	
Sample Number	None Supplied			None Supplied	None Supplied	
Water Matrix	N/A			N/A	N/A	
Depth (m)	None Supplied			None Supplied	None Supplied	
Date Sampled	28/04/2026			28/04/2026	28/04/2026	
Time Taken	None Supplied			None Supplied	None Supplied	
Analytical Parameter (Soil Analysis)	Units	Test Limit of detection	Test Accreditation Status			

Mass of stone >10mm	%	0.1	NONE	< 0.1	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	7.7	6.9	7.4
Total mass of sample received	kg	0.1	NONE	0.8	0.7	0.9

Asbestos

Asbestos in Soil Detected/Not Detected	Type	N/A	ISO 17025	Not-detected	Not-detected	Not-detected
Asbestos Analyst ID	N/A	N/A	N/A	CZJ	CZJ	CZJ
Analysis completed	N/A	N/A	N/A	09/05/2026	09/05/2026	09/05/2026

General Inorganics

pH (L099)	pH Units	N/A	MCERTS	8.6	8.6	8.6
Total Sulphate as SO ₄	mg/kg	50	MCERTS	140	93	320
Water Soluble Sulphate as SO ₄ 16hr extraction (2:1)	mg/kg	2.5	MCERTS	14	18	66
Water Soluble SO ₄ 16hr extraction (2:1 Leachate Equivalent)	mg/l	1.25	MCERTS	7.06	8.8	33.2
Organic Matter (automated)	%	0.1	MCERTS	0.7	0.6	0.6

Total Phenols

Total Phenols (monohydric)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0
----------------------------	-------	---	--------	-------	-------	-------

Speciated PAHs

Naphthalene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05
Acenaphthylene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05
Acenaphthene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05
Fluorene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05
Phenanthrene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05
Anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05
Fluoranthene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05
Pyrene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05
Benzo(a)anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05
Chrysene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05
Benzo(b)fluoranthene	mg/kg	0.05	ISO 17025	< 0.05	< 0.05	< 0.05
Benzo(k)fluoranthene	mg/kg	0.05	ISO 17025	< 0.05	< 0.05	< 0.05
Benzo(a)pyrene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05

Total PAH

Speciated Total EPA-16 PAHs	mg/kg	0.8	ISO 17025	< 0.80	< 0.80	< 0.80
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Analytical Report Number: 26-022655
Project / Site name: Smithybridge Pub
Your Order No: NW191 01

Lab Sample Number				904407	904408	904409
Sample Reference				Sub soil stockpile 1	Sub soil stockpile 2	Sub soil stockpile 3
Sample Number				None Supplied	None Supplied	None Supplied
Water Matrix				N/A	N/A	N/A
Depth (m)				None Supplied	None Supplied	None Supplied
Date Sampled				28/04/2026	28/04/2026	28/04/2026
Time Taken				None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Test Limit of detection	Test Accreditation Status			

Heavy Metals / Metalloids

Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	2.3	1.7	1.6
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	0.2	< 0.2	< 0.2
Chromium (hexavalent)	mg/kg	1.8	MCERTS	< 1.8	< 1.8	< 1.8
Chromium (III)	mg/kg	1	NONE	18	16	17
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	18	16	17
Copper (aqua regia extractable)	mg/kg	1	MCERTS	12	12	11
Lead (aqua regia extractable)	mg/kg	1	MCERTS	8.5	9.9	8.9
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	19	16	17
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	1	< 1.0	< 1.0
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	55	47	47

Petroleum Hydrocarbons

TPH (EC10 - EC40) EH_CU_1D_TOTAL	mg/kg	10	MCERTS	< 10	< 10	< 10
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U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected



Analytical Report Number : 26-022655
Project / Site name: Smithybridge Pub

* 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 *
904407	ub soil stockpile	None Supplied	None Supplied	Brown clay and sand with gravel
904408	ub soil stockpile	None Supplied	None Supplied	Brown clay and sand with gravel
904409	ub soil stockpile	None Supplied	None Supplied	Brown clay and sand with gravel

Analytical Report Number : 26-022655

Project / Site name: Smithybridge Pub

Water matrix abbreviations:

Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters Heating/Cooling (PrW) DI Process Water (DI PrW)

Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Asbestos identification in Soil	Asbestos Identification with the use of polarised light microscopy in conjunction with dispersion staining techniques	In-house method based on HSG 248, 2021	A001B	D	ISO 17025
Organic matter (Automated) in soil	Determination of organic matter in soil by oxidising with potassium dichromate followed by titration with iron (II) sulphate (Walkley Black Method)	In-house method	L009B	D	MCERTS
Moisture Content (Wet Weight)	Moisture content (% wet weight), determined gravimetrically (up to 30°C)	In-house-procedure based on BS EN 12880:2000	L019B	W	NONE
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.	L019B	D	NONE
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	L038B	D	MCERTS
Total sulphate (as SO ₄ in soil)	Determination of total sulphate in soil by extraction with 10% HCl followed by ICP-OES	In-house method	L038B	D	MCERTS
Sulphate, water soluble, in soil (16hr extraction)	Sulphate, water soluble, in soil (16hr extraction)	In-house method	L038B	D	MCERTS
Speciated PAHs and/or Semi-volatile organic compounds in soil	Determination of semi-volatile organic compounds (including PAH) in soil by extraction in dichloromethane and hexane followed by GC-MS	In-house method based on USEPA 8270	L064B	D	MCERTS
Total petroleum hydrocarbons by GC-FID in soil	Determination of total petroleum hydrocarbons in soil by GC-FID	In-house method	L076B	D	MCERTS
Chromium III in soil	In-house method by calculation from total Cr and Cr VI	In-house method by calculation	L080-PL/L130B	W	NONE
Hexavalent chromium in soil	Determination of hexavalent chromium in soil by extraction in NaOH and addition of 1,5 diphenylcarbazide followed by colorimetry	In-house method	L080-PL	W	MCERTS
Monohydric phenols in soil	Determination of phenols in soil by extraction with sodium hydroxide followed by distillation followed by colorimetry	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L080-PL	W	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



Analytical Report Number : 26-022655
Project / Site name: Smithybridge Pub

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters Heating/Cooling (PrW) DI Process Water (DI PrW)
Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Soil Descriptions	Textural classification	In-house method	L019B	W	NONE

For method numbers ending in 'UK' or 'A' analysis have been carried out in our laboratory in the United Kingdom (Watford).
For method numbers ending in 'F' analysis have been carried out in our laboratory in the United Kingdom (East Kilbride).
For method numbers ending in 'PL' or 'B' 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.
Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.

Quality control parameter failure associated with individual result applies to calculated sum of individuals.
The result for sum should be interpreted with caution

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Analytical Report Number : 26-024497

Project / Site name:	Smithybridge Pub	Samples received on:	08/05/2026
Your job number:	NW191 01	Samples instructed on/ Analysis started on:	08/05/2026
Your order number:	NW191 01	Analysis completed by:	19/05/2026
Report Issue Number:	1	Report issued on:	19/05/2026
Samples Analysed:	3 soil samples		



Signed:

Anna Goc
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
air	- once the analysis is complete

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Retention period for records and reports is minimum 6 years from the date of issue of the final report.
Some records may be kept for longer according to other legal/best practice requirements.

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: 26-024497
Project / Site name: Smithybridge Pub
Your Order No: NW191 01

Lab Sample Number	913516	913517	913518
Sample Reference	Top soil stockpile 1	Top soil stockpile 2	Top soil stockpile 3
Sample Number	None Supplied	None Supplied	None Supplied
Water Matrix	N/A	N/A	N/A
Depth (m)	None Supplied	None Supplied	None Supplied
Date Sampled	06/05/2026	06/05/2026	06/05/2026
Time Taken	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Test Limit of detection	Test Accreditation Status

Mass of stone >10mm	%	0.1	NONE	< 0.1	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	17	16	16
Total mass of sample received	kg	0.1	NONE	0.4	0.6	0.6

Asbestos

Asbestos in Soil Detected/Not Detected	Type	N/A	ISO 17025	Not-detected	Not-detected	Not-detected
Asbestos Analyst ID	N/A	N/A	N/A	MMI	MMI	MMI
Analysis completed	N/A	N/A	N/A	19/05/2026	19/05/2026	19/05/2026

General Inorganics

pH (L099)	pH Units	N/A	MCERTS	8.3	8.5	8.4
Total Sulphate as SO ₄	mg/kg	50	MCERTS	3800	960	850
Water Soluble Sulphate as SO ₄ 16hr extraction (2:1)	mg/kg	2.5	MCERTS	260	260	250
Water Soluble SO ₄ 16hr extraction (2:1 Leachate Equivalent)	mg/l	1.25	MCERTS	131	128	127
Organic Matter (automated)	%	0.1	MCERTS	6.1	5	5.6

Total Phenols

Total Phenols (monohydric)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0
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Speciated PAHs

Naphthalene	mg/kg	0.05	MCERTS	< 0.05	0.05	< 0.05
Acenaphthylene	mg/kg	0.05	MCERTS	< 0.05	0.06	< 0.05
Acenaphthene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05
Fluorene	mg/kg	0.05	MCERTS	< 0.05	0.18	< 0.05
Phenanthrene	mg/kg	0.05	MCERTS	0.21	0.35	0.21
Anthracene	mg/kg	0.05	MCERTS	0.06	0.17	0.07
Fluoranthene	mg/kg	0.05	MCERTS	0.6	1.6	0.77
Pyrene	mg/kg	0.05	MCERTS	0.61	1.5	0.76
Benzo(a)anthracene	mg/kg	0.05	MCERTS	0.31	0.97	0.35
Chrysene	mg/kg	0.05	MCERTS	0.34	1.1	0.4
Benzo(b)fluoranthene	mg/kg	0.05	ISO 17025	0.4	1.3	0.53
Benzo(k)fluoranthene	mg/kg	0.05	ISO 17025	0.17	0.58	0.17
Benzo(a)pyrene	mg/kg	0.05	MCERTS	0.31	1.1	0.38
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	0.19	0.64	0.25
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	< 0.05	0.1	< 0.05
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	0.21	0.73	0.3

Total PAH

Speciated Total EPA-16 PAHs	mg/kg	0.8	ISO 17025	3.4	10.4	4.19
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Analytical Report Number: 26-024497
 Project / Site name: Smithybridge Pub
 Your Order No: NW191 01

Lab Sample Number	913516	913517	913518
Sample Reference	Top soil stockpile 1	Top soil stockpile 2	Top soil stockpile 3
Sample Number	None Supplied	None Supplied	None Supplied
Water Matrix	N/A	N/A	N/A
Depth (m)	None Supplied	None Supplied	None Supplied
Date Sampled	06/05/2026	06/05/2026	06/05/2026
Time Taken	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Test Limit of detection	Test Accreditation Status

Heavy Metals / Metalloids

Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	8.8	8.2	7.5
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	0.4	0.2	0.3
Chromium (hexavalent)	mg/kg	1.8	MCERTS	U/S ^{*U/S g}	U/S ^{*U/S g}	U/S ^{*U/S g}
Chromium (III)	mg/kg	1	NONE	U/S ^{*U/S g}	U/S ^{*U/S g}	U/S ^{*U/S g}
Chromium (hexavalent) by IC	mg/kg	1.8	NONE	< 1.80	< 1.80	< 1.80
Chromium (III) by IC	mg/kg	1	NONE	13	16	15
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	13	16	15
Copper (aqua regia extractable)	mg/kg	1	MCERTS	30	23	46
Lead (aqua regia extractable)	mg/kg	1	MCERTS	54	44	47
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	0.5	< 0.3	0.3
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	12	17	12
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	1.1	< 1.0
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	150	120	140

Petroleum Hydrocarbons

TPH (EC10 - EC40) _{EH_CU_10_TOTAL}	mg/kg	10	MCERTS	100	110	130
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U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

Analytical Report Number : 26-024497

Project / Site name: Smithybridge Pub

* 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 *
913516	op soil stockpile	None Supplied	None Supplied	Brown loam and sand with vegetation and gravel
913517	op soil stockpile	None Supplied	None Supplied	Brown loam and sand with vegetation
913518	op soil stockpile	None Supplied	None Supplied	Brown loam and sand with gravel and vegetation

Analytical Report Number : 26-024497

Project / Site name: Smithybridge Pub

Water matrix abbreviations:

Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters Heating/Cooling (PrW) DI Process Water (DI PrW)

Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Asbestos identification in Soil	Asbestos Identification with the use of polarised light microscopy in conjunction with dispersion staining techniques	In-house method based on HSG 248, 2021	A001B	D	ISO 17025
Organic matter (Automated) in soil	Determination of organic matter in soil by oxidising with potassium dichromate followed by titration with iron (II) sulphate (Walkley Black Method)	In-house method	L009B	D	MCERTS
Moisture Content (Wet Weight)	Moisture content (% wet weight), determined gravimetrically (up to 30°C)	In-house-procedure based on BS EN 12880:2000	L019B	W	NONE
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.	L019B	D	NONE
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	L038B	D	MCERTS
Total sulphate (as SO ₄ in soil)	Determination of total sulphate in soil by extraction with 10% HCl followed by ICP-OES	In-house method	L038B	D	MCERTS
Sulphate, water soluble, in soil (16hr extraction)	Sulphate, water soluble, in soil (16hr extraction)	In-house method	L038B	D	MCERTS
Hexavalent chromium in soil by Ion Chromatography	Determination of hexavalent chromium in alkaline soil extract by use of ion chromatography with spectrophotometric detection	In-house method	L130B	W	NONE
Speciated PAHs and/or Semi-volatile organic compounds in soil	Determination of semi-volatile organic compounds (including PAH) in soil by extraction in dichloromethane and hexane followed by GC-MS	In-house method based on USEPA 8270	L064B	D	MCERTS
Total petroleum hydrocarbons by GC-FID in soil	Determination of total petroleum hydrocarbons in soil by GC-FID	In-house method	L076B	D	MCERTS
Chromium III in soil	In-house method by calculation from total Cr and Cr VI	In-house method by calculation	L080-PL/L130B	W	NONE
Hexavalent chromium in soil	Determination of hexavalent chromium in soil by extraction in NaOH and addition of 1,5 diphenylcarbazide followed by colorimetry	In-house method	L080-PL	W	MCERTS
Monohydric phenols in soil	Determination of phenols in soil by extraction with sodium hydroxide followed by distillation followed by colorimetry	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L080-PL	W	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

Analytical Report Number : 26-024497

Project / Site name: Smithybridge Pub

Water matrix abbreviations:

Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters Heating/Cooling (PrW) DI Process Water (DI PrW)

Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Soil Descriptions	Textural classification	In-house method	L019B	W	NONE

For method numbers ending in 'UK' or 'A' analysis have been carried out in our laboratory in the United Kingdom (Watford).

For method numbers ending in 'F' analysis have been carried out in our laboratory in the United Kingdom (East Kilbride).

For method numbers ending in 'PL' or 'B' 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.

Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.

Quality control parameter failure associated with individual result applies to calculated sum of individuals.

The result for sum should be interpreted with caution

*U/S g- Unsuitable for analysis due to high colour intensity.