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COVER SYSTEM VALIDATION REPORT – PRINCEDOM STREET, MANCHESTER – PLOTS 1-12

This Remediation Validation Report has been prepared at the request of John Southworth Builders Ltd. Instructions to proceed with this report were received in October 2025.

This report pertains to a c. 0.52 Ha site located either side of Princedom Street, Manchester at the approximate post code M9 4JR. The National Ordnance Survey Grid Reference for the centre of the site is 386432E, 401698N.

This report follows, and should be read in conjunction with, the following reports:

- Sladen Associates, '*Phase 1 Geo-Environmental Study*' (Ref. 20 2776, December 2020).
- Brownfield Solutions Ltd., '*Phase 2 Ground Investigation Report*' (Ref. PH/C4656/10673, March 2022).
- IGE Consulting Ltd., '*Princedom Street, Manchester - Remedial Strategy Report*' (ref: 4048-01/A, dated: December 2024).

This Validation Report concerns the cover system validation of Plots 1-12 only.

Further validations for further Plots will be produced as they become available. This report is to be used for submission to the building insurer, to achieve sign-off for Plots 1-12 only.

Ground gas protection measures are not required for this site.

Remedial Requirements

The above referenced IGE Consulting Remedial Strategy Report specified the installation of a clean cover system within private rear gardens and areas of soft landscaping in order to break any pathways between the existing site soils and the end user due to GAC exceedances recorded in the existing site soils.



The following Landscaping Plan details the private rear gardens (green), private front gardens (orange) and POS soft landscaping (Public Open Space / POSresi – yellow) on site. This cover system validation report will refer to the landscaping designations detailed in the below extract.



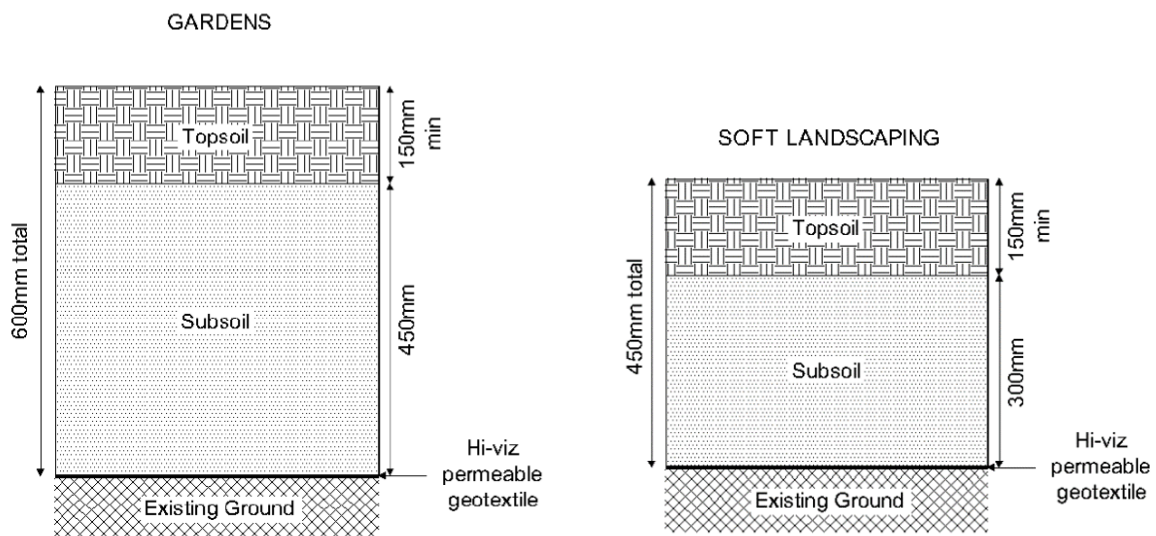
Figure 1: Extract of the landscape plan of the site (SI-02 Landscaping Plan, Sept 2024). Blue = proposed Plots. Green = private rear gardens. Orange = private front gardens. Yellow = soft landscaping / public open space.

Cover System Requirements

Made Ground containing human health GAC exceedances is present below finalised rear garden levels at depths shallower than 600mm (450mm in front gardens and areas of soft landscaping) across the site. The following procedure is outlined for use in all private gardens and in areas of soft landscaping:

1. Excavate to 600mm bgl in private rear gardens (450mm in front gardens and soft landscaping areas).
2. A 600mm clean cover system is recommended to be added to the proposed private rear gardens (450mm in front gardens and soft landscaping areas). This is to consist of:
 - No less than 150mm and no more than 300mm suitable topsoil, underlain by;
 - Suitable subsoil to a total (topsoil + subsoil) depth of 600mm (450mm in front gardens and areas of soft landscaping), underlain by;
 - A high vis geotextile marker;
 - Validate in line with the below strategy.

This is shown diagrammatically below:



Where Made Ground is shallower than 600mm in rear garden areas or shallower than 450mm in front gardens or soft landscaped areas, excavating to the required depth for a cover system in these areas would constitute source removal. Therefore, where this is the case, the following procedure is proposed:

- Excavate to the base of the Made Ground (less than 600mm in rear gardens and less than 450mm in front gardens or soft landscaping areas). A clean cover system is not necessary.
- Add suitable subsoil and topsoil to create a garden / soft landscaping to the client's specification.
- Validate in line with the below strategy.

Soils for use in the above recommended cover system must be validated as detailed below to ensure their suitability for use.

Clean Cover System Validation

Once the 600mm clean cover system is installed to break contaminative linkages (450mm in front gardens and areas of soft landscaping), validation requirements include:

- Details of the source of the cover material;
- Chemical test results to demonstrate that the soil is free from contamination and 'suitable for use' in-line with the below chemical testing suites and rates.
- Waste transfer notes to provide evidence of source;
- Confirmation of cover depth by either measurement tape or topographical survey with photographs at a frequency of one pit per three Plots.

Imported topsoil and subsoil must be validated as detailed below to ensure its suitability for use (i.e., no glass or plastic is to be included and meets chemical testing acceptability criteria). Imported topsoil and subsoil is required to be tested at source prior to import to confirm suitability. All topsoil and subsoil, whether site-won or imported is required to be tested at the following frequency, in line with Manchester City Council guidance:

End-Use	Greenfield Soils	Remediated Soils	Brownfield Soils	Unknown Soil Source
Residential Gardens	1:200m ³	1:100m ³	1:50m ³	1:50m ³
Soft Landscaping	1:200m ³	1:150m ³	1:150m ³	1:150m ³
Other	1:200m ³	1:200m ³	1:200m ³	1:200m ³

Minimum 3 samples regardless of volume.

Suitability of Imported Topsoil

The topsoil for the clean cover system was imported from R Draper Ltd, a topsoil supplier, the topsoil was sourced from Fearn's Farm Equestrian & Country, Liverpool Rd, Rufford, Ormskirk L40 1SQ. The material is Grade 1 topsoil excavated from greenfield land. Chemical testing of the imported topsoil was provided by the supplier and assessed by IGE Consulting. A google maps extract of the site and 5 No. historical maps have been included below to illustrate the greenfield nature of the site. The topsoil was taken from the western field of the site, indicated by the red boundary below. No material was taken from in and around the farm buildings and topsoil only was exported from site.



Figure 2: Google Maps extract showing Fearn's Farm Equestrian & Country (approximate site boundary shown in yellow), Area of topsoil strip shown with red boundary.



Figure 3: 1830-1880 Historical Map (approximate site boundary shown in yellow).



Figure 4: 1888-1915 Historical Map (approximate site boundary shown in yellow).

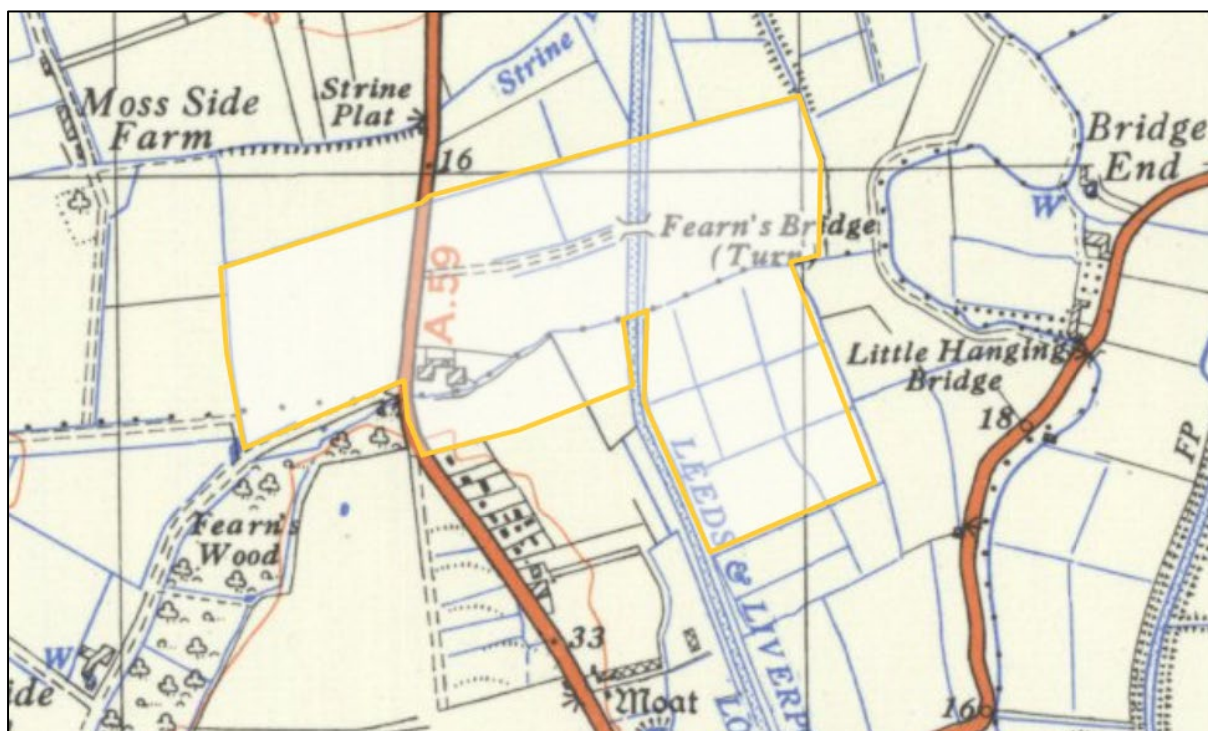


Figure 5: 1937-1961 Historical Map (approximate site boundary shown in yellow).

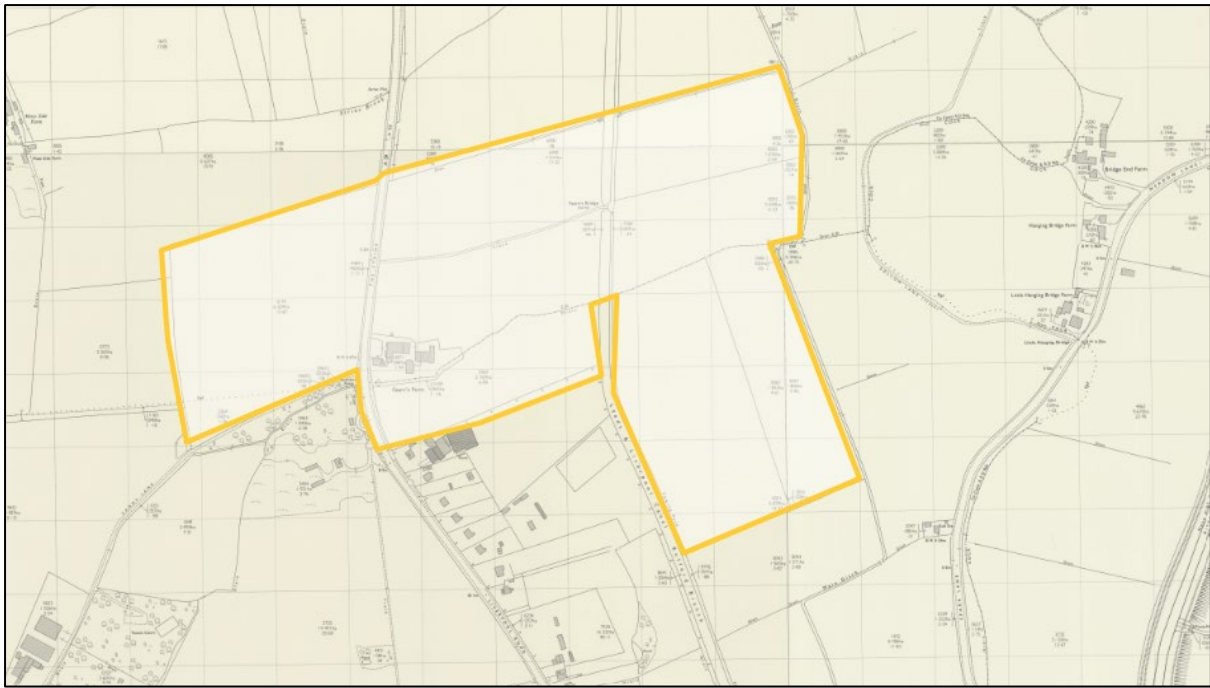


Figure 6: 1948-1974 Historical Map (approximate site boundary shown in yellow).

No exceedances above human health criteria were detected. On this basis, the soils were deemed acceptable for import and suitable for use on residential development sites. The chemical test results at source are contained in Appendix 2.

The topsoil was visually assessed and found to contain no plastics, glass, metals, or other deleterious anthropogenic materials and appeared to be a suitable growing medium. The material was sampled for chemical testing at site by IGE and was analysed by i2 Analytical and subsequently assessed by IGE Consulting. The area of the gardens of Plots 1-12 equates to approximately 733m². Utilising an average of 0.15m depth of topsoil this equates to a volume of 110m³, consequently 6 No. soil samples were tested, which exceeds the above requirements – 1 per 200m³ (or minimum 3). An appropriate suite of contaminants was analysed for comparison to GACs for a '*residential with plant uptake*' end use.

No concentrations were present in exceedance of their respective GACs. Therefore, the topsoil was deemed suitable for use. The chemical test results at site are included in Appendix 3 (report ref: 25-054817, 25-047040 & 25-058750-1).

Suitability of Imported Subsoil

The subsoil for the clean cover system comprises quarried sand from Bathgate Silica Sand Ltd, Arclid Quarry, Congleton Rd, Sandbach CW11 4SN. Bathgate Silica Sand Ltd are the suppliers of subsoil for all John Southworth Builders Ltd sites in the north west. A health and safety sheet of the material is included in Appendix 2 as evidence of source.

The subsoil was visually assessed on site and found to contain no plastics, glass, metals, or other deleterious anthropogenic materials. The material was sampled for chemical testing at site by IGE and was analysed by i2 Analytical and subsequently assessed by IGE Consulting. The area of the gardens of Plots 1-12 equates to approximately 733m². Utilising an average of 0.45m depth of subsoil this equates to a volume of 330m³, consequently 6 No. soil samples were tested, which meets the above requirements – 1 per 200m³ (or minimum 3). An appropriate suite of contaminants was analysed for comparison to GACs for a '*residential with plant uptake*' end use.

No exceedances above human health criteria were detected. Therefore, the subsoil was deemed suitable for use. The chemical test results are contained in Appendix 3 (report ref: 25-047042 & 25-058752-1).

All transfer notes, providing evidence of source and import, are available at the following Dropbox link: [..\..\Waste Transfer notes](#)

Thickness of Clean Cover

A small hole was dug within 1 per 3 gardens of Plots 1-12. Photographs were taken of the cover system thickness in these areas, which was found to be equal or greater than the required thickness. The photographs and confirmation of cover depth for Plots 1-12 are contained in the Verification Logs in Appendix 4.

A development site layout plan, showing the locations of the gardens and soft landscaping areas, is contained in Appendix 1.

Cover System Validation Summary

On the basis of the information provided, it is confirmed that the clean cover system remediation objectives have been met for Plots 1-12. Further validations are required for further Plots as they are completed before the site as a whole can be validated.

Conclusion

The remedial objectives for Plots 1-12 have been met. No further recommendations are made for these Plots. Further validations are required for further Plots as they are completed before the site as a whole can be validated. These will be included in a revision or addendum to this report once complete.

If any additional information is needed, do not hesitate to ask.

Yours sincerely,

James Harley MSci SGPV FGS

Geo-Environmental Engineer

Appendix 1 – Site Layout Plan

Appendix 2 – Chemical test results at source

Appendix 3 – Chemical test results at site

Appendix 4 – Verification Logs

APPENDIX 1



- NOTES
- All dimensions and levels are to be checked on site.

Any discrepancies are to be reported to the architect before any work commences

This drawing shall not be scaled to ascertain any dimensions. Work to figured dimensions only.

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All works are to be undertaken in accordance with Building Regulations and the latest British Standards.

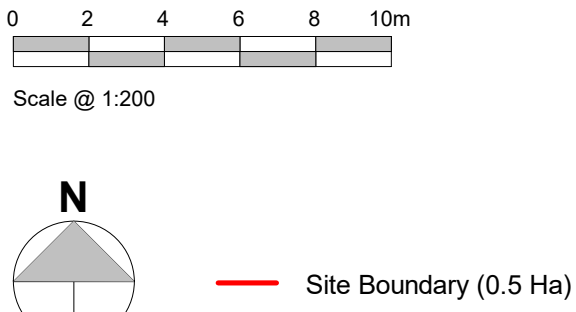
All proprietary materials and products are to be used strictly in accordance with the manufacturers recommendations.
- This drawing contains the following model files: -

12192-AEW-XX-XX-M3-A-0001 [P0.1] [S0]

CDM 2015

Client notified of duties:
Principal Designer:

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



- Key
- 4 wheelie bins per house

1 Enclosed cycle shed per house

Schedule of Accommodation		
Type	Area	Count
3B4P End Terrace Housing Plot	87.16m ²	8
3B4P Mid Terrace Housing Plot	88.12m ²	14
Total		22

P05	10.07.23	KJ	DAL
Rescaled to A1.			
P04	30.06.23	KJ	DAL
Issue for planning.			
P03	10.07.23	KJ	DAL
Revised site plan with 'H' bars and rearrangement of Plot 21 bin store.			
P02	23.06.23	KJ	DAL
Block 01, block 02, and waste management layouts revised.			
P1	03.12.21	DAL	BR
Initial Issue.			
REV	Date	Drawn by: -	Checked by: -

Status

Purpose of Issue

S2

For Information

drawing stage

Stage 3

client

Mossclare St Vincents

project

Princedom Street, Harpurhey

drawing title

Proposed - Site Layout - Presentation

date

29.11.21

drawn

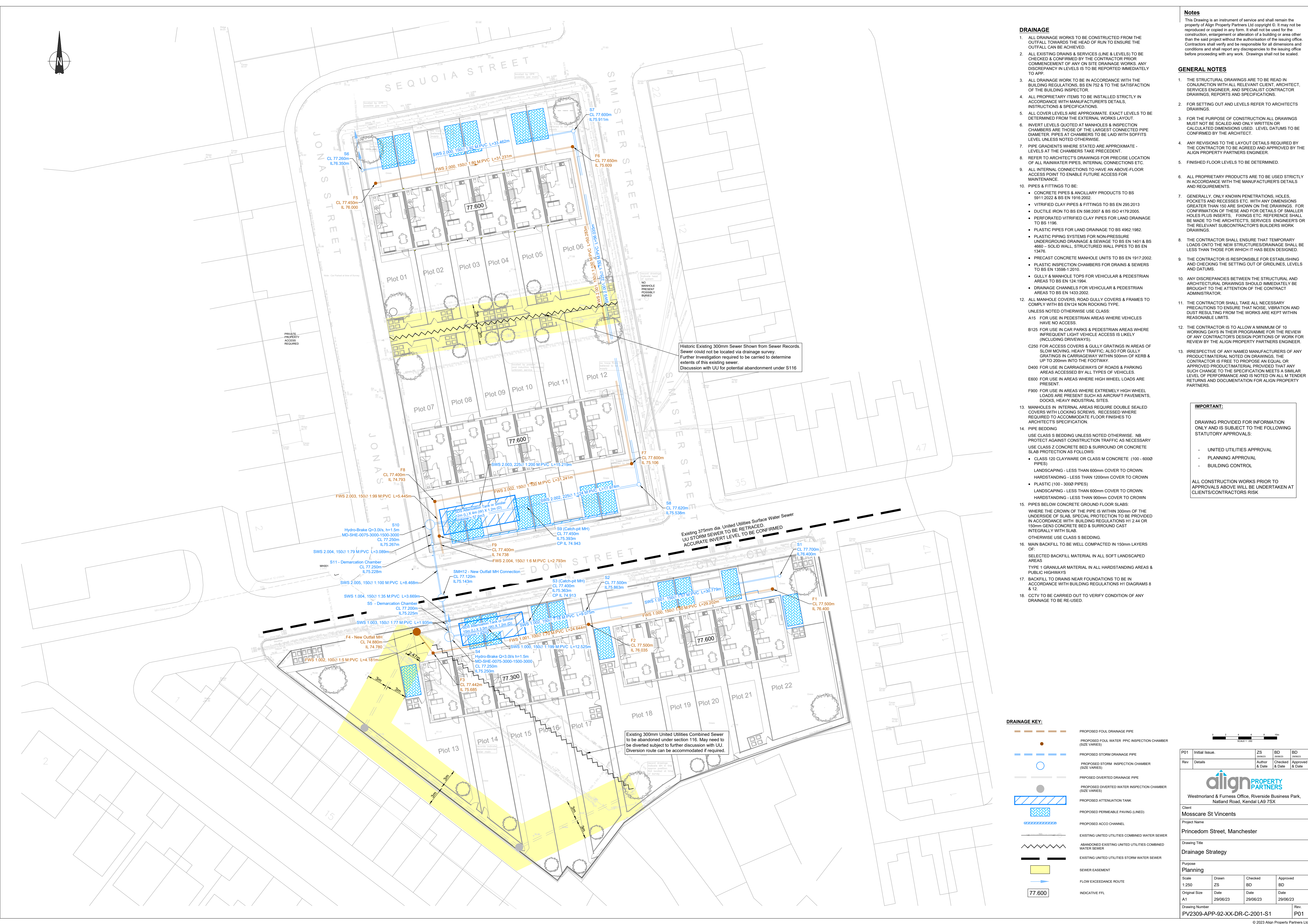
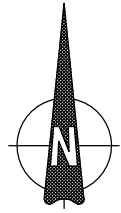
DAL

scale @ A1

As indicated

checked

BR



DRAINAGE

- ALL DRAINAGE WORKS TO BE CONSTRUCTED FROM THE OUTFALL TOWARDS THE HEAD OF RUN TO ENSURE THE OUTFALL CAN BE ACHIEVED.
- ALL EXISTING DRAINS & SERVICES (LINE & LEVELS) TO BE CHECKED & CONFIRMED BY THE CONTRACTOR PRIOR COMMENCEMENT OF ANY ON SITE DRAINAGE WORKS. ANY DISCREPANCY IN LEVELS IS TO BE REPORTED IMMEDIATELY TO APP.
- ALL DRAINAGE WORK TO BE IN ACCORDANCE WITH THE BUILDING REGULATIONS, BS EN 752 & TO THE SATISFACTION OF THE BUILDING INSPECTOR.
- ALL PROPRIETARY ITEMS TO BE INSTALLED STRICTLY IN ACCORDANCE WITH MANUFACTURER'S DETAILS, INSTRUCTIONS & SPECIFICATIONS.
- ALL COVER LEVELS ARE APPROXIMATE. EXACT LEVELS TO BE DETERMINED FROM THE EXTERNAL WORKS LAYOUT.
- INVERT LEVELS QUOTED AT MANHOLES & INSPECTION CHAMBERS ARE THOSE OF THE LARGEST CONNECTED PIPE DIAMETER. PIPES AT CHAMBERS TO BE LAID WITH SOFFITS LEVEL UNLESS NOTED OTHERWISE.
- PIPE GRADIENTS WHERE STATED ARE APPROXIMATE - LEVELS AT THE CHAMBERS TAKE PRECEDENT.
- REFER TO ARCHITECT'S DRAWINGS FOR PRECISE LOCATION OF ALL RAINWATER PIPES, INTERNAL CONNECTIONS ETC.
- ALL INTERNAL CONNECTIONS TO HAVE AN ABOVE-FLOOR ACCESS POINT TO ENABLE FUTURE ACCESS FOR MAINTENANCE.
- PIPES & FITTINGS TO BE:
 - CONCRETE PIPES & ANCILLARY PRODUCTS TO BS 5911:2022 & BS EN 1916:2002.
 - VITRIFIED CLAY PIPES & FITTINGS TO BS EN 295:2013
 - DUCTILE IRON TO BS EN 598:2007 & BS ISO 4179:2005.
 - PERFORATED VITRIFIED CLAY PIPES FOR LAND DRAINAGE TO BS 1196.
 - PLASTIC PIPES FOR LAND DRAINAGE TO BS 4962:1982.
 - PLASTIC PIPING SYSTEMS FOR NON-PRESSURE UNDERGROUND DRAINAGE & SEWAGE TO BS EN 1401 & BS 4680 - SOLID WALL, STRUCTURED WALL PIPES TO BS EN 13476.
 - PRECAST CONCRETE MANHOLE UNITS TO BS EN 1917:2002.
 - PLASTIC INSPECTION CHAMBERS FOR DRAINS & SEWERS TO BS EN 13598-1:2010.
 - GULLY & MANHOLE TOPS FOR VEHICULAR & PEDESTRIAN AREAS TO BS EN 124:1994.
 - DRAINAGE CHANNELS FOR VEHICULAR & PEDESTRIAN AREAS TO BS EN 1433:2002.
- ALL MANHOLE COVERS, ROAD GULLY COVERS & FRAMES TO COMPLY WITH BS EN124 NON ROCKING TYPE. UNLESS NOTED OTHERWISE USE CLASS:
 - A15 FOR USE IN PEDESTRIAN AREAS WHERE VEHICLES HAVE NO ACCESS.
 - B125 FOR USE IN CAR PARKS & PEDESTRIAN AREAS WHERE INFREQUENT LIGHT VEHICLE ACCESS IS LIKELY (INCLUDING DRIVEWAYS).
 - C250 FOR ACCESS COVERS & GULLY GRATINGS IN AREAS OF SLOW MOVING, HEAVY TRAFFIC; ALSO FOR GULLY GRATINGS IN CARRIAGEWAY WITHIN 500mm OF KERB & UP TO 200mm INTO THE FOOTWAY.
 - D400 FOR USE IN CARRIAGEWAYS OF ROADS & PARKING AREAS ACCESSED BY ALL TYPES OF VEHICLES.
 - E600 FOR USE IN AREAS WHERE HIGH WHEEL LOADS ARE PRESENT.
 - F900 FOR USE IN AREAS WHERE EXTREMELY HIGH WHEEL LOADS ARE PRESENT SUCH AS AIRCRAFT PAVEMENTS, DOCKS, HEAVY INDUSTRIAL SITES.
- MANHOLES IN INTERNAL AREAS REQUIRE DOUBLE SEALED COVERS WITH LOCKING SCREWS. RECESSED WHERE REQUIRED TO ACCOMMODATE FLOOR FINISHES TO ARCHITECT'S SPECIFICATION.
- PIPE BEDDING
 - USE CLASS S BEDDING UNLESS NOTED OTHERWISE. NB PROTECT AGAINST CONSTRUCTION TRAFFIC AS NECESSARY
 - USE CLASS 2 CONCRETE BED & SURROUND OR CONCRETE SLAB PROTECTION AS FOLLOWS:
 - CLASS 120 CLAYWARE OR CLASS M CONCRETE (100 - 6000 PIPES)
 - LANDSCAPING - LESS THAN 600mm COVER TO CROWN. HARDSTANDING - LESS THAN 1200mm COVER TO CROWN
 - PLASTIC (100 - 3000 PIPES)
 - LANDSCAPING - LESS THAN 600mm COVER TO CROWN. HARDSTANDING - LESS THAN 900mm COVER TO CROWN
- PIPES BELOW CONCRETE GROUND FLOOR SLABS:
 - WHERE THE CROWN OF THE PIPE IS WITHIN 300mm OF THE UNDERSIDE OF SLAB, SPECIAL PROTECTION TO BE PROVIDED IN ACCORDANCE WITH BUILDING REGULATIONS H1 2.44 OR 150mm GEND CONCRETE BED & SURROUND CAST INTEGRALLY WITH SLAB.
 - OTHERWISE USE CLASS S BEDDING.
- MAIN BACKFILL TO BE WELL COMPACTED IN 150mm LAYERS OF:
 - SELECTED BACKFILL MATERIAL IN ALL SOFT LANDSCAPED AREAS
 - TYPE 1 GRANULAR MATERIAL IN ALL HARDSTANDING AREAS & PUBLIC HIGHWAYS
- BACKFILL TO DRAINS NEAR FOUNDATIONS TO BE IN ACCORDANCE WITH BUILDING REGULATIONS H1 DIAGRAMS 8 & 12.
- CCTV TO BE CARRIED OUT TO VERIFY CONDITION OF ANY DRAINAGE TO BE RE-USED.

DRAINAGE KEY:

- PROPOSED FOUL DRAINAGE PIPE
- PROPOSED FOUL WATER PVC INSPECTION CHAMBER (SIZE VARIES)
- PROPOSED STORM DRAINAGE PIPE
- PROPOSED STORM INSPECTION CHAMBER (SIZE VARIES)
- PROPOSED DIVERTED DRAINAGE PIPE
- PROPOSED DIVERTED WATER INSPECTION CHAMBER (SIZE VARIES)
- PROPOSED ATTENUATION TANK
- PROPOSED PERMEABLE PAVING (LINED)
- PROPOSED ACCO CHANNEL
- EXISTING UNITED UTILITIES COMBINED WATER SEWER
- ABANDONED EXISTING UNITED UTILITIES COMBINED WATER SEWER
- EXISTING UNITED UTILITIES STORM WATER SEWER
- SEWER EASEMENT
- FLOW EXCEEDANCE ROUTE
- INDICATIVE FFL

Notes

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GENERAL NOTES

- THE STRUCTURAL DRAWINGS ARE TO BE READ IN CONJUNCTION WITH ALL RELEVANT CLIENT, ARCHITECT, SERVICES ENGINEER, AND SPECIALIST CONTRACTOR DRAWINGS, REPORTS AND SPECIFICATIONS.
- FOR SETTING OUT AND LEVELS REFER TO ARCHITECTS DRAWINGS.
- FOR THE PURPOSE OF CONSTRUCTION ALL DRAWINGS MUST NOT BE SCALED AND ONLY WRITTEN OR CALCULATED DIMENSIONS USED. LEVEL DATUMS TO BE CONFIRMED BY THE ARCHITECT.
- ANY REVISIONS TO THE LAYOUT DETAILS REQUIRED BY THE CONTRACTOR TO BE AGREED AND APPROVED BY THE ALIGN PROPERTY PARTNERS ENGINEER.
- FINISHED FLOOR LEVELS TO BE DETERMINED.
- ALL PROPRIETARY PRODUCTS ARE TO BE USED STRICTLY IN ACCORDANCE WITH THE MANUFACTURER'S DETAILS AND REQUIREMENTS.
- GENERALLY, ONLY KNOWN PENETRATIONS, HOLES, POCKETS AND RECESSES ETC. WITH ANY DIMENSIONS GREATER THAN 150 ARE SHOWN ON THE DRAWINGS. FOR CONFIRMATION OF THESE AND FOR DETAILS OF SMALLER HOLES PLUS INSERTS, FIXINGS ETC. REFERENCE SHALL BE MADE TO THE ARCHITECT'S SERVICES ENGINEERS OR THE RELEVANT SUBCONTRACTOR'S BUILDERS WORK DRAWINGS.
- THE CONTRACTOR SHALL ENSURE THAT TEMPORARY LOADS ONTO THE NEW STRUCTURES/DRAINAGE SHALL BE LESS THAN THOSE FOR WHICH IT HAS BEEN DESIGNED.
- THE CONTRACTOR IS RESPONSIBLE FOR ESTABLISHING AND CHECKING THE SETTING OUT OF GRIDLINES, LEVELS AND DATUMS.
- ANY DISCREPANCIES BETWEEN THE STRUCTURAL AND ARCHITECTURAL DRAWINGS SHOULD IMMEDIATELY BE BROUGHT TO THE ATTENTION OF THE CONTRACT ADMINISTRATOR.
- THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO ENSURE THAT NOISE, VIBRATION AND DUST RESULTING FROM THE WORKS ARE KEPT WITHIN REASONABLE LIMITS.
- THE CONTRACTOR IS TO ALLOW A MINIMUM OF 10 WORKING DAYS IN THEIR PROGRAMME FOR THE REVIEW OF ANY CONTRACTOR'S DESIGN PORTIONS OF WORK FOR REVIEW BY THE ALIGN PROPERTY PARTNERS ENGINEER.
- IRRESPECTIVE OF ANY NAMED MANUFACTURERS OF ANY PRODUCT/MATERIAL NOTED ON DRAWINGS, THE CONTRACTOR IS FREE TO PROPOSE AN EQUAL OR APPROVED PRODUCT/MATERIAL PROVIDED THAT ANY SUCH CHANGE TO THE SPECIFICATION MEETS A SIMILAR LEVEL OF PERFORMANCE AND IS NOTED ON ALL M TENDER RETURNS AND DOCUMENTATION FOR ALIGN PROPERTY PARTNERS.

IMPORTANT:

DRAWING PROVIDED FOR INFORMATION ONLY AND IS SUBJECT TO THE FOLLOWING STATUTORY APPROVALS:

- UNITED UTILITIES APPROVAL
- PLANNING APPROVAL
- BUILDING CONTROL

ALL CONSTRUCTION WORKS PRIOR TO APPROVALS ABOVE WILL BE UNDERTAKEN AT CLIENTS/CONTRACTORS RISK

P01	Initial Issue.	ZS	BD
Rev	Details	Author	Checked
		& Date	& Date
		Approved	& Date
align PROPERTY PARTNERS Westmorland & Furness Office, Riverside Business Park, Natland Road, Kendal LA9 7SX			
Client			
Mosscares St Vincents			
Project Name			
Princesdom Street, Manchester			
Drawing Title			
Drainage Strategy			
Purpose			
Planning			
Scale	Drawn	Checked	Approved
1:250	ZS	BD	BD
Original Size	Date	Date	Date
A1	29/06/23	29/06/23	29/06/23
Drawing Number	Rev.		
PV2309-APP-92-XX-DR-C-2001-S1	P01		

APPENDIX 2



TIM O'HARE ASSOCIATES
SOIL & LANDSCAPE CONSULTANCY

Alan Draper
R. Draper Ltd
Barrow Nook Lane
Bickerstaffe
Nr. Ormskirk
Lancashire
L39 0ET

25th February 2025
Our Ref: TOHA/25/1730/1/SS
Your Ref: as below

Dear Sirs

Topsoil Analysis Report – Grade 1 Topsoil

We have completed the analysis of the topsoil sample recently submitted, referenced *Grade 1 Topsoil*, and have pleasure reporting our findings.

The purpose of the analysis was to determine the suitability of the topsoil sample for general landscape purposes (trees, shrubs, amenity grass). In addition, this sample has been assessed to determine its compliance with the requirements of the British Standard for Topsoil (*BS3882:2015 Specification for Topsoil – Multipurpose Topsoil*).

This report presents the results of analysis for the sample submitted to our office, and it should be considered 'indicative' of the topsoil source. The report and results should therefore not be used by third parties as a means of verification or validation testing or waste designation purposes, especially after the topsoil has left the R Draper Ltd site.

SAMPLE EXAMINATION

The sample was described as a black (Munsell Colour 10YR 2/1), dry, friable, non-calcareous LOAMY SAND with a weakly developed, fine to medium granular structure*. The sample was slightly stony and contained a moderate proportion of organic fines and occasional woody fragments. No unusual odours, deleterious materials, roots or rhizomes of pernicious weeds were observed.

*This appraisal of soil structure was made from examination of disturbed sample. Structure is a key soil characteristic that may only be accurately assessed by examination in an in-situ state.

Tim O'Hare Associates LLP
Howbery Park Wallingford Oxfordshire OX10 8BA
T:01491 822653 E:info@toha.co.uk
www.toha.co.uk

ANALYTICAL SCHEDULE

The sample was submitted to a UKAS and MCERTS accredited laboratory for a range of physical and chemical tests to confirm the composition and fertility of the soil, and the concentration of selected potential contaminants. The following parameters were determined:

- particle size analysis (sand, silt, clay);
- stone content (2-20mm, 20-50mm, >50mm);
- pH and electrical conductivity values;
- exchangeable sodium percentage;
- major plant nutrients (N, P, K, Mg);
- organic matter content;
- C:N ratio;
- heavy metals (As, Cd, Cr, Cu, Pb, Hg, Ni, Se, Zn, B);
- total cyanide and total (mono) phenols;
- speciated PAHs (US EPA16 suite);
- aromatic and aliphatic TPH (C5-C35 banding);
- benzene, toluene, ethylbenzene, xylene (BTEX);
- asbestos screen.

The results are presented on the attached Certificate of Analysis and an interpretation of the results is given below.

RESULTS OF ANALYSIS

Particle Size Analysis and Stone Content

The sample fell into the *loamy sand* texture class, which is usually considered suitable for general landscape applications provided the soil's physical condition is satisfactory.

The sample was low and, as such, stones should not restrict the use of the soil for general landscape purposes.

pH and Electrical Conductivity Values

The sample was neutral in reaction (pH 7.0), with a pH value that would be considered ideal for general landscape purposes.

The electrical conductivity (salinity) value (water extract) was moderate, which indicates that soluble salts should not be present at levels that would be harmful to plants.

The electrical conductivity value by CaSO₄ extract (BS3882 requirement) fell below the maximum specified value (3300 µS/cm) given in BS3882:2015 – Table 1.

Organic Matter and Fertility Status

The sample was adequate to well supplied with organic matter and all major plant nutrients.

The C:N ratio of the sample was acceptable for general landscape purposes.

Potential Contaminants

With reference to BS3882:2015 - Table 1: Notes 3 and 4, there is a recommendation to confirm levels of potential contaminants in relation to the topsoil's proposed end use. This includes human health, environmental protection and metals considered toxic to plants. In the absence of site-specific assessment criteria, the concentrations that affect human health have been compared with the *residential with home grown produce* land use in the Suitable For Use Levels (S4ULs) presented in *The LQM/CIEH S4ULs for Human Health Risk Assessment* (2015) and the DEFRA SP1010: *Development of Category 4 Screening Levels (C4SLs) for Assessment of Land Affected by Contamination – Policy Companion Document* (2014).

Of the potential contaminants determined, none exceeded their respective guideline values.

Phytotoxic Contaminants

Of the phytotoxic (toxic to plants) contaminants determined (copper, nickel, zinc), none was found at levels that exceeded the maximum permissible levels specified in *BS3882:2015 – Table 1*.

CONCLUSION

The purpose of the analysis was to determine the suitability of the topsoil sample for general landscape purposes (trees, shrubs, amenity grass). In addition, this sample has been assessed to determine its compliance with the requirements of the British Standard for Topsoil (*BS3882:2015 Specification for Topsoil – Multipurpose Topsoil*).

From the soil examination and laboratory analysis, the sample was described as a neutral, non-saline, slightly calcareous *loamy sand* with a weakly developed structure and a low stone content. The sample was adequate to well supplied with organic matter and all major plant nutrients. Of the potential contaminants determined, none exceeded their guideline values.

To conclude, based on our findings, the topsoil represented by this sample would be considered suitable for general landscape purposes (trees, shrubs and amenity grass), provided the physical condition of the topsoil is satisfactory.

The topsoil was fully compliant with the requirements of the British Standard for Topsoil (*BS3882:2015 – Specification for Topsoil – Table 1, Multipurpose Topsoil*).

RECOMMENDATIONS

Soil Handling Recommendations

It is important to maintain the physical condition of the soil and avoid structural damage during all phases of soil handling (e.g. stockpiling, resspreading, cultivating, planting, seeding or turfing). As a consequence, soil handling operations should be carried out when soil is sufficiently dry to be non-plastic (friable) in consistency.

It is important to ensure that the soil is not unnecessarily compacted by trampling or trafficking by site machinery, and soil handling should be stopped during and after heavy rainfall and not continued until the soil is friable in consistency. If the soil is structurally damaged and compacted at any stage during the course of soiling or landscaping works, it should be cultivated appropriately to relieve the compaction and to restore the soil's structure prior to any planting, turfing or seeding.

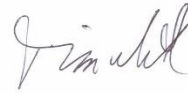
Further details on soil handling are provided in Annex A of *BS3882:2015*.

We hope this report meets with your approval and provides the necessary information. Please do not hesitate to contact the undersigned if we can be of further assistance.

Yours faithfully



Ebony Gheorghe
BSc MSc
Soil Scientist



Tim White
BSc MSc MISOilSci CSci
Senior Associate

For & on behalf of Tim O'Hare Associates LLP



TIM O'HARE ASSOCIATES
SOIL & LANDSCAPE CONSULTANCY

Client:	R Draper Ltd
Project	Grade 1 Topsoil
Job:	Topsoil Analysis - BS3882:2015
Date:	25/02/2025
Job Ref No:	TOHA/25/1730/1/SS

Sample Reference		Accreditation
Clay (<0.002mm)	%	UKAS
Silt (0.002-0.063mm)	%	UKAS
Sand (0.063-2.0mm)	%	UKAS
Texture Class (UK Classification)	--	UKAS
Stones (2-20mm)	% DW	GLP
Stones (20-50mm)	% DW	GLP
Stones (>50mm)	% DW	GLP

pH Value (1:2.5 water extract)	units	UKAS
Electrical Conductivity (1:2.5 water extract)	uS/cm	UKAS
Electrical Conductivity (1:2 CaSO ₄ extract)	uS/cm	UKAS
Exchangeable Sodium Percentage	%	UKAS
Organic Matter (LOI)	%	UKAS
Total Nitrogen (Dumas)	%	UKAS
C : N Ratio	ratio	UKAS
Extractable Phosphorus	mg/l	UKAS
Extractable Potassium	mg/l	UKAS
Extractable Magnesium	mg/l	UKAS

Total Arsenic (As)	mg/kg	MCERTS
Total Cadmium (Cd)	mg/kg	MCERTS
Total Chromium (Cr)	mg/kg	MCERTS
Hexavalent Chromium (Cr VI)	mg/kg	MCERTS
Total Copper (Cu)	mg/kg	MCERTS
Total Lead (Pb)	mg/kg	MCERTS
Total Mercury (Hg)	mg/kg	MCERTS
Total Nickel (Ni)	mg/kg	MCERTS
Total Selenium (Se)	mg/kg	MCERTS
Total Zinc (Zn)	mg/kg	MCERTS
Water Soluble Boron (B)	mg/kg	MCERTS
Total Cyanide (CN)	mg/kg	MCERTS
Total (mono) Phenols	mg/kg	MCERTS

Naphthalene	mg/kg	MCERTS
Acenaphthylene	mg/kg	MCERTS
Acenaphthene	mg/kg	MCERTS
Fluorene	mg/kg	MCERTS
Phenanthrene	mg/kg	MCERTS
Anthracene	mg/kg	MCERTS
Fluoranthene	mg/kg	MCERTS
Pyrene	mg/kg	MCERTS
Benzo(a)anthracene	mg/kg	MCERTS
Chrysene	mg/kg	MCERTS
Benzo(b)fluoranthene	mg/kg	MCERTS
Benzo(k)fluoranthene	mg/kg	MCERTS
Benzo(a)pyrene	mg/kg	MCERTS
Indeno(1,2,3-cd)pyrene	mg/kg	MCERTS
Dibenzo(a,h)anthracene	mg/kg	MCERTS
Benzo(g,h,i)perylene	mg/kg	MCERTS
Total PAHs (sum USEPA16)	mg/kg	MCERTS

Aliphatic TPH >C5 - C6	mg/kg	MCERTS
Aliphatic TPH >C6 - C8	mg/kg	MCERTS
Aliphatic TPH >C8 - C10	mg/kg	MCERTS
Aliphatic TPH >C10 - C12	mg/kg	MCERTS
Aliphatic TPH >C12 - C16	mg/kg	MCERTS
Aliphatic TPH >C16 - C21	mg/kg	MCERTS
Aliphatic TPH >C21 - C35	mg/kg	MCERTS
Aliphatic TPH (C5 - C35)	mg/kg	MCERTS
Aromatic TPH >C5 - C7	mg/kg	MCERTS
Aromatic TPH >C7 - C8	mg/kg	MCERTS
Aromatic TPH >C8 - C10	mg/kg	MCERTS
Aromatic TPH >C10 - C12	mg/kg	MCERTS
Aromatic TPH >C12 - C16	mg/kg	MCERTS
Aromatic TPH >C16 - C21	mg/kg	MCERTS
Aromatic TPH >C21 - C35	mg/kg	MCERTS
Aromatic TPH (C5 - C35)	mg/kg	MCERTS

Benzene	mg/kg	MCERTS
Toluene	mg/kg	MCERTS
Ethylbenzene	mg/kg	MCERTS
p & m-xylene	mg/kg	MCERTS
Xylene	mg/kg	MCERTS
MTBE (Methyl Tertiary Butyl Ether)	mg/kg	MCERTS

Asbestos Screen	N/ND	ISO 17025
-----------------	------	-----------

LS = LOAMY SAND

Visual Examination

The sample was described as a black (Munsell Colour 10YR 2/1), dry, friable, non-calcareous LOAMY SAND with a weakly developed, fine to medium granular structure. The sample was slightly stony and contained a moderate proportion of organic fines and occasional woody fragments. No unusual odours, deleterious materials, roots or rhizomes of pernicious weeds were observed.

Results of analysis should be read in conjunction with the report they were issued with.

The contents of this certificate shall not be reproduced without the express written permission of Tim O'Hare Associates LLP

**Grade 1
Topsoil**

8
8
84
LS
2
3
0

7.0
1461
3197
3.5
4.1
0.20
12
64
700
78

10
0.4
14
< 1.8
41
60
< 0.3
12
< 1.0
72
0.5
< 1.0
< 1.0

< 0.05
< 0.05
< 0.05
< 0.05
0.18
< 0.05
0.40
0.37
0.21
0.20
0.22
0.08
0.26
0.13
< 0.05
0.18
2.2

< 0.010
< 0.010
< 0.010
< 1.0
< 2.0
< 8.0
< 8.0
< 10
< 0.010
0.01
< 0.020
< 1.0
< 2.0
< 10
< 10
< 10

< 0.005
0.01
< 0.005
< 0.008
< 0.005
< 0.005

Not-detected

Ebony Gheorghe
BSc MSc
Soil Scientist

Appendix A – Analytical Certificates & Screening Tables (Imported)

FINAL ANALYTICAL TEST REPORT

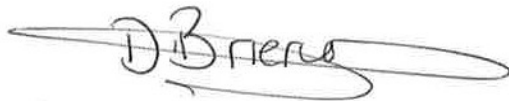
Envirolab Job Number: 24/08804
Issue Number: 1

Date: 17 September, 2024

Client: Sutcliffe
18-20 Harrington Street
Liverpool
L2 9QA

Project Manager: (Use) D Evans; D Bowen; A Tosh; W Baldwin/(Use) Sa
Project Name: Wheatfields Day Centre
Project Ref: 31990LG
Order No: 10542
Date Samples Received: 11/09/24
Date Instructions Received: 12/09/24
Date Analysis Completed: 17/09/24

Approved by:



Danielle Brierley
Client Services Supervisor

Envirolab Job Number: 24/08804

Client Project Name: Wheatfields Day Centre

Client Project Ref: 31990LG

Lab Sample ID	24/08804/1	24/08804/2	24/08804/3	24/08804/4				Units	Limit of Detection	Method ref
Client Sample No										
Client Sample ID	TS-PLOT 29-30	TS-PLOT 15	SS-PLOT 29-30	SS-PLOT 16						
Depth to Top	0.00	0.00	0.15	0.15						
Depth To Bottom	0.15	0.15	0.60	0.60						
Date Sampled	09-Sep-24	09-Sep-24	09-Sep-24	09-Sep-24						
Sample Type	SOIL	SOIL	SOIL	SOIL						
Sample Matrix Code	4AE	4AE	4AE	5AE						
% Moisture at <40C _A	23.6	22.3	10.5	13.5				% w/w	0.1	A-T-044
% Stones >10mm _A	2.5	1.6	18.2	3.0				% w/w	0.1	A-T-044
pH _D ^{M#}	8.81	8.61	8.21	8.38				pH	0.01	A-T-031s
Sulphate (water sol 2:1) _D ^{M#}	0.04	0.05	<0.01	0.03				g/l	0.01	A-T-026s
Sulphate (acid soluble) _D ^{M#}	400	350	<200	<200				mg/kg	200	A-T-028s
Cyanide (total) _A ^{M#}	<1	<1	<1	<1				mg/kg	1	A-T-042sTCN
Phenols - Total by HPLC _A	<0.2	<0.2	<0.2	<0.2				mg/kg	0.2	A-T-050s
Sulphide _A	<5	<5	<5	<5				mg/kg	5	A-T-043-s
Sulphur (elemental) _D ^{M#}	6	7	<5	<5				mg/kg	5	A-T-029s
Organic Matter _D ^{M#}	11.5	8.6	0.2	0.9				% w/w	0.1	A-T-032s
Arsenic _D ^{M#}	4	3	<1	<1				mg/kg	1	A-T-024s
Boron (water soluble) _D ^{M#}	1.5	1.4	<1.0	<1.0				mg/kg	1	A-T-027s
Cadmium _D ^{M#}	<0.5	<0.5	<0.5	<0.5				mg/kg	0.5	A-T-024s
Copper _D ^{M#}	20	14	6	11				mg/kg	1	A-T-024s
Chromium _D ^{M#}	9	10	11	16				mg/kg	1	A-T-024s
Chromium (hexavalent) _D	<1	<1	<1	<1				mg/kg	1	A-T-040s
Chromium (trivalent)	9	10	11	16				mg/kg	1	Calc
Lead _D ^{M#}	23	22	7	11				mg/kg	1	A-T-024s
Mercury _D	<0.17	<0.17	<0.17	<0.17				mg/kg	0.17	A-T-024s
Nickel _D ^{M#}	8	9	11	17				mg/kg	1	A-T-024s
Selenium _D ^{M#}	<1	<1	<1	<1				mg/kg	1	A-T-024s
Zinc _D ^{M#}	49	51	36	54				mg/kg	5	A-T-024s

Envirolab Job Number: 24/08804

Client Project Name: Wheatfields Day Centre

Client Project Ref: 31990LG

Lab Sample ID	24/08804/1	24/08804/2	24/08804/3	24/08804/4				Units	Limit of Detection	Method ref
Client Sample No										
Client Sample ID	TS-PLOT 29-30	TS-PLOT 15	SS-PLOT 29-30	SS-PLOT 16						
Depth to Top	0.00	0.00	0.15	0.15						
Depth To Bottom	0.15	0.15	0.60	0.60						
Date Sampled	09-Sep-24	09-Sep-24	09-Sep-24	09-Sep-24						
Sample Type	SOIL	SOIL	SOIL	SOIL						
Sample Matrix Code	4AE	4AE	4AE	5AE						
Asbestos in Soil (inc. matrix)										
Asbestos in soil [#]	NAD	NAD	NAD	NAD						A-T-045
Asbestos Matrix (visual) _D	-	-	-	-						A-T-045
Asbestos Matrix (microscope) _D	-	-	-	-						A-T-045
Asbestos ACM - Suitable for Water Absorption Test? _D	N/A	N/A	N/A	N/A						A-T-045

Envirolab Job Number: 24/08804

Client Project Name: Wheatfields Day Centre

Client Project Ref: 31990LG

Lab Sample ID	24/08804/1	24/08804/2	24/08804/3	24/08804/4				Units	Limit of Detection	Method ref
Client Sample No										
Client Sample ID	TS-PLOT 29-30	TS-PLOT 15	SS-PLOT 29-30	SS-PLOT 16						
Depth to Top	0.00	0.00	0.15	0.15						
Depth To Bottom	0.15	0.15	0.60	0.60						
Date Sampled	09-Sep-24	09-Sep-24	09-Sep-24	09-Sep-24						
Sample Type	SOIL	SOIL	SOIL	SOIL						
Sample Matrix Code	4AE	4AE	4AE	5AE						
PAH-16MS										
Acenaphthene _A ^{M#}	<0.01	<0.01	<0.01	<0.01				mg/kg	0.01	A-T-019s
Acenaphthylene _A ^{M#}	<0.01	<0.01	<0.01	<0.01				mg/kg	0.01	A-T-019s
Anthracene _A ^{M#}	0.05	<0.02	<0.02	<0.02				mg/kg	0.02	A-T-019s
Benzo(a)anthracene _A ^{M#}	0.19	0.14	<0.04	<0.04				mg/kg	0.04	A-T-019s
Benzo(a)pyrene _A ^{M#}	0.11	0.09	<0.04	<0.04				mg/kg	0.04	A-T-019s
Benzo(b)fluoranthene _A ^{M#}	0.17	0.15	<0.05	<0.05				mg/kg	0.05	A-T-019s
Benzo(ghi)perylene _A ^{M#}	0.09	0.06	<0.05	<0.05				mg/kg	0.05	A-T-019s
Benzo(k)fluoranthene _A ^{M#}	<0.07	<0.07	<0.07	<0.07				mg/kg	0.07	A-T-019s
Chrysene _A ^{M#}	0.23	0.19	<0.06	<0.06				mg/kg	0.06	A-T-019s
Dibenzo(ah)anthracene _A ^{M#}	<0.04	<0.04	<0.04	<0.04				mg/kg	0.04	A-T-019s
Fluoranthene _A ^{M#}	0.40	0.25	<0.08	<0.08				mg/kg	0.08	A-T-019s
Fluorene _A ^{M#}	<0.01	<0.01	<0.01	<0.01				mg/kg	0.01	A-T-019s
Indeno(123-cd)pyrene _A ^{M#}	0.06	0.05	<0.03	<0.03				mg/kg	0.03	A-T-019s
Naphthalene _A ^{M#}	<0.03	<0.03	<0.03	<0.03				mg/kg	0.03	A-T-019s
Phenanthrene _A ^{M#}	0.15	0.06	<0.03	<0.03				mg/kg	0.03	A-T-019s
Pyrene _A ^{M#}	0.34	0.23	<0.07	<0.07				mg/kg	0.07	A-T-019s
Total PAH-16MS _A ^{M#}	1.79	1.22	<0.08	<0.08				mg/kg	0.01	A-T-019s

Envirolab Job Number: 24/08804

Client Project Name: Wheatfields Day Centre

Client Project Ref: 31990LG

Lab Sample ID	24/08804/1	24/08804/2	24/08804/3	24/08804/4				Units	Limit of Detection	Method ref
Client Sample No										
Client Sample ID	TS-PLOT 29-30	TS-PLOT 15	SS-PLOT 29-30	SS-PLOT 16						
Depth to Top	0.00	0.00	0.15	0.15						
Depth To Bottom	0.15	0.15	0.60	0.60						
Date Sampled	09-Sep-24	09-Sep-24	09-Sep-24	09-Sep-24						
Sample Type	SOIL	SOIL	SOIL	SOIL						
Sample Matrix Code	4AE	4AE	4AE	5AE						
TPH UKCWG with Clean Up										
Ali >C5-C6 _A	<0.01	<0.01	<0.01	<0.01				mg/kg	0.01	A-T-022s
Ali >C6-C8 _A	<0.01	<0.01	<0.01	<0.01				mg/kg	0.01	A-T-022s
Ali >C8-C10 _A	<1	<1	<1	<1				mg/kg	1	A-T-055s
Ali >C10-C12 _A ^{M#}	<1	<1	<1	<1				mg/kg	1	A-T-055s
Ali >C12-C16 _A ^{M#}	1	<1	<1	<1				mg/kg	1	A-T-055s
Ali >C16-C21 _A ^{M#}	6	6	<1	<1				mg/kg	1	A-T-055s
Ali >C21-C35 _A ^{M#}	40	38	<1	<1				mg/kg	1	A-T-055s
Ali >C35-C44 _A	8	9	<1	<1				mg/kg	1	A-T-055s
Total Aliphatics _A	55	53	<1	<1				mg/kg	1	Calc-As Recd
Aro >C5-C7 _A [#]	<0.01	<0.01	<0.01	<0.01				mg/kg	0.01	A-T-022s
Aro >C7-C8 _A [#]	<0.01	<0.01	<0.01	<0.01				mg/kg	0.01	A-T-022s
Aro >C8-C10 _A	1	1	<1	<1				mg/kg	1	A-T-055s
Aro >C10-C12 _A	<1	<1	<1	<1				mg/kg	1	A-T-055s
Aro >C12-C16 _A	5	4	<1	<1				mg/kg	1	A-T-055s
Aro >C16-C21 _A ^{M#}	20	13	<1	<1				mg/kg	1	A-T-055s
Aro >C21-C35 _A ^{M#}	43	20	<1	<1				mg/kg	1	A-T-055s
Aro >C35-C44 _A	6	6	<1	<1				mg/kg	1	A-T-055s
Total Aromatics _A	77	44	<1	<1				mg/kg	1	Calc-As Recd
TPH (Ali & Aro >C5-C44) _A	131	98	2	<1				mg/kg	1	Calc-As Recd
BTEX - Benzene _A [#]	<0.01	<0.01	<0.01	<0.01				mg/kg	0.01	A-T-022s
BTEX - Toluene _A [#]	<0.01	<0.01	<0.01	<0.01				mg/kg	0.01	A-T-022s
BTEX - Ethyl Benzene _A [#]	<0.01	<0.01	<0.01	<0.01				mg/kg	0.01	A-T-022s
BTEX - m & p Xylene _A [#]	<0.01	<0.01	<0.01	<0.01				mg/kg	0.01	A-T-022s
BTEX - o Xylene _A [#]	<0.01	<0.01	<0.01	<0.01				mg/kg	0.01	A-T-022s
MTBE _A [#]	<0.01	<0.01	<0.01	<0.01				mg/kg	0.01	A-T-022s

Report Notes

General

- This report shall not be reproduced, except in full, without written approval from Envirolab.
- The client Sample No, Client Sample ID, Depth to top, Depth to Bottom and Date Sampled are all provided by the client and can affect the validity of results.
- The results reported herein relate only to the material supplied to the laboratory.
- The residue of any samples contained within this report, and any received within the same delivery, will be disposed of **four weeks** after the initial scheduling. For samples tested for Asbestos we will retain a portion of the dried sample for a minimum of **six months** after the initial Asbestos testing is completed.
- Analytical results reflect the quality of the sample at the time of analysis only.
- Opinions and Interpretations expressed are outside our scope of accreditation.
- A deviating sample report is appended and will indicate if samples or tests have been found to be deviating. Any test results affected may not be an accurate record of the concentration at the time of sampling and, as a result, may be invalid.
- If a sample is outside of the calibration range or affected by interferences then it may need diluting. This will result in the limit of detection (LOD) being raised.
- Subcontracted Analysis: Please see the appended report for any deviations, current LODs and accreditation status of the test.

Key

Superscript “#”	Accredited to ISO 17025
Superscript “M”	Accredited to MCertS
Superscript “U”	Individual result not accredited
None of the above symbols	Analysis unaccredited
Subscript “A”	Analysis performed on as-received Sample
Subscript “D”	Analysis performed on the dried sample, crushed to pass 2mm sieve.
Subscript “D” on Asbestos	Analysis performed on a dried aliquot of sample provided.
Subscript “^”	Analysis has dependant options against results. Details appear in the comments of your Sample receipt
IS	Insufficient Sample for analysis
US	Unsuitable Sample for analysis
NDP	No Determination Possible
NAD	No Asbestos Detected
Trace	Asbestos found not suitable for Gravimetric Quantification – not enough to accurately weigh.
N/A	Not applicable

Asbestos

Identification: Asbestos in soil analysis is performed on a dried aliquot of the submitted sample and cannot guarantee to identify asbestos if only present in small numbers as discrete fibres/fragments in the original sample.

Stones etc. are not removed from the sample prior to analysis

“Trace Asbestos Identified” will be reported if there is not enough present to verify the type.

Quantification: Generally a 2 stage process including visual identification, hand picking and weighing, and fibre counting. Where ACMs are found a percentage asbestos is assigned to each with reference to ‘HSG264, Asbestos: The survey guide’ and the calculated asbestos content is expressed as a percentage of the dried soil sample aliquot used. If asbestos is identified as being present but is not in a form that is suitable for analysis by hand picking and weighing (normally if the asbestos is present as free fibres). “TRACE” will be reported as a quantification result.

PLEASE INFORM THE LABORATORY IF YOU WOULD LIKE THE STAGE 3 SEDIMENTATION PROCESS CARRIED OUT. Note this will be subcontracted.

Assigned Matrix Codes

1	SAND	6	CLAY/LOAM	A	Contains Stones
2	LOAM	7	OTHER	B	Contains Construction Rubble
3	CLAY	8	Asbestos Bulk (Only Asbestos ID accredited)	C	Contains visible hydrocarbons
4	LOAM/SAND	9	Incinerator Ash (some Metals accredited)	D	Contains glass / metal
5	SAND/CLAY			E	Contains roots / twigs

Note: 7,8,9 matrices are not covered by our ISO 17025 or MCertS accreditation, unless stated above.

Soil Chemical Analysis:

All results are reported as dry weight (<40°C).

For samples with Matrix Codes 1 - 6 natural stones, brick and concrete fragments >10mm and any extraneous material (visible glass, metal or twigs) are removed and excluded from the sample prior to analysis and reported results corrected to a whole sample basis. This is reported as ‘% stones >10mm’.

For samples with Matrix Code 7 the whole sample is dried and crushed prior to analysis and this supersedes any “A” subscripts

All analysis is performed on the sample as received for soil samples which are positive for asbestos or the client has informed asbestos may be present and/or if they are from outside the European Union and this supersedes any “D” subscripts.

TPH by method A-T-007:

For waters, free and visible oils are excluded from the sample used for analysis, so the reported result represents the dissolved phase only. Results “with Clean up” indicates samples cleaned up with Silica during extraction.

EPH CWG (method A-T-055) from TPH CWG:

EPH CWG results have humics mathematically subtracted through instrument calculation.

Where these humic substances have been identified in any IDs from “TPH CWG with clean up” please note that the concentration is **NOT** included in the quantified results but present in the ID for information.

Electrical Conductivity of water by method A-T-037:

Results greater than 12900µS/cm @ 25°C / 11550µS/cm @ 20°C fall outside the calibration range and as such are unaccredited.

Please contact your client manager if you require any further information.

Envirolab Deviating Samples Report

Hattersley Science & Technology Park, Stockport Road, Hattersley, SK14 3QU
Tel. 0161 368 4921
email. ask@envlab.co.uk

Client:	Sutcliffe, 18-20 Harrington Street, Liverpool, L2 9QA	Project No:	24/08804
Project:	Wheatfields Day Centre	Date Received:	12/09/2024 (am)
Clients Project No:	31990LG	Cool Box Temperatures (°C):	14.8

NO DEVIATIONS IDENTIFIED

If, at any point before reaching the laboratory, the temperature of the samples has breached those set in published standards, e.g. BS-EN 5667-3, ISO 18400-102:2017, then the concentration of any affected analytes may differ from that at the time of sampling.

Envirolab Analysis Dates

Lab Sample ID	24/08804/1	24/08804/2	24/08804/3	24/08804/4
Client Sample No				
Client Sample ID/Depth	TS-PLOT 29-30 0.00-0.15m	TS-PLOT 15 0.00-0.15m	SS-PLOT 29-30 0.15-0.60m	SS-PLOT 16 0.15-0.60m
Date Sampled	09/09/24	09/09/24	09/09/24	09/09/24
A-T-019s	16/09/2024	16/09/2024	17/09/2024	17/09/2024
A-T-022s	13/09/2024	13/09/2024	13/09/2024	13/09/2024
A-T-024s	17/09/2024	17/09/2024	17/09/2024	17/09/2024
A-T-026s	16/09/2024	16/09/2024	16/09/2024	16/09/2024
A-T-027s	17/09/2024	17/09/2024	17/09/2024	17/09/2024
A-T-028s	17/09/2024	17/09/2024	17/09/2024	17/09/2024
A-T-029s	17/09/2024	17/09/2024	17/09/2024	17/09/2024
A-T-031s	16/09/2024	16/09/2024	16/09/2024	16/09/2024
A-T-032s	16/09/2024	16/09/2024	16/09/2024	17/09/2024
A-T-040s	16/09/2024	16/09/2024	16/09/2024	16/09/2024
A-T-042sTCN	13/09/2024	13/09/2024	13/09/2024	16/09/2024
A-T-043-s	12/09/2024	12/09/2024	12/09/2024	12/09/2024
A-T-044	16/09/2024	16/09/2024	16/09/2024	16/09/2024
A-T-045	13/09/2024	13/09/2024	13/09/2024	13/09/2024
A-T-050s	16/09/2024	16/09/2024	16/09/2024	16/09/2024
A-T-055s	13/09/2024	13/09/2024	13/09/2024	13/09/2024
Calc	17/09/2024	17/09/2024	17/09/2024	17/09/2024
Calc-As Recd	13/09/2024	13/09/2024	13/09/2024	13/09/2024

The above dates are the analysis completion dates, please note that these are not necessarily the date that the analysis was weighed/extracted.

End of Report

FINAL ANALYTICAL TEST REPORT

Envirolab Job Number: 24/07906
Issue Number: 1

Date: 20 August, 2024

Client: Sutcliffe
18-20 Harrington Street
Liverpool
L2 9QA

Project Manager: (Use) D Evans; D Bowen; A Tosh; W Baldwin/(Use) Sa
Project Name: Wheatfields Day Centre
Project Ref: 31990LG
Order No: 10494
Date Samples Received: 13/08/24
Date Instructions Received: 13/08/24
Date Analysis Completed: 20/08/24

Approved by:



Richard Wong
Client Manager

Envirolab Job Number: 24/07906

Client Project Name: Wheatfields Day Centre

Client Project Ref: 31990LG

Lab Sample ID	24/07906/1	24/07906/2	24/07906/3	24/07906/4	24/07906/5	24/07906/6		Units	Limit of Detection	Method ref
Client Sample No										
Client Sample ID	TS-Plot 2	TS-Plot 5	TS-Plot 8	TS-Plot 11	SS-Plot 23	TS-Plot 19				
Depth to Top	0.00	0.00	0.00	0.00	0.20	0.00				
Depth To Bottom	0.20	0.20	0.20	0.20	0.60	0.20				
Date Sampled	13-Aug-24	13-Aug-24	13-Aug-24	13-Aug-24	13-Aug-24	13-Aug-24				
Sample Type	SOIL - ES	SOIL - ES	SOIL - ES	SOIL - ES	SOIL - ES	SOIL - ES				
Sample Matrix Code	4AE	4AE	4AE	4AE	4AE	4AE				
% Moisture at <40C _A	18.1	19.4	18.6	18.7	8.1	18.5		% w/w	0.1	A-T-944
% Stones >10mm _A	4.4	4.1	4.2	2.2	15.5	11.8		% w/w	0.1	A-T-944
pH _D ^{M#}	8.23	8.20	8.02	8.29	7.50	8.15		pH	0.01	A-T-031s
Sulphate (water sol 2:1) _D ^{M#}	0.09	0.10	0.13	0.14	0.02	0.10		g/l	0.01	A-T-028s
Sulphate (acid soluble) _D ^{M#}	580	500	570	760	<200	460		mg/kg	200	A-T-028s
Cyanide (total) _A ^{M#}	<1	<1	<1	<1	<1	<1		mg/kg	1	A-T-042sTCN
Phenols - Total by HPLC _A	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2		mg/kg	0.2	A-T-050s
Sulphide _A	<5	<5	<5	<5	<5	<5		mg/kg	5	A-T-043-s
Sulphur (elemental) _D ^{M#}	6	<5	6	7	<5	6		mg/kg	5	A-T-029s
Organic Matter _D ^{M#}	12.8	8.3	11.7	7.3	2.1	5.2		% w/w	0.1	A-T-032s
Arsenic _D ^{M#}	4	4	3	4	<1	4		mg/kg	1	A-T-024s
Boron (water soluble) _D ^{M#}	1.7	1.9	1.8	1.7	<1.0	1.6		mg/kg	1	A-T-027s
Cadmium _D ^{M#}	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5		mg/kg	0.5	A-T-024s
Copper _D ^{M#}	20	14	18	19	10	16		mg/kg	1	A-T-024s
Chromium _D ^{M#}	10	11	12	11	16	9		mg/kg	1	A-T-024s
Chromium (hexavalent) _D	<1	<1	<1	<1	<1	<1		mg/kg	1	A-T-040s
Chromium (trivalent)	10	11	12	11	16	9		mg/kg	1	Calc
Lead _D ^{M#}	21	22	26	26	11	22		mg/kg	1	A-T-024s
Mercury _D	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17		mg/kg	0.17	A-T-024s
Nickel _D ^{M#}	9	8	8	9	15	6		mg/kg	1	A-T-024s
Selenium _D ^{M#}	<1	<1	<1	<1	<1	<1		mg/kg	1	A-T-024s
Zinc _D ^{M#}	46	43	59	56	46	77		mg/kg	5	A-T-024s

Envirolab Job Number: 24/07906

Client Project Name: Wheatfields Day Centre

Client Project Ref: 31990LG

Lab Sample ID	24/07906/1	24/07906/2	24/07906/3	24/07906/4	24/07906/5	24/07906/6		Units	Limit of Detection	Method ref
Client Sample No										
Client Sample ID	TS-Plot 2	TS-Plot 5	TS-Plot 8	TS-Plot 11	SS-Plot 23	TS-Plot 19				
Depth to Top	0.00	0.00	0.00	0.00	0.20	0.00				
Depth To Bottom	0.20	0.20	0.20	0.20	0.60	0.20				
Date Sampled	13-Aug-24	13-Aug-24	13-Aug-24	13-Aug-24	13-Aug-24	13-Aug-24				
Sample Type	SOIL - ES	SOIL - ES	SOIL - ES	SOIL - ES	SOIL - ES	SOIL - ES				
Sample Matrix Code	4AE	4AE	4AE	4AE	4AE	4AE				
Asbestos in Soil (inc. matrix)										
Asbestos in soil ^g	NAD	NAD	NAD	NAD	NAD	NAD				A-T-045
Asbestos Matrix (visual) _o	-	-	-	-	-	-				A-T-045
Asbestos Matrix (microscope) _o	-	-	-	-	-	-				A-T-045
Asbestos ACM - Suitable for Water Absorption Test? _o	N/A	N/A	N/A	N/A	N/A	N/A				A-T-045

Envirolab Job Number: 24/07906

Client Project Name: Wheatfields Day Centre

Client Project Ref: 31990LG

Lab Sample ID	24/07906/1	24/07906/2	24/07906/3	24/07906/4	24/07906/5	24/07906/6		Units	Limit of Detection	Method ref
Client Sample No										
Client Sample ID	TS-Plot 2	TS-Plot 5	TS-Plot 8	TS-Plot 11	SS-Plot 23	TS-Plot 19				
Depth to Top	0.00	0.00	0.00	0.00	0.20	0.00				
Depth To Bottom	0.20	0.20	0.20	0.20	0.60	0.20				
Date Sampled	13-Aug-24	13-Aug-24	13-Aug-24	13-Aug-24	13-Aug-24	13-Aug-24				
Sample Type	SOIL - ES	SOIL - ES	SOIL - ES	SOIL - ES	SOIL - ES	SOIL - ES				
Sample Matrix Code	4AE	4AE	4AE	4AE	4AE	4AE				
PAH-16MS										
Acenaphthene _A ^{MS}	0.01	0.30	0.01	0.04	<0.01	0.03		mg/kg	0.01	A-T-019s
Acenaphthylene _A ^{MS}	<0.01	<0.01	<0.01	0.02	<0.01	<0.01		mg/kg	0.01	A-T-019s
Anthracene _A ^{MS}	0.02	0.37	0.02	0.07	<0.02	0.04		mg/kg	0.02	A-T-019s
Benzo(a)anthracene _A ^{MS}	0.11	0.71	0.14	0.19	0.05	0.14		mg/kg	0.04	A-T-019s
Benzo(a)pyrene _A ^{MS}	0.09	0.50	0.12	0.18	0.05	0.11		mg/kg	0.04	A-T-019s
Benzo(b)fluoranthene _A ^{MS}	0.15	0.73	0.19	0.26	0.07	0.17		mg/kg	0.05	A-T-019s
Benzo(ghi)perylene _A ^{MS}	0.07	0.24	0.08	0.13	<0.05	0.08		mg/kg	0.05	A-T-019s
Benzo(k)fluoranthene _A ^{MS}	<0.07	0.24	<0.07	<0.07	<0.07	<0.07		mg/kg	0.07	A-T-019s
Chrysene _A ^{MS}	0.14	0.75	0.18	0.24	0.07	0.18		mg/kg	0.06	A-T-019s
Dibenzo(ah)anthracene _A ^{MS}	<0.04	0.05	<0.04	<0.04	<0.04	<0.04		mg/kg	0.04	A-T-019s
Fluoranthene _A ^{MS}	0.29	2.20	0.31	0.51	0.12	0.42		mg/kg	0.08	A-T-019s
Fluorene _A ^{MS}	<0.01	0.15	<0.01	0.06	<0.01	0.01		mg/kg	0.01	A-T-019s
Indeno(123-cd)pyrene _A ^{MS}	0.07	0.25	0.07	0.12	<0.03	0.08		mg/kg	0.03	A-T-019s
Naphthalene _A ^{MS}	<0.03	<0.03	<0.03	0.06	<0.03	<0.03		mg/kg	0.03	A-T-019s
Phenanthrene _A ^{MS}	0.13	1.46	0.12	0.35	0.06	0.16		mg/kg	0.03	A-T-019s
Pyrene _A ^{MS}	0.28	1.75	0.31	0.51	0.12	0.40		mg/kg	0.07	A-T-019s
Total PAH-16MS _A ^{MS}	1.36	9.70	1.55	2.74	0.54	1.82		mg/kg	0.01	A-T-019s

Envirolab Job Number: 24/07906

Client Project Name: Wheatfields Day Centre

Client Project Ref: 31990LG

Lab Sample ID	24/07906/1	24/07906/2	24/07906/3	24/07906/4	24/07906/5	24/07906/6		Units	Limit of Detection	Method ref
Client Sample No										
Client Sample ID	TS-Plot 2	TS-Plot 5	TS-Plot 8	TS-Plot 11	SS-Plot 23	TS-Plot 19				
Depth to Top	0.00	0.00	0.00	0.00	0.20	0.00				
Depth To Bottom	0.20	0.20	0.20	0.20	0.60	0.20				
Date Sampled	13-Aug-24	13-Aug-24	13-Aug-24	13-Aug-24	13-Aug-24	13-Aug-24				
Sample Type	SOIL - ES	SOIL - ES	SOIL - ES	SOIL - ES	SOIL - ES	SOIL - ES				
Sample Matrix Code	4AE	4AE	4AE	4AE	4AE	4AE				
TPH UKCWG with Clean Up										
Ali >C5-C6 _A	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01		mg/kg	0.01	A-T-022s
Ali >C6-C8 _A	<0.01	0.02	0.02	<0.01	<0.01	<0.01		mg/kg	0.01	A-T-022s
Ali >C8-C10 _A	<1	<1	<1	<1	<1	<1		mg/kg	1	A-T-055s
Ali >C10-C12 _A ^{M#}	<1	<1	<1	<1	<1	<1		mg/kg	1	A-T-055s
Ali >C12-C16 _A ^{M#}	<1	<1	<1	<1	<1	<1		mg/kg	1	A-T-055s
Ali >C16-C21 _A ^{M#}	6	6	5	7	4	5		mg/kg	1	A-T-055s
Ali >C21-C35 _A ^{M#}	33	71	29	43	17	41		mg/kg	1	A-T-055s
Ali >C35-C44 _A	4	36	4	6	2	3		mg/kg	1	A-T-055s
Total Aliphatics _A	42	113	38	57	22	50		mg/kg	1	Calc-As Recd
Aro >C5-C7 _A [#]	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01		mg/kg	0.01	A-T-022s
Aro >C7-C8 _A [#]	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01		mg/kg	0.01	A-T-022s
Aro >C8-C10 _A	<1	<1	<1	<1	<1	<1		mg/kg	1	A-T-055s
Aro >C10-C12 _A	<1	<1	<1	<1	<1	<1		mg/kg	1	A-T-055s
Aro >C12-C16 _A	5	7	5	6	2	4		mg/kg	1	A-T-055s
Aro >C16-C21 _A ^{M#}	13	21	11	23	8	14		mg/kg	1	A-T-055s
Aro >C21-C35 _A ^{M#}	25	37	22	45	12	24		mg/kg	1	A-T-055s
Aro >C35-C44 _A	5	18	4	6	2	8		mg/kg	1	A-T-055s
Total Aromatics _A	47	83	41	79	24	50		mg/kg	1	Calc-As Recd
TPH (Ali & Aro >C5-C44) _A	89	196	79	136	46	100		mg/kg	1	Calc-As Recd
BTEX - Benzene _A [#]	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01		mg/kg	0.01	A-T-022s
BTEX - Toluene _A [#]	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01		mg/kg	0.01	A-T-022s
BTEX - Ethyl Benzene _A [#]	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01		mg/kg	0.01	A-T-022s
BTEX - m & p Xylene _A [#]	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01		mg/kg	0.01	A-T-022s
BTEX - o Xylene _A [#]	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01		mg/kg	0.01	A-T-022s
MTBE _A [#]	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01		mg/kg	0.01	A-T-022s

Report Notes

General

- This report shall not be reproduced, except in full, without written approval from Envirolab.
- The client Sample No, Client Sample ID, Depth to top, Depth to Bottom and Date Sampled are all provided by the client and can affect the validity of results.
- The results reported herein relate only to the material supplied to the laboratory.
- The residue of any samples contained within this report, and any received within the same delivery, will be disposed of **four weeks** after the initial scheduling. For samples tested for Asbestos we will retain a portion of the dried sample for a minimum of **six months** after the initial Asbestos testing is completed.
- Analytical results reflect the quality of the sample at the time of analysis only.
- Opinions and Interpretations expressed are outside our scope of accreditation.
- A deviating sample report is appended and will indicate if samples or tests have been found to be deviating. Any test results affected may not be an accurate record of the concentration at the time of sampling and, as a result, may be invalid.
- If a sample is outside of the calibration range or affected by interferences then it may need diluting. This will result in the limit of detection (LOD) being raised.
- Subcontracted Analysis: Please see the appended report for any deviations, current LODs and accreditation status of the test.

Key

Superscript "#"	Accredited to ISO 17025
Superscript "M"	Accredited to MCertS
Superscript "U"	Individual result not accredited
None of the above symbols	Analysis unaccredited
Subscript "A"	Analysis performed on as-received Sample
Subscript "D"	Analysis performed on the dried sample, crushed to pass 2mm sieve.
Subscript "D" on Asbestos	Analysis performed on a dried aliquot of sample provided.
Subscript "A"	Analysis has dependant options against results. Details appear in the comments of your Sample receipt
IS	Insufficient Sample for analysis
US	Unsuitable Sample for analysis
NDP	No Determination Possible
NAD	No Asbestos Detected
Trace	Asbestos found not suitable for Gravimetric Quantification – not enough to accurately weigh.
N/A	Not applicable

Asbestos

Identification: Asbestos in soil analysis is performed on a dried aliquot of the submitted sample and cannot guarantee to identify asbestos if only present in small numbers as discrete fibres/fragments in the original sample.

Stones etc. are not removed from the sample prior to analysis

"Trace Asbestos Identified" will be reported if there is not enough present to verify the type.

Quantification: Generally a 2 stage process including visual identification, hand picking and weighing, and fibre counting. Where ACMs are found a percentage asbestos is assigned to each with reference to 'HSG264, Asbestos: The survey guide' and the calculated asbestos content is expressed as a percentage of the dried soil sample aliquot used. If asbestos is identified as being present but is not in a form that is suitable for analysis by hand picking and weighing (normally if the asbestos is present as free fibres). "TRACE" will be reported as a quantification result.

PLEASE INFORM THE LABORATORY IF YOU WOULD LIKE THE STAGE 3 SEDIMENTATION PROCESS CARRIED OUT. Note this will be subcontracted.

Assigned Matrix Codes

1	SAND	6	CLAY/LOAM	A	Contains Stones
2	LOAM	7	OTHER	B	Contains Construction Rubble
3	CLAY	8	Asbestos Bulk (Only Asbestos ID accredited)	C	Contains visible hydrocarbons
4	LOAM/SAND	9	Incinerator Ash (some Metals accredited)	D	Contains glass / metal
5	SAND/CLAY			E	Contains roots / twigs
Note: 7,8,9 matrices are not covered by our ISO 17025 or MCertS accreditation, unless stated above.					

Soil Chemical Analysis:

All results are reported as dry weight (<40°C).

For samples with Matrix Codes 1 - 6 natural stones, brick and concrete fragments >10mm and any extraneous material (visible glass, metal or twigs) are removed and excluded from the sample prior to analysis and reported results corrected to a whole sample basis. This is reported as '% stones >10mm'.

For samples with Matrix Code 7 the whole sample is dried and crushed prior to analysis and this supersedes any "A" subscripts

All analysis is performed on the sample as received for soil samples which are positive for asbestos or the client has informed asbestos may be present and/or if they are from outside the European Union and this supersedes any "D" subscripts.

TPH by method A-T-007:

For waters, free and visible oils are excluded from the sample used for analysis, so the reported result represents the dissolved phase only. Results "with Clean up" indicates samples cleaned up with Silica during extraction.

EPH CWG (method A-T-055) from TPH CWG:

EPH CWG results have humics mathematically subtracted through instrument calculation.

Where these humic substances have been identified in any IDs from "TPH CWG with clean up" please note that the concentration is **NOT** included in the quantified results but present in the ID for information.

Electrical Conductivity of water by method A-T-037:

Results greater than 12900µS/cm @ 25°C / 11550µS/cm @ 20°C fall outside the calibration range and as such are unaccredited.

Please contact your client manager if you require any further information.

Envirolab Deviating Samples Report

Hattersley Science & Technology Park, Stockport Road, Hattersley, SK14 3QU
Tel. 0161 368 4921
email. ask@envirolab.co.uk

Client:	Sutcliffe, 18-20 Harrington Street, Liverpool, L2 9QA	Project No:	24/07906
Project:	Wheatfields Day Centre	Date Received:	13/08/2024 (pm)
Clients Project No:	31990LG	Cool Box Temperatures (°C):	20.5

NO DEVIATIONS IDENTIFIED with respect to sampling dates or containers received.

Note: If, at any point before reaching the laboratory, the temperature of the samples has breached those set in published standards, e.g. BS-EN 5667-3 (for water samples $5 \pm 3^{\circ}\text{C}$), ISO 18400-105:2017, then the concentration of any affected analytes may differ from that at the time of sampling.

Envirolab Analysis Dates

Lab Sample ID	24/07906/1	24/07906/2	24/07906/3	24/07906/4	24/07906/5	24/07906/6
Client Sample No						
Client Sample ID/Depth	TS-Plot 2 0.00-0.20m	TS-Plot 5 0.00-0.20m	TS-Plot 8 0.00-0.20m	TS-Plot 11 0.20-0.60m	SS-Plot 23 0.00-0.20m	TS-Plot 19 0.00-0.20m
Date Sampled	13/08/24	13/08/24	13/08/24	13/08/24	13/08/24	13/08/24
A-T-019s	19/08/2024	19/08/2024	19/08/2024	19/08/2024	19/08/2024	19/08/2024
A-T-022s	15/08/2024	15/08/2024	15/08/2024	15/08/2024	15/08/2024	15/08/2024
A-T-024s	19/08/2024	19/08/2024	19/08/2024	19/08/2024	19/08/2024	19/08/2024
A-T-026s	16/08/2024	16/08/2024	16/08/2024	16/08/2024	16/08/2024	16/08/2024
A-T-027s	19/08/2024	19/08/2024	19/08/2024	19/08/2024	19/08/2024	19/08/2024
A-T-028s	19/08/2024	19/08/2024	19/08/2024	19/08/2024	19/08/2024	19/08/2024
A-T-029s	16/08/2024	16/08/2024	16/08/2024	16/08/2024	16/08/2024	16/08/2024
A-T-031s	16/08/2024	16/08/2024	16/08/2024	16/08/2024	16/08/2024	16/08/2024
A-T-032s	20/08/2024	20/08/2024	20/08/2024	20/08/2024	20/08/2024	20/08/2024
A-T-040s	16/08/2024	16/08/2024	16/08/2024	16/08/2024	16/08/2024	16/08/2024
A-T-042sTCN	15/08/2024	15/08/2024	15/08/2024	15/08/2024	15/08/2024	15/08/2024
A-T-043-s	15/08/2024	15/08/2024	15/08/2024	15/08/2024	15/08/2024	15/08/2024
A-T-044	16/08/2024	16/08/2024	16/08/2024	16/08/2024	16/08/2024	16/08/2024
A-T-045	15/08/2024	15/08/2024	15/08/2024	15/08/2024	15/08/2024	15/08/2024
A-T-050s	16/08/2024	16/08/2024	15/08/2024	15/08/2024	15/08/2024	16/08/2024
A-T-055s	15/08/2024	15/08/2024	15/08/2024	15/08/2024	15/08/2024	15/08/2024
Calc	19/08/2024	19/08/2024	19/08/2024	19/08/2024	19/08/2024	19/08/2024
Calc-As Recd	15/08/2024	15/08/2024	15/08/2024	15/08/2024	15/08/2024	15/08/2024

The above dates are the analysis completion dates, please note that these are not necessarily the date that the analysis was weighed/extracted.

End of Report

FINAL ANALYTICAL TEST REPORT

Envirolab Job Number: 24/07340
Issue Number: 1

Date: 02 August, 2024

Client: Sutcliffe
18-20 Harrington Street
Liverpool
L2 9QA

Project Manager: (Use) D Evans; D Bowen; A Tosh; W Baldwin/(Use) Sa
Project Name: Wheatfields Day Centre
Project Ref: 31990LG
Order No: 10477
Date Samples Received: 26/07/24
Date Instructions Received: 29/07/24
Date Analysis Completed: 02/08/24

Approved by:



Richard Wong
Client Manager

Envirolab Job Number: 24/07340

Client Project Name: Wheatfields Day Centre

Client Project Ref: 31990LG

Lab Sample ID	24/07340/1	24/07340/2	24/07340/3	24/07340/4				Units	Limit of Detection	Method ref
Client Sample No										
Client Sample ID	SS-P14	SS-P11	SS-P8	SS-P5						
Depth to Top	0.00	0.00	0.00	0.00						
Depth To Bottom	0.30	0.30	0.30	0.30						
Date Sampled	25-Jul-24	25-Jul-24	25-Jul-24	25-Jul-24						
Sample Type	SOIL - ES	SOIL - ES	SOIL - ES	SOIL - ES						
Sample Matrix Code	4AE	4AE	5AE	4AE						
% Moisture at <40C _A	8.7	8.9	10.8	9.0				% w/w	0.1	A-T-044
% Stones >10mm _A	4.9	11.9	7.3	5.0				% w/w	0.1	A-T-044
pH _D ^{M#}	7.73	7.05	6.62	7.72				pH	0.01	A-T-031s
Sulphate (water sol 2:1) _D ^{M#}	0.03	0.02	0.02	0.03				g/l	0.01	A-T-026s
Sulphate (acid soluble) _D ^{M#}	<200	<200	<200	<200				mg/kg	200	A-T-028s
Cyanide (total) _A ^{M#}	<1	<1	<1	<1				mg/kg	1	A-T-042sTCN
Phenols - Total by HPLC _A	<0.2	<0.2	<0.2	<0.2				mg/kg	0.2	A-T-050s
Sulphide _A	<5	<5	<5	<5				mg/kg	5	A-T-043-s
Sulphur (elemental) _D ^{M#}	<5	<5	<5	<5				mg/kg	5	A-T-029s
Organic Matter _D ^{M#}	0.7	0.4	0.7	0.6				% w/w	0.1	A-T-032s
Arsenic _D ^{M#}	<1	<1	<1	<1				mg/kg	1	A-T-024s
Boron (water soluble) _D ^{M#}	<1.0	<1.0	<1.0	<1.0				mg/kg	1	A-T-027s
Cadmium _D ^{M#}	<0.5	<0.5	<0.5	<0.5				mg/kg	0.5	A-T-024s
Copper _D ^{M#}	11	11	11	11				mg/kg	1	A-T-024s
Chromium _D ^{M#}	18	18	19	18				mg/kg	1	A-T-024s
Chromium (hexavalent) _D	<1	<1	<1	<1				mg/kg	1	A-T-040s
Chromium (trivalent)	18	18	19	18				mg/kg	1	Calc
Lead _D ^{M#}	12	11	12	13				mg/kg	1	A-T-024s
Mercury _D	<0.17	<0.17	<0.17	<0.17				mg/kg	0.17	A-T-024s
Nickel _D ^{M#}	18	17	18	18				mg/kg	1	A-T-024s
Selenium _D ^{M#}	<1	<1	<1	<1				mg/kg	1	A-T-024s
Zinc _D ^{M#}	51	46	50	50				mg/kg	5	A-T-024s

Envirolab Job Number: 24/07340

Client Project Name: Wheatfields Day Centre

Client Project Ref: 31990LG

Lab Sample ID	24/07340/1	24/07340/2	24/07340/3	24/07340/4				Units	Limit of Detection	Method ref
Client Sample No										
Client Sample ID	SS-P14	SS-P11	SS-P8	SS-P5						
Depth to Top	0.00	0.00	0.00	0.00						
Depth To Bottom	0.30	0.30	0.30	0.30						
Date Sampled	25-Jul-24	25-Jul-24	25-Jul-24	25-Jul-24						
Sample Type	SOIL - ES	SOIL - ES	SOIL - ES	SOIL - ES						
Sample Matrix Code	4AE	4AE	5AE	4AE						
Asbestos in Soil (inc. matrix)										
Asbestos in soil _D [#]	NAD	NAD	NAD	NAD						A-T-045
Asbestos Matrix (visual) _D	-	-	-	-						A-T-045
Asbestos Matrix (microscope) _D	-	-	-	-						A-T-045
Asbestos ACM - Suitable for Water Absorption Test? _D	N/A	N/A	N/A	N/A						A-T-045

Envirolab Job Number: 24/07340

Client Project Name: Wheatfields Day Centre

Client Project Ref: 31990LG

Lab Sample ID	24/07340/1	24/07340/2	24/07340/3	24/07340/4				Units	Limit of Detection	Method ref
Client Sample No										
Client Sample ID	SS-P14	SS-P11	SS-P8	SS-P5						
Depth to Top	0.00	0.00	0.00	0.00						
Depth To Bottom	0.30	0.30	0.30	0.30						
Date Sampled	25-Jul-24	25-Jul-24	25-Jul-24	25-Jul-24						
Sample Type	SOIL - ES	SOIL - ES	SOIL - ES	SOIL - ES						
Sample Matrix Code	4AE	4AE	5AE	4AE						
PAH-16MS										
Acenaphthene _A ^{M#}	<0.01	<0.01	<0.01	<0.01				mg/kg	0.01	A-T-019s
Acenaphthylene _A ^{M#}	<0.01	<0.01	<0.01	<0.01				mg/kg	0.01	A-T-019s
Anthracene _A ^{M#}	<0.02	<0.02	<0.02	<0.02				mg/kg	0.02	A-T-019s
Benzo(a)anthracene _A ^{M#}	0.04	<0.04	<0.04	<0.04				mg/kg	0.04	A-T-019s
Benzo(a)pyrene _A ^{M#}	<0.04	<0.04	<0.04	<0.04				mg/kg	0.04	A-T-019s
Benzo(b)fluoranthene _A ^{M#}	0.06	<0.05	<0.05	<0.05				mg/kg	0.05	A-T-019s
Benzo(ghi)perylene _A ^{M#}	<0.05	<0.05	<0.05	<0.05				mg/kg	0.05	A-T-019s
Benzo(k)fluoranthene _A ^{M#}	<0.07	<0.07	<0.07	<0.07				mg/kg	0.07	A-T-019s
Chrysene _A ^{M#}	0.07	<0.06	<0.06	<0.06				mg/kg	0.06	A-T-019s
Dibenzo(ah)anthracene _A ^{M#}	<0.04	<0.04	<0.04	<0.04				mg/kg	0.04	A-T-019s
Fluoranthene _A ^{M#}	0.12	<0.08	<0.08	<0.08				mg/kg	0.08	A-T-019s
Fluorene _A ^{M#}	<0.01	<0.01	<0.01	<0.01				mg/kg	0.01	A-T-019s
Indeno(123-cd)pyrene _A ^{M#}	<0.03	<0.03	<0.03	<0.03				mg/kg	0.03	A-T-019s
Naphthalene _A ^{M#}	<0.03	<0.03	<0.03	<0.03				mg/kg	0.03	A-T-019s
Phenanthrene _A ^{M#}	0.07	<0.03	<0.03	0.04				mg/kg	0.03	A-T-019s
Pyrene _A ^{M#}	0.11	<0.07	<0.07	<0.07				mg/kg	0.07	A-T-019s
Total PAH-16MS _A ^{M#}	0.47	<0.08	<0.08	<0.08				mg/kg	0.01	A-T-019s

Envirolab Job Number: 24/07340

Client Project Name: Wheatfields Day Centre

Client Project Ref: 31990LG

Lab Sample ID	24/07340/1	24/07340/2	24/07340/3	24/07340/4				Units	Limit of Detection	Method ref
Client Sample No										
Client Sample ID	SS-P14	SS-P11	SS-P8	SS-P5						
Depth to Top	0.00	0.00	0.00	0.00						
Depth To Bottom	0.30	0.30	0.30	0.30						
Date Sampled	25-Jul-24	25-Jul-24	25-Jul-24	25-Jul-24						
Sample Type	SOIL - ES	SOIL - ES	SOIL - ES	SOIL - ES						
Sample Matrix Code	4AE	4AE	5AE	4AE						
TPH UKCWG with Clean Up										
Ali >C5-C6 _A	<0.01	<0.01	<0.01	<0.01				mg/kg	0.01	A-T-022s
Ali >C6-C8 _A	<0.01	<0.01	<0.01	<0.01				mg/kg	0.01	A-T-022s
Ali >C8-C10 _A	<1	<1	<1	<1				mg/kg	1	A-T-055s
Ali >C10-C12 _A ^{M#}	<1	<1	<1	<1				mg/kg	1	A-T-055s
Ali >C12-C16 _A ^{M#}	<1	<1	<1	<1				mg/kg	1	A-T-055s
Ali >C16-C21 _A ^{M#}	<1	<1	<1	<1				mg/kg	1	A-T-055s
Ali >C21-C35 _A ^{M#}	4	3	4	4				mg/kg	1	A-T-055s
Ali >C35-C44 _A	<1	<1	1	1				mg/kg	1	A-T-055s
Total Aliphatics _A	4	3	5	5				mg/kg	1	Calc-As Recd
Aro >C5-C7 _A [#]	<0.01	<0.01	<0.01	<0.01				mg/kg	0.01	A-T-022s
Aro >C7-C8 _A [#]	<0.01	<0.01	<0.01	<0.01				mg/kg	0.01	A-T-022s
Aro >C8-C10 _A	<1	<1	<1	<1				mg/kg	1	A-T-055s
Aro >C10-C12 _A	<1	<1	<1	<1				mg/kg	1	A-T-055s
Aro >C12-C16 _A	<1	<1	<1	<1				mg/kg	1	A-T-055s
Aro >C16-C21 _A ^{M#}	<1	<1	<1	<1				mg/kg	1	A-T-055s
Aro >C21-C35 _A ^{M#}	2	<1	<1	2				mg/kg	1	A-T-055s
Aro >C35-C44 _A	<1	<1	<1	<1				mg/kg	1	A-T-055s
Total Aromatics _A	2	<1	<1	2				mg/kg	1	Calc-As Recd
TPH (Ali & Aro >C5-C44) _A	6	3	5	7				mg/kg	1	Calc-As Recd
BTEX - Benzene _A [#]	<0.01	<0.01	<0.01	<0.01				mg/kg	0.01	A-T-022s
BTEX - Toluene _A [#]	<0.01	<0.01	<0.01	<0.01				mg/kg	0.01	A-T-022s
BTEX - Ethyl Benzene _A [#]	<0.01	<0.01	<0.01	<0.01				mg/kg	0.01	A-T-022s
BTEX - m & p Xylene _A [#]	<0.01	<0.01	<0.01	<0.01				mg/kg	0.01	A-T-022s
BTEX - o Xylene _A [#]	<0.01	<0.01	<0.01	<0.01				mg/kg	0.01	A-T-022s
MTBE _A [#]	<0.01	<0.01	<0.01	<0.01				mg/kg	0.01	A-T-022s

Report Notes

General

- This report shall not be reproduced, except in full, without written approval from Envirolab.
- The client Sample No, Client Sample ID, Depth to top, Depth to Bottom and Date Sampled are all provided by the client and can affect the validity of results.
- The results reported herein relate only to the material supplied to the laboratory.
- The residue of any samples contained within this report, and any received within the same delivery, will be disposed of **four weeks** after the initial scheduling. For samples tested for Asbestos we will retain a portion of the dried sample for a minimum of **six months** after the initial Asbestos testing is completed.
- Analytical results reflect the quality of the sample at the time of analysis only.
- Opinions and Interpretations expressed are outside our scope of accreditation.
- A deviating sample report is appended and will indicate if samples or tests have been found to be deviating. Any test results affected may not be an accurate record of the concentration at the time of sampling and, as a result, may be invalid.
- If a sample is outside of the calibration range or affected by interferences then it may need diluting. This will result in the limit of detection (LOD) being raised.
- Subcontracted Analysis: Please see the appended report for any deviations, current LODs and accreditation status of the test.

Key

Superscript “#”	Accredited to ISO 17025
Superscript “M”	Accredited to MCertS
Superscript “U”	Individual result not accredited
None of the above symbols	Analysis unaccredited
Subscript “A”	Analysis performed on as-received Sample
Subscript “D”	Analysis performed on the dried sample, crushed to pass 2mm sieve.
Subscript “D” on Asbestos	Analysis performed on a dried aliquot of sample provided.
Subscript “^”	Analysis has dependant options against results. Details appear in the comments of your Sample receipt
IS	Insufficient Sample for analysis
US	Unsuitable Sample for analysis
NDP	No Determination Possible
NAD	No Asbestos Detected
Trace	Asbestos found not suitable for Gravimetric Quantification – not enough to accurately weigh.
N/A	Not applicable

Asbestos

Identification: Asbestos in soil analysis is performed on a dried aliquot of the submitted sample and cannot guarantee to identify asbestos if only present in small numbers as discrete fibres/fragments in the original sample.

Stones etc. are not removed from the sample prior to analysis

“Trace Asbestos Identified” will be reported if there is not enough present to verify the type.

Quantification: Generally a 2 stage process including visual identification, hand picking and weighing, and fibre counting. Where ACMs are found a percentage asbestos is assigned to each with reference to ‘HSG264, Asbestos: The survey guide’ and the calculated asbestos content is expressed as a percentage of the dried soil sample aliquot used. If asbestos is identified as being present but is not in a form that is suitable for analysis by hand picking and weighing (normally if the asbestos is present as free fibres). “TRACE” will be reported as a quantification result.

PLEASE INFORM THE LABORATORY IF YOU WOULD LIKE THE STAGE 3 SEDIMENTATION PROCESS CARRIED OUT. Note this will be subcontracted.

Assigned Matrix Codes

1	SAND	6	CLAY/LOAM	A	Contains Stones
2	LOAM	7	OTHER	B	Contains Construction Rubble
3	CLAY	8	Asbestos Bulk (Only Asbestos ID accredited)	C	Contains visible hydrocarbons
4	LOAM/SAND	9	Incinerator Ash (some Metals accredited)	D	Contains glass / metal
5	SAND/CLAY			E	Contains roots / twigs

Note: 7,8,9 matrices are not covered by our ISO 17025 or MCertS accreditation, unless stated above.

Soil Chemical Analysis:

All results are reported as dry weight (<40°C).

For samples with Matrix Codes 1 - 6 natural stones, brick and concrete fragments >10mm and any extraneous material (visible glass, metal or twigs) are removed and excluded from the sample prior to analysis and reported results corrected to a whole sample basis. This is reported as ‘% stones >10mm’.

For samples with Matrix Code 7 the whole sample is dried and crushed prior to analysis and this supersedes any “A” subscripts

All analysis is performed on the sample as received for soil samples which are positive for asbestos or the client has informed asbestos may be present and/or if they are from outside the European Union and this supersedes any “D” subscripts.

TPH by method A-T-007:

For waters, free and visible oils are excluded from the sample used for analysis, so the reported result represents the dissolved phase only. Results “with Clean up” indicates samples cleaned up with Silica during extraction.

EPH CWG (method A-T-055) from TPH CWG:

EPH CWG results have humics mathematically subtracted through instrument calculation.

Where these humic substances have been identified in any IDs from “TPH CWG with clean up” please note that the concentration is **NOT** included in the quantified results but present in the ID for information.

Electrical Conductivity of water by method A-T-037:

Results greater than 12900µS/cm @ 25°C / 11550µS/cm @ 20°C fall outside the calibration range and as such are unaccredited.

Please contact your client manager if you require any further information.

Envirolab Deviating Samples Report

Hattersley Science & Technology Park, Stockport Road, Hattersley, SK14 3QU
Tel. 0161 368 4921
email. ask@envlab.co.uk

Client:	Sutcliffe, 18-20 Harrington Street, Liverpool, L2 9QA	Project No:	24/07340
Project:	Wheatfields Day Centre	Date Received:	29/07/2024 (am)
Clients Project No:	31990LG	Cool Box Temperatures (°C):	19.7

NO DEVIATIONS IDENTIFIED

If, at any point before reaching the laboratory, the temperature of the samples has breached those set in published standards, e.g. BS-EN 5667-3, ISO 18400-102:2017, then the concentration of any affected analytes may differ from that at the time of sampling.

Envirolab Analysis Dates

Lab Sample ID		24/07340/1	24/07340/2	24/07340/3	24/07340/4
Client Sample No					
Client Sample ID/Depth		SS-P14 0.00-0.30m	SS-P11 0.00-0.30m	SS-P8 0.00-0.30m	SS-P5 0.00-0.30m
Date Sampled		25/07/24	25/07/24	25/07/24	25/07/24
A-T-019s		31/07/2024	31/07/2024	31/07/2024	31/07/2024
A-T-022s		31/07/2024	31/07/2024	31/07/2024	31/07/2024
A-T-024s		02/08/2024	02/08/2024	02/08/2024	02/08/2024
A-T-026s		01/08/2024	01/08/2024	01/08/2024	01/08/2024
A-T-027s		01/08/2024	01/08/2024	01/08/2024	01/08/2024
A-T-028s		01/08/2024	01/08/2024	01/08/2024	01/08/2024
A-T-029s		01/08/2024	01/08/2024	01/08/2024	01/08/2024
A-T-031s		31/07/2024	31/07/2024	31/07/2024	31/07/2024
A-T-032s		02/08/2024	02/08/2024	02/08/2024	02/08/2024
A-T-040s		01/08/2024	01/08/2024	01/08/2024	01/08/2024
A-T-042sTCN		31/07/2024	31/07/2024	31/07/2024	31/07/2024
A-T-043-s		31/07/2024	31/07/2024	31/07/2024	31/07/2024
A-T-044		01/08/2024	01/08/2024	01/08/2024	01/08/2024
A-T-045		30/07/2024	30/07/2024	30/07/2024	30/07/2024
A-T-050s		31/07/2024	31/07/2024	31/07/2024	31/07/2024
A-T-055s		31/07/2024	31/07/2024	31/07/2024	31/07/2024
Calc		02/08/2024	02/08/2024	02/08/2024	02/08/2024
Calc-As Recd		31/07/2024	31/07/2024	31/07/2024	31/07/2024

The above dates are the analysis completion dates, please note that these are not necessarily the date that the analysis was weighed/extracted.

End of Report

Safety Data Sheet (2001/58/EC and ISO 11014 format)

SILICA SAND

Version SAM3, page 1 of 7

Revision date: 01/08/2013

1. IDENTIFICATION OF THE SUBSTANCE / PREPARATION AND OF THE COMPANY / UNDERTAKING

1.1. Identification of the substance or preparation

SILICA SAND

Trade names

Registration number: This product is Exempted according to Article 2 § (7) of REACh.

1.2. Use of the substance / preparation

Main applications of silica sand - non-exhaustive list:
glass, silicate chemistry, abrasives, foundry sand, filler for textured coatings,
glues and mortars, filtration, sports and leisure, specialist construction...

1.3. Company / undertaking identification

Bathgate Silica Sand Limited
Arclid Quarry, Congleton Road, Sandbach, Cheshire, CW11 4SN
Tel: 01270 762002 / 768018
Fax: 01270 759449

1.4. Emergency telephone

Emergency phone number 01270 762002 / 768018. This number is not available outside office hours.

2. COMPOSITION / INFORMATION ON INGREDIENTS

Chemical	:	SiO ₂ (ca. 99 %)
Mineralogical	:	alpha quartz
E.I.N.E.C.S.-N°	:	238-878-4
C.A.S.-N°	:	14808-60-7
EU-classification	:	no classification
IUPAC Name	:	silicon dioxide
REACh Reg. No	:	Exempted

3. HAZARD IDENTIFICATION

Quartz sand does not meet the criteria for classification as dangerous as defined in Directive 67/548/EEC and in the Regulation EC 1272/2008 (Classification, Labelling and Packaging of dangerous substances).

The grain size distribution of silica sand means that it is not hazardous. However, any respirable crystalline silica dust generated by processing and handling of silica sand may cause health effects.

Prolonged and/or massive inhalation of respirable crystalline silica dust may cause lung fibrosis, commonly referred to as silicosis. Principal symptoms of silicosis are cough and breathlessness. Occupational exposure to respirable crystalline silica should be monitored and controlled.

4. **FIRST AID MEASURES**

No actions are to be avoided, nor are there any special instructions for rescuers.

Eye contact

Wash with copious quantities of water.

Ingestion

Not hazardous. No special first aid measures necessary.

Inhalation

No special first aid measures. Remove to fresh air and consult a physician.

Skin contact

Not hazardous. No special first aid measures necessary.

5. **FIRE-FIGHTING MEASURES**

Does not burn. No hazardous releases in case of fire.

Suitable extinguishing media: Not applicable.

Extinguishing media which should not be used: Not applicable.

Special exposure hazards: Not applicable.

Special protective equipment for fire fighters: Not applicable.

6. **ACCIDENTAL RELEASE MEASURES**

Personal precautions

Avoid airborne dust generation. In case of exposure to airborne dust concentrations exceeding regulatory limits, wear a personal respirator in compliance with national legislation.

Environmental precautions

No special requirements.

Methods for cleaning up

Avoid dry sweeping and use water spraying or vacuum cleaning systems to prevent airborne dust generation.

7. HANDLING AND STORAGE

7.1. Handling

Avoid airborne dust generation. Handle bags carefully so as to prevent accidental bursting. Provide appropriate exhaust ventilation at places where airborne dust is generated. In case of insufficient ventilation, wear suitable respiratory protective equipment. If you require advice on safe handling techniques please contact your supplier, or check the Good Practice Guide referred to in Section 16.

7.2. Storage

Technical measures / Precautions

Ensure abatement of dust produced during the loading of silos.
Keep containers closed and store/handle bagged products so as to prevent accidental bursting.

7.3. Specific use(s)

For industry specific guidance, check the Good Practice Guide referred to in Section 16.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1. Exposure limit values

Respect workplace regulatory provisions for all types of airborne dust (total dust, respirable dust and respirable crystalline silica dust). The UK Control of Substances Hazardous to Health Regulations 2002 (as amended) require adherence to good practice principles in the control of exposure to hazardous substances.

Additionally, a WEL (Workplace Exposure Limit) for respirable crystalline silica dust of 0.1mg/m³ applies in the United Kingdom, measured as an 8 hour TWA (Time Weighted Average).

For the equivalent limits in other countries, please consult a competent occupational hygienist or the local regulatory authority.

8.2. Exposure controls

8.2.1. Occupational exposure controls

Provide appropriate local exhaust ventilation in places where dust is generated. Control of occupational exposure may also be achieved by enclosing plant and equipment, by isolating personnel from dusty areas and by ensuring good standards of ventilation in the workplace.

8.2.1.1. Respiratory protection

In case of exposure to airborne dust concentrations exceeding regulatory limits, wear a personal respirator that complies with the requirements of national legislation.

8.2.1.2. Eye protection

Wear safety glasses with side-shields in circumstances where there is a risk of penetrative eye injuries.

8.2.2. *Environmental exposure controls*

No special requirements.

9. **PHYSICAL AND CHEMICAL PROPERTIES**

9.1. **General information**

Appearance

Solid, granular, in various colours ranging from white to brown.

Odour

Odourless.

9.2. **Important health, safety and environmental information**

Density	:	2.65 g/cm ³
SiO ₂ %	:	ca. 99 % (cfr. technical data sheet)
Grain shape	:	sub-angular
Particle size range	:	cfr. technical data sheet
Solubility in water	:	negligible
Solubility in hydrofluoric acid	:	yes

9.3. **Other information**

Melting point	:	1610°C
Molecular weight	:	60.1

10. **STABILITY AND REACTIVITY**

Chemically stable, no particular incompatibility.

11. **TOXICOLOGICAL INFORMATION**

Skin irritation: Data shows no skin irritation effects.

Eye irritation: Data shows no eye irritation effects.

Chronic effects

Prolonged and/or massive exposure to respirable crystalline silica-containing dust may cause silicosis, a nodular pulmonary fibrosis caused by deposition in the lungs of fine respirable particles of crystalline silica. In 1997, IARC (the International Agency for Research on Cancer) concluded that crystalline silica inhaled from occupational sources can cause lung cancer in humans. However it pointed out that not all industrial circumstances, nor all crystalline silica types, were to be incriminated. (*IARC Monographs on the evaluation of the carcinogenic risks of chemicals to humans, Silica, silicates dust and organic fibres, 1997, Vol. 68, IARC, Lyon, France.*)

In June 2003, SCOEL (the EU Scientific Committee on Occupational Exposure Limits) concluded that the main effect in humans of the inhalation of respirable crystalline silica dust is silicosis. "There is sufficient information to conclude that the relative risk of lung cancer is increased in persons with silicosis (and, apparently, not in employees without silicosis exposed to silica dust in quarries and in the ceramic industry). Therefore preventing the onset of silicosis will also reduce the cancer risk..." (*SCOEL SUM Doc 94-final, June 2003*). So there is a body of evidence supporting the fact that increased cancer risk would be limited to people already suffering from silicosis. Worker protection against silicosis should be assured by respecting the existing regulatory occupational exposure limits and implementing additional risk management measures where required (see IMA-Europe table of OELs in the EU at <http://www.ima-eu.org/en/publication.htm>).

12. **ECOTOXICOLOGICAL INFORMATION**

No specific adverse effects known.

13. **DISPOSAL CONSIDERATIONS**

Waste from residues / unused products

Can be landfilled in compliance with local regulations. The material should be buried to prevent dust being picked up by the wind. Where possible, recycling is preferable to disposal.

Packaging

No specific requirements. Recycling and disposal of packaging should be carried out by an authorised waste management company.

14. **TRANSPORT INFORMATION**

No special precautions are required under regulations relating to the transportation of dangerous goods.

15. **REGULATORY INFORMATION**

National Legislation

Sand blasting According to the Control of Substances Hazardous to Health Regulations 2002, sand and other substances containing free crystalline silica cannot be used as an abrasive for blasting articles in any blasting apparatus.

European Legislation

Quartz sand does not meet the criteria for classification as dangerous as defined in Directive 67/548/EEC.

Dry Blasting According to national regulations in EU member states, sand containing more than a certain amount of free crystalline silica cannot be used for dry blasting. This amount varies between 1% and 5%, according to country.

16. OTHER INFORMATION

Third party materials

Insofar as materials not manufactured or supplied by Bathgate Silica Sand Ltd are used in conjunction with, or instead of Bathgate Silica Sand Ltd materials, it is the responsibility of the customer himself to obtain, from the manufacturer or supplier, all technical data and other properties relating to these and other materials and to obtain all necessary information relating to them. No liability can be accepted in respect of the use of Bathgate Silica Sand Ltd quartz sand in conjunction with materials from another supplier.

Liability

Such information is to the best of Bathgate Silica Sand Ltd knowledge and belief accurate and reliable as of the date indicated. However, no representation, warranty or guarantee is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability and completeness of such information for his own particular use.

Dry sand blasting

According to national regulations in EU member states, sand containing more than a certain amount of free crystalline silica cannot be used for dry blasting.

This amount varies between 1% and 5%, according to country.

Literature references are available on request from EUROSIL, the European Association of Industrial Silica Producers, Bd. S. Dupuis 233 Bte 124, 1070 Brussels, Belgium. Tel: +32 (0)2 524 55 00, Fax: + 32 (0)2 524 45 75, e-mail: secretariat@ima-eu.org.

Social Dialogue on Respirable Crystalline Silica

A multi-sectoral social dialogue agreement on *Workers Health Protection through the Good Handling and Use of Crystalline Silica and Products Containing it* was signed on 25 April 2006. This autonomous agreement, which receives the European Commission's financial support, is based on a Good Practices Guide. The requirements of the Agreement came into force on 25 October 2006. The Agreement was published in the Official Journal of the European Union (2006/C 279/02). The text of the Agreement and its annexes, including the Good Practices Guide, are available from <http://www.nepsi.eu> and provide useful information and guidance for the handling of products containing respirable crystalline silica.

UK Health and Safety Executive - silica (quartz)

Extract taken from <http://www.hse.gov.uk/quarries/silica.htm>

Quartz is found in almost all kinds of rock, sands, clays, shale and gravel. Workers exposed to fine dust containing quartz are at risk of developing a chronic and possibly severely disabling lung disease known as "silicosis". It usually takes a number of years of regular daily exposure before there is a risk of developing silicosis. Silicosis is a disease that has only been seen in workers from industries where there is a significant exposure to silica dust, such as in quarries, foundries, the potteries etc. No cases of silicosis have been documented among members of the general public in Great Britain, indicating that environmental exposures to silica dust are not sufficiently high to cause this occupational disease. In addition to silicosis, there is now evidence that heavy and prolonged workplace exposure to dust containing crystalline silica can lead to an increased risk of lung cancer. The evidence suggests that an increased risk of lung cancer is likely to occur only in those workers who have developed silicosis. It should also be noted that

excessive long term exposures to almost any dust, are likely to lead to respiratory (breathing) problems.

Detailed reviews of the scientific evidence on the health effects of crystalline silica have been published by HSE in the following Hazard Assessment Documents EH75/4 and EH75/5.

These documents are available from HSE Books.

References

Literature references are available on request from EUROSIL, the European Association of Industrial Silica Producers, Twin Gardens (6th floor), rue des Deux Eglises 26, B-1000 Brussels, Belgium.

Tel: +32 2 210 44 10, Fax: + 32 2 210 44 29.

E-mail: secretariat@imaeurope.eu.

[eu, www.ima-europe.eu](http://www.ima-europe.eu)

APPENDIX 3

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Analytical Report Number : 25-047040

Project / Site name:	Princedom Street	Samples received on:	03/09/2025
Your job number:	4048	Samples instructed on/ Analysis started on:	03/09/2025
Your order number:	4048 LL	Analysis completed by:	10/09/2025
Report Issue Number:	2	Report issued on:	09/10/2025
Samples Analysed:	2 soil samples		



Signed: _____

Caterina Bentley
Customer service Advisor
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: 25-047040
Project / Site name: Princedom Street
Your Order No: 4048 LL

Lab Sample Number	668734	668735
Sample Reference	TS02	TS03
Sample Number	None Supplied	None Supplied
Water Matrix	N/A	N/A
Depth (m)	None Supplied	None Supplied
Date Sampled	02/09/2025	02/09/2025
Time Taken	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Test Limit of detection
		Test Accreditation Status

Stone Content	%	0.1	NONE	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	12	12
Total mass of sample received	kg	0.1	NONE	0.6	0.6

Asbestos

Asbestos in Soil Detected/Not Detected	Type	N/A	ISO 17025	Not-detected	Not-detected
Asbestos Analyst ID	N/A	N/A	N/A	KKR	KKR
Analysis completed	N/A	N/A	N/A	08/09/2025	08/09/2025

General Inorganics

pH (L099)	pH Units	N/A	MCERTS	8	8.3
Total Cyanide	mg/kg	1	MCERTS	< 1.0	< 1.0
Free Cyanide	mg/kg	1	MCERTS	< 1.0	< 1.0
Water Soluble Sulphate as SO ₄ 16hr extraction (2:1)	mg/kg	2.5	MCERTS	210	200
Water Soluble SO ₄ 16hr extraction (2:1 Leachate Equivalent)	mg/l	1.25	MCERTS	103	97.9
Organic Matter (automated)	%	0.1	MCERTS	3.9	3.5
Water Soluble Nitrate (2:1) as NO ₃	mg/kg	2	NONE	35	62
Water Soluble Nitrate (2:1) as NO ₃ (leachate equivalent)	mg/l	5	NONE	18	31

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	0.06	< 0.05
Fluorene	mg/kg	0.05	MCERTS	< 0.05	< 0.05
Phenanthrene	mg/kg	0.05	MCERTS	0.37	0.3
Anthracene	mg/kg	0.05	MCERTS	0.06	0.06
Fluoranthene	mg/kg	0.05	MCERTS	0.86	0.54
Pyrene	mg/kg	0.05	MCERTS	0.85	0.51
Benzo(a)anthracene	mg/kg	0.05	MCERTS	0.48	0.28
Chrysene	mg/kg	0.05	MCERTS	0.51	0.29
Benzo(b)fluoranthene	mg/kg	0.05	ISO 17025	0.58	0.33
Benzo(k)fluoranthene	mg/kg	0.05	ISO 17025	0.18	0.12
Benzo(a)pyrene	mg/kg	0.05	MCERTS	0.43	0.27
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	0.22	0.14
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	0.18	0.14

Total PAH

Speciated Total EPA-16 PAHs	mg/kg	0.8	ISO 17025	4.78	2.98
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Analytical Report Number: 25-047040
Project / Site name: Princedom Street
Your Order No: 4048 LL

Lab Sample Number	668734	668735
Sample Reference	TS02	TS03
Sample Number	None Supplied	None Supplied
Water Matrix	N/A	N/A
Depth (m)	None Supplied	None Supplied
Date Sampled	02/09/2025	02/09/2025
Time Taken	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	5.3	5.7
Barium (aqua regia extractable)	mg/kg	1	MCERTS	52	54
Beryllium (aqua regia extractable)	mg/kg	0.06	MCERTS	0.34	0.35
Boron (water soluble)	mg/kg	0.2	MCERTS	1.2	1.3
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	< 0.2	< 0.2
Chromium (hexavalent) Low Level	mg/kg	1.2	NONE	< 1.2	< 1.2
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	9.6	9.7
Copper (aqua regia extractable)	mg/kg	1	MCERTS	25	26
Lead (aqua regia extractable)	mg/kg	1	MCERTS	43	47
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	< 0.3	< 0.3
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	7.9	8.3
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0
Vanadium (aqua regia extractable)	mg/kg	1	MCERTS	11	12
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	53	52

Petroleum Hydrocarbons

TPHCWG - Aliphatic >EC5 - EC6 _{HS_1D_AL}	mg/kg	0.01	MCERTS	< 0.010	< 0.010
TPHCWG - Aliphatic >EC6 - EC8 _{HS_1D_AL}	mg/kg	0.01	MCERTS	< 0.010	< 0.010
TPHCWG - Aliphatic >EC8 - EC10 _{HS_1D_AL}	mg/kg	0.01	MCERTS	< 0.010	< 0.010
TPHCWG - Aliphatic >EC10 - EC12 _{EH_CU_1D_AL}	mg/kg	1	MCERTS	< 1.0	< 1.0
TPHCWG - Aliphatic >EC12 - EC16 _{EH_CU_1D_AL}	mg/kg	2	MCERTS	3.9	2.6
TPHCWG - Aliphatic >EC16 - EC21 _{EH_CU_1D_AL}	mg/kg	8	MCERTS	< 8.0	< 8.0
TPHCWG - Aliphatic >EC21 - EC35 _{EH_CU_1D_AL}	mg/kg	8	MCERTS	18	26
TPHCWG - Aliphatic >EC35 - EC44 _{EH_CU_1D_AL}	mg/kg	8.4	NONE	< 8.4	11
TPHCWG - Aliphatic >EC5 - EC35 _{EH_CU+HS_1D_AL}	mg/kg	10	NONE	22	29
TPHCWG - Aliphatic >EC5 - EC44 _{EH_CU+HS_1D_AL}	mg/kg	10	NONE	22	39

TPHCWG - Aromatic >EC5 - EC7 _{HS_1D_AR}	mg/kg	0.01	MCERTS	< 0.010	< 0.010
TPHCWG - Aromatic >EC7 - EC8 _{HS_1D_AR}	mg/kg	0.01	MCERTS	< 0.010	< 0.010
TPHCWG - Aromatic >EC8 - EC10 _{HS_1D_AR}	mg/kg	0.02	MCERTS	< 0.020	< 0.020
TPHCWG - Aromatic >EC10 - EC12 _{EH_CU_1D_AR}	mg/kg	1	MCERTS	< 1.0	< 1.0
TPHCWG - Aromatic >EC12 - EC16 _{EH_CU_1D_AR}	mg/kg	2	MCERTS	< 2.0	5.7
TPHCWG - Aromatic >EC16 - EC21 _{EH_CU_1D_AR}	mg/kg	10	MCERTS	< 10	< 10
TPHCWG - Aromatic >EC21 - EC35 _{EH_CU_1D_AR}	mg/kg	10	MCERTS	12	21
TPHCWG - Aromatic >EC35 - EC44 _{EH_CU_1D_AR}	mg/kg	8.4	NONE	< 8.4	< 8.4
TPHCWG - Aromatic >EC5 - EC35 _{EH_CU+HS_1D_AR}	mg/kg	10	NONE	12	27
TPHCWG - Aromatic >EC5 - EC44 _{EH_CU+HS_1D_AR}	mg/kg	10	NONE	12	27

VOCs

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

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

Analytical Report Number : 25-047040

Project / Site name: Princedom 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 *
668734	TS02	None Supplied	None Supplied	Brown loam and sand with gravel and vegetation
668735	TS03	None Supplied	None Supplied	Brown loam and sand with gravel and vegetation

Analytical Report Number : 25-047040
Project / Site name: Princedom Street

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
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
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
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
Water Soluble Nitrate (leachate equivalent)	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
Nitrate, water soluble, 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
Hexavalent chromium in soil (low level)	Determination of hexavalent chromium in soil by extraction in water then by acidification, addition of 1,5 diphenylcarbazide followed by colorimetry	In-house method	L080-PL	W	NONE
Free cyanide in soil	Determination of free cyanide by distillation followed by colorimetry	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L080-PL	W	MCERTS
Total cyanide in soil	Determination of total cyanide by distillation followed by colorimetry	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L080-PL	W	MCERTS

Analytical Report Number : 25-047040
Project / Site name: Princedom Street

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
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
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
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 30°C.

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 : 25-054817

Project / Site name:	Princedom Street	Samples received on:	09/10/2025
Your job number:	4048	Samples instructed on/ Analysis started on:	09/10/2025
Your order number:	4048 AH	Analysis completed by:	16/10/2025
Report Issue Number:	1	Report issued on:	16/10/2025
Samples Analysed:	1 soil sample		



Signed:

Rachel Chappell
Key Account 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
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: 25-054817
Project / Site name: Princedom Street
Your Order No: 4048 AH

Lab Sample Number				71197
Sample Reference				TS01
Sample Number				None Supplied
Water Matrix				N/A
Depth (m)				None Supplied
Date Sampled				08/10/2025
Time Taken				None Supplied
Analytical Parameter (Soil Analysis)	Units	Test Limit of detection	Test Accreditation Status	

Stone Content	%	0.1	NONE	< 0.1
Moisture Content	%	0.01	NONE	28
Total mass of sample received	kg	0.1	NONE	1

Asbestos

Asbestos in Soil Detected/Not Detected	Type	N/A	ISO 17025	Not-detected
Asbestos Analyst ID	N/A	N/A	N/A	KJK
Analysis completed	N/A	N/A	N/A	15/10/2025

General Inorganics

pH (L099)	pH Units	N/A	MCERTS	6.3
Total Cyanide	mg/kg	1	MCERTS	< 1.0
Free Cyanide	mg/kg	1	MCERTS	< 1.0
Water Soluble Sulphate as SO ₄ 16hr extraction (2:1)	mg/kg	2.5	MCERTS	34
Water Soluble SO ₄ 16hr extraction (2:1 Leachate Equivalent)	mg/l	1.25	MCERTS	16.8
Organic Matter (automated)	%	0.1	MCERTS	7.1
Water Soluble Nitrate (2:1) as NO ₃	mg/kg	2	NONE	18
Water Soluble Nitrate (2:1) as NO ₃ (leachate equivalent)	mg/l	5	NONE	9.2

Speciated PAHs

Naphthalene	mg/kg	0.05	MCERTS	< 0.05
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	0.18
Anthracene	mg/kg	0.05	MCERTS	< 0.05
Fluoranthene	mg/kg	0.05	MCERTS	0.34
Pyrene	mg/kg	0.05	MCERTS	0.37
Benzo(a)anthracene	mg/kg	0.05	MCERTS	0.21
Chrysene	mg/kg	0.05	MCERTS	0.23
Benzo(b)fluoranthene	mg/kg	0.05	ISO 17025	0.32
Benzo(k)fluoranthene	mg/kg	0.05	ISO 17025	0.12
Benzo(a)pyrene	mg/kg	0.05	MCERTS	0.27
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	0.15
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	< 0.05
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	< 0.05

Total PAH

Speciated Total EPA-16 PAHs	mg/kg	0.8	ISO 17025	2.17
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Analytical Report Number: 25-054817
Project / Site name: Princedom Street
Your Order No: 4048 AH

Lab Sample Number				71197
Sample Reference				TS01
Sample Number				None Supplied
Water Matrix				N/A
Depth (m)				None Supplied
Date Sampled				08/10/2025
Time Taken				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	6.8
Barium (aqua regia extractable)	mg/kg	1	MCERTS	76
Beryllium (aqua regia extractable)	mg/kg	0.06	MCERTS	0.47
Boron (water soluble)	mg/kg	0.2	MCERTS	0.5
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	< 0.2
Chromium (hexavalent) Low Level	mg/kg	1.2	NONE	< 1.2
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	14
Copper (aqua regia extractable)	mg/kg	1	MCERTS	25
Lead (aqua regia extractable)	mg/kg	1	MCERTS	47
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	< 0.3
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	11
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0
Vanadium (aqua regia extractable)	mg/kg	1	MCERTS	17
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	46

Petroleum Hydrocarbons

TPHCWG - Aliphatic >EC5 - EC6 _{HS_ID_AL}	mg/kg	0.01	MCERTS	< 0.010
TPHCWG - Aliphatic >EC6 - EC8 _{HS_ID_AL}	mg/kg	0.01	MCERTS	< 0.010
TPHCWG - Aliphatic >EC8 - EC10 _{HS_ID_AL}	mg/kg	0.01	MCERTS	< 0.010
TPHCWG - Aliphatic >EC10 - EC12 _{EH_CU_ID_AL}	mg/kg	1	MCERTS	< 1.0
TPHCWG - Aliphatic >EC12 - EC16 _{EH_CU_ID_AL}	mg/kg	2	MCERTS	< 2.0
TPHCWG - Aliphatic >EC16 - EC21 _{EH_CU_ID_AL}	mg/kg	8	MCERTS	< 8.0
TPHCWG - Aliphatic >EC21 - EC35 _{EH_CU_ID_AL}	mg/kg	8	MCERTS	< 8.0
TPHCWG - Aliphatic >EC35 - EC44 _{EH_CU_ID_AL}	mg/kg	8.4	NONE	< 8.4
TPHCWG - Aliphatic >EC5 - EC35 _{EH_CU+HS_ID_AL}	mg/kg	10	NONE	< 10
TPHCWG - Aliphatic >EC5 - EC44 _{EH_CU+HS_ID_AL}	mg/kg	10	NONE	< 10

TPHCWG - Aromatic >EC5 - EC7 _{HS_ID_AR}	mg/kg	0.01	MCERTS	< 0.010
TPHCWG - Aromatic >EC7 - EC8 _{HS_ID_AR}	mg/kg	0.01	MCERTS	< 0.010
TPHCWG - Aromatic >EC8 - EC10 _{HS_ID_AR}	mg/kg	0.02	MCERTS	< 0.020
TPHCWG - Aromatic >EC10 - EC12 _{EH_CU_ID_AR}	mg/kg	1	MCERTS	< 1.0
TPHCWG - Aromatic >EC12 - EC16 _{EH_CU_ID_AR}	mg/kg	2	MCERTS	< 2.0
TPHCWG - Aromatic >EC16 - EC21 _{EH_CU_ID_AR}	mg/kg	10	MCERTS	< 10
TPHCWG - Aromatic >EC21 - EC35 _{EH_CU_ID_AR}	mg/kg	10	MCERTS	11
TPHCWG - Aromatic >EC35 - EC44 _{EH_CU_ID_AR}	mg/kg	8.4	NONE	< 8.4
TPHCWG - Aromatic >EC5 - EC35 _{EH_CU+HS_ID_AR}	mg/kg	10	NONE	11
TPHCWG - Aromatic >EC5 - EC44 _{EH_CU+HS_ID_AR}	mg/kg	10	NONE	11

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 : 25-054817

Project / Site name: Princedom 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 *
71197	TS01	None Supplied	None Supplied	Brown loam and clay with gravel and vegetation

Analytical Report Number : 25-054817
Project / Site name: Princedom Street

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
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
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
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
Water Soluble Nitrate (leachate equivalent)	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
Nitrate, water soluble, 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
Hexavalent chromium in soil (low level)	Determination of hexavalent chromium in soil by extraction in water then by acidification, addition of 1,5 diphenylcarbazide followed by colorimetry	In-house method	L080-PL	W	NONE
Free cyanide in soil	Determination of free cyanide by distillation followed by colorimetry	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L080-PL	W	MCERTS

Analytical Report Number : 25-054817
Project / Site name: Princedom Street

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
Total cyanide in soil	Determination of total cyanide by distillation followed by colorimetry	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	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
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
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 30°C.

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 : 25-058750

Project / Site name:	Princedom Street	Samples received on:	29/10/2025
Your job number:	4048	Samples instructed on/ Analysis started on:	29/10/2025
Your order number:	4048 AH	Analysis completed by:	07/11/2025
Report Issue Number:	1	Report issued on:	07/11/2025
Samples Analysed:	3 soil samples		



Signed:

Rachel Chappell
Key Account 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
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: 25-058750
Project / Site name: Princedom Street
Your Order No: 4048 AH

Lab Sample Number	733971	733972	733973
Sample Reference	TS01	TS02	TS03
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	27/10/2025	27/10/2025	27/10/2025
Time Taken	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Test Limit of detection	Test Accreditation Status

Stone Content	%	0.1	NONE	< 0.1	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	14	15	15
Total mass of sample received	kg	0.1	NONE	1.7	1.4	1.1

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	DSO	DSO	DSO
Analysis completed	N/A	N/A	N/A	05/11/2025	05/11/2025	05/11/2025

General Inorganics

pH (L099)	pH Units	N/A	MCERTS	7.2	7.4	7.3
Total Cyanide	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0
Free Cyanide	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0
Water Soluble Sulphate as SO ₄ 16hr extraction (2:1)	mg/kg	2.5	MCERTS	45	41	47
Water Soluble SO ₄ 16hr extraction (2:1 Leachate Equivalent)	mg/l	1.25	MCERTS	22.6	20.4	23.4
Organic Matter (automated)	%	0.1	MCERTS	2.3	2.7	2.6
Water Soluble Nitrate (2:1) as NO ₃	mg/kg	2	NONE	8.8	16	63
Water Soluble Nitrate (2:1) as NO ₃ (leachate equivalent)	mg/l	5	NONE	< 5.0	8.2	32

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	0.08	0.07	< 0.05
Fluorene	mg/kg	0.05	MCERTS	< 0.05	0.1	< 0.05
Phenanthrene	mg/kg	0.05	MCERTS	0.39	0.72	0.2
Anthracene	mg/kg	0.05	MCERTS	0.09	0.19	< 0.05
Fluoranthene	mg/kg	0.05	MCERTS	0.74	0.94	0.31
Pyrene	mg/kg	0.05	MCERTS	0.74	0.91	0.31
Benzo(a)anthracene	mg/kg	0.05	MCERTS	0.41	0.53	0.21
Chrysene	mg/kg	0.05	MCERTS	0.43	0.56	0.19
Benzo(b)fluoranthene	mg/kg	0.05	ISO 17025	0.47	0.51	0.28
Benzo(k)fluoranthene	mg/kg	0.05	ISO 17025	0.25	0.27	0.1
Benzo(a)pyrene	mg/kg	0.05	MCERTS	0.42	0.46	0.21
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	0.22	0.19	0.11
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	0.13	0.19	0.1

Total PAH

Speciated Total EPA-16 PAHs	mg/kg	0.8	ISO 17025	4.37	5.64	2
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Heavy Metals / Metalloids

Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	5.3	4.7	4.2
Barium (aqua regia extractable)	mg/kg	1	MCERTS	41	39	38
Beryllium (aqua regia extractable)	mg/kg	0.06	MCERTS	0.33	0.28	0.25
Boron (water soluble)	mg/kg	0.2	MCERTS	0.3	< 0.2	0.6
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	< 0.2	< 0.2	< 0.2
Chromium (hexavalent) Low Level	mg/kg	1.2	NONE	< 1.2	< 1.2	< 1.2
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	10	9.7	8.3
Copper (aqua regia extractable)	mg/kg	1	MCERTS	17	19	21

Analytical Report Number: 25-058750
Project / Site name: Princedom Street
Your Order No: 4048 AH

Lab Sample Number				733971	733972	733973
Sample Reference				TS01	TS02	TS03
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				27/10/2025	27/10/2025	27/10/2025
Time Taken				None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Test Limit of detection	Test Accreditation Status			
Lead (aqua regia extractable)	mg/kg	1	MCERTS	27	26	30
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	8.7	7.8	6.8
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0
Vanadium (aqua regia extractable)	mg/kg	1	MCERTS	13	11	9.6
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	37	35	33

Petroleum Hydrocarbons

TPHCWG - Aliphatic >EC5 - EC6 _{HS_1D_AL}	mg/kg	0.01	MCERTS	< 0.010	< 0.010	< 0.010
TPHCWG - Aliphatic >EC6 - EC8 _{HS_1D_AL}	mg/kg	0.01	MCERTS	< 0.010	< 0.010	< 0.010
TPHCWG - Aliphatic >EC8 - EC10 _{HS_1D_AL}	mg/kg	0.01	MCERTS	< 0.010	< 0.010	< 0.010
TPHCWG - Aliphatic >EC10 - EC12 _{EH_CU_1D_AL}	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0
TPHCWG - Aliphatic >EC12 - EC16 _{EH_CU_1D_AL}	mg/kg	2	MCERTS	< 2.0	< 2.0	< 2.0
TPHCWG - Aliphatic >EC16 - EC21 _{EH_CU_1D_AL}	mg/kg	8	MCERTS	< 8.0	< 8.0	< 8.0
TPHCWG - Aliphatic >EC21 - EC35 _{EH_CU_1D_AL}	mg/kg	8	MCERTS	< 8.0	< 8.0	< 8.0
TPHCWG - Aliphatic >EC35 - EC44 _{EH_CU_1D_AL}	mg/kg	8.4	NONE	< 8.4	< 8.4	< 8.4
TPHCWG - Aliphatic >EC5 - EC35 _{EH_CU+HS_1D_AL}	mg/kg	10	NONE	< 10	< 10	< 10
TPHCWG - Aliphatic >EC5 - EC44 _{EH_CU+HS_1D_AL}	mg/kg	10	NONE	< 10	< 10	< 10

TPHCWG - Aromatic >EC5 - EC7 _{HS_1D_AR}	mg/kg	0.01	MCERTS	< 0.010	< 0.010	< 0.010
TPHCWG - Aromatic >EC7 - EC8 _{HS_1D_AR}	mg/kg	0.01	MCERTS	< 0.010	< 0.010	< 0.010
TPHCWG - Aromatic >EC8 - EC10 _{HS_1D_AR}	mg/kg	0.02	MCERTS	< 0.020	< 0.020	< 0.020
TPHCWG - Aromatic >EC10 - EC12 _{EH_CU_1D_AR}	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0
TPHCWG - Aromatic >EC12 - EC16 _{EH_CU_1D_AR}	mg/kg	2	MCERTS	< 2.0	< 2.0	< 2.0
TPHCWG - Aromatic >EC16 - EC21 _{EH_CU_1D_AR}	mg/kg	10	MCERTS	< 10	< 10	< 10
TPHCWG - Aromatic >EC21 - EC35 _{EH_CU_1D_AR}	mg/kg	10	MCERTS	< 10	< 10	< 10
TPHCWG - Aromatic >EC35 - EC44 _{EH_CU_1D_AR}	mg/kg	8.4	NONE	< 8.4	< 8.4	< 8.4
TPHCWG - Aromatic >EC5 - EC35 _{EH_CU+HS_1D_AR}	mg/kg	10	NONE	< 10	< 10	< 10
TPHCWG - Aromatic >EC5 - EC44 _{EH_CU+HS_1D_AR}	mg/kg	10	NONE	< 10	< 10	< 10

VOCs

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

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

Analytical Report Number : 25-058750

Project / Site name: Princedom 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 *
733971	TS01	None Supplied	None Supplied	Brown sand with vegetation
733972	TS02	None Supplied	None Supplied	Brown sand with vegetation
733973	TS03	None Supplied	None Supplied	Brown sand

Analytical Report Number : 25-058750

Project / Site name: Princedom Street

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
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
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
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
Water Soluble Nitrate (leachate equivalent)	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
Nitrate, water soluble, 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
Hexavalent chromium in soil (low level)	Determination of hexavalent chromium in soil by extraction in water then by acidification, addition of 1,5 diphenylcarbazide followed by colorimetry	In-house method	L080-PL	W	NONE
Free cyanide in soil	Determination of free cyanide by distillation followed by colorimetry	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L080-PL	W	MCERTS

Analytical Report Number : 25-058750
Project / Site name: Princedom Street

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
Total cyanide in soil	Determination of total cyanide by distillation followed by colorimetry	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	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
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

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 30°C.

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 : 25-058752

Project / Site name:	Princedom Street	Samples received on:	25/10/2025
Your job number:	4048	Samples instructed on/ Analysis started on:	28/10/2025
Your order number:	4048 AH	Analysis completed by:	04/11/2025
Report Issue Number:	1	Report issued on:	04/11/2025
Samples Analysed:	3 soil samples		



Signed:

Trevor Hill
Customer Service
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: 25-058752
Project / Site name: Princedom Street
Your Order No: 4048 AH

Lab Sample Number	733980	733981	733982
Sample Reference	SS01	SS02	SS03
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	27/10/2025	27/10/2025	27/10/2025
Time Taken	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Test Limit of detection	Test Accreditation Status

Stone Content	%	0.1	NONE	< 0.1	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	13	14	13
Total mass of sample received	kg	0.1	NONE	1.4	1.1	1.3

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	SPU	SPU	SPU
Analysis completed	N/A	N/A	N/A	03/11/2025	03/11/2025	03/11/2025

General Inorganics

pH (L099)	pH Units	N/A	MCERTS	8.4	7.9	7.8
Total Cyanide	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0
Free Cyanide	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0
Water Soluble Sulphate as SO ₄ 16hr extraction (2:1)	mg/kg	2.5	MCERTS	40	34	54
Water Soluble SO ₄ 16hr extraction (2:1 Leachate Equivalent)	mg/l	1.25	MCERTS	20.2	17	27.1
Organic Matter (automated)	%	0.1	MCERTS	0.3	0.3	0.4
Total Organic Carbon (TOC) - Automated	%	0.1	MCERTS	0.2	0.2	0.2
Water Soluble Nitrate (2:1) as NO ₃	mg/kg	2	NONE	9	10	8.9
Water Soluble Nitrate (2:1) as NO ₃ (leachate equivalent)	mg/l	5	NONE	< 5.0	5.2	< 5.0

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	0.13	< 0.05	< 0.05
Anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05
Fluoranthene	mg/kg	0.05	MCERTS	0.2	< 0.05	< 0.05
Pyrene	mg/kg	0.05	MCERTS	0.19	< 0.05	< 0.05
Benzo(a)anthracene	mg/kg	0.05	MCERTS	0.13	< 0.05	< 0.05
Chrysene	mg/kg	0.05	MCERTS	0.11	< 0.05	< 0.05
Benzo(b)fluoranthene	mg/kg	0.05	ISO 17025	0.13	< 0.05	< 0.05
Benzo(k)fluoranthene	mg/kg	0.05	ISO 17025	0.06	< 0.05	< 0.05
Benzo(a)pyrene	mg/kg	0.05	MCERTS	0.1	< 0.05	< 0.05
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	0.06	< 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	1.1	< 0.80	< 0.80
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Analytical Report Number: 25-058752
Project / Site name: Princedom Street
Your Order No: 4048 AH

Lab Sample Number	733980	733981	733982
Sample Reference	SS01	SS02	SS03
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	27/10/2025	27/10/2025	27/10/2025
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	1.3	1.3	1.5
Barium (aqua regia extractable)	mg/kg	1	MCERTS	24	26	35
Beryllium (aqua regia extractable)	mg/kg	0.06	MCERTS	0.11	0.11	0.13
Boron (water soluble)	mg/kg	0.2	MCERTS	0.5	0.2	0.6
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	< 0.2	< 0.2	< 0.2
Chromium (hexavalent) Low Level	mg/kg	1.2	NONE	< 1.2	< 1.2	< 1.2
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	4.1	3.2	4.1
Copper (aqua regia extractable)	mg/kg	1	MCERTS	7.3	6	6.7
Lead (aqua regia extractable)	mg/kg	1	MCERTS	3.7	1.6	3.8
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	3.7	3.4	4.3
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0
Vanadium (aqua regia extractable)	mg/kg	1	MCERTS	4.4	3.7	5
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	13	7.9	14

Petroleum Hydrocarbons

TPHCWG - Aliphatic >EC5 - EC6 HS_1D_AL	mg/kg	0.01	MCERTS	< 0.010	< 0.010	< 0.010
TPHCWG - Aliphatic >EC6 - EC8 HS_1D_AL	mg/kg	0.01	MCERTS	< 0.010	< 0.010	< 0.010
TPHCWG - Aliphatic >EC8 - EC10 HS_1D_AL	mg/kg	0.01	MCERTS	< 0.010	< 0.010	< 0.010
TPHCWG - Aliphatic >EC10 - EC12 EH_CU_1D_AL	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0
TPHCWG - Aliphatic >EC12 - EC16 EH_CU_1D_AL	mg/kg	2	MCERTS	< 2.0	< 2.0	< 2.0
TPHCWG - Aliphatic >EC16 - EC21 EH_CU_1D_AL	mg/kg	8	MCERTS	< 8.0	< 8.0	< 8.0
TPHCWG - Aliphatic >EC21 - EC35 EH_CU_1D_AL	mg/kg	8	MCERTS	< 8.0	< 8.0	< 8.0
TPHCWG - Aliphatic >EC35 - EC44 EH_CU_1D_AL	mg/kg	8.4	NONE	< 8.4	< 8.4	< 8.4
TPHCWG - Aliphatic >EC5 - EC35 EH_CU+HS_1D_AL	mg/kg	10	NONE	< 10	< 10	< 10
TPHCWG - Aliphatic >EC5 - EC44 EH_CU+HS_1D_AL	mg/kg	10	NONE	< 10	< 10	< 10

TPHCWG - Aromatic >EC5 - EC7 HS_1D_AR	mg/kg	0.01	MCERTS	< 0.010	< 0.010	< 0.010
TPHCWG - Aromatic >EC7 - EC8 HS_1D_AR	mg/kg	0.01	MCERTS	< 0.010	< 0.010	< 0.010
TPHCWG - Aromatic >EC8 - EC10 HS_1D_AR	mg/kg	0.02	MCERTS	< 0.020	< 0.020	< 0.020
TPHCWG - Aromatic >EC10 - EC12 EH_CU_1D_AR	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0
TPHCWG - Aromatic >EC12 - EC16 EH_CU_1D_AR	mg/kg	2	MCERTS	< 2.0	< 2.0	< 2.0
TPHCWG - Aromatic >EC16 - EC21 EH_CU_1D_AR	mg/kg	10	MCERTS	< 10	< 10	< 10
TPHCWG - Aromatic >EC21 - EC35 EH_CU_1D_AR	mg/kg	10	MCERTS	< 10	< 10	< 10
TPHCWG - Aromatic >EC35 - EC44 EH_CU_1D_AR	mg/kg	8.4	NONE	< 8.4	< 8.4	< 8.4
TPHCWG - Aromatic >EC5 - EC35 EH_CU+HS_1D_AR	mg/kg	10	NONE	< 10	< 10	< 10
TPHCWG - Aromatic >EC5 - EC44 EH_CU+HS_1D_AR	mg/kg	10	NONE	< 10	< 10	< 10

VOCs

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

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

Analytical Report Number : 25-058752

Project / Site name: Princedom 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 *
733980	SS01	None Supplied	None Supplied	Brown sand with gravel
733981	SS02	None Supplied	None Supplied	Brown sand
733982	SS03	None Supplied	None Supplied	Brown sand with gravel

Analytical Report Number : 25-058752

Project / Site name: Princedom Street

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
Total organic carbon (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
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
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
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
Water Soluble Nitrate (leachate equivalent)	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
Nitrate, water soluble, 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
Hexavalent chromium in soil (low level)	Determination of hexavalent chromium in soil by extraction in water then by acidification, addition of 1,5 diphenylcarbazide followed by colorimetry	In-house method	L080-PL	W	NONE
Free cyanide in soil	Determination of free cyanide by distillation followed by colorimetry	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L080-PL	W	MCERTS

Analytical Report Number : 25-058752

Project / Site name: Princedom Street

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
Total cyanide in soil	Determination of total cyanide by distillation followed by colorimetry	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	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
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
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

****t-** No additional VOC container submitted for provision of repeat/dilution. The result should be considered as deviating and should be interpreted with caution.

IGE consulting			Project: Princedom		
			Job No: 4048		
Lab Sample Number			733980	733981	733982
Sample Reference			SS01	SS02	SS03
Sample Number			None Supplied	None Supplied	None Supplied
Depth (m)			None Supplied	None Supplied	None Supplied
Date Sampled			27/10/2025	27/10/2025	27/10/2025
Analytical Parameter (Soil Analysis)		Units	LoD		
Stone Content	%	0.1	0.10	0.10	0.10
Moisture Content	%	0.01	13.00	14.00	13.00
Total mass of sample received	kg	0.1	1.40	1.10	1.30
Asbestos					
Asbestos in Soil Screen	Type	N/A	Not-detected	Not-detected	Not-detected
General Inorganics					
pH - Automated	pH Units	N/A	8.40	7.90	7.80
Total Cyanide	mg/kg	1	1.00	1.00	1.00
Free Cyanide	mg/kg	1	1.00	1.00	1.00
Water Soluble Sulfate as SO4 16hr extraction (2:1)	mg/kg	2.5	40.00	34.00	54.00
Water Soluble SO4 16hr extraction (2:1 Leachate Equivalent)	mg/l	1.25	20.20	17.00	27.10
Organic Matter (automated)	%	0.1	0.30	0.30	0.40
Total Organic Carbon (automated)	%	0.1	0.20	0.20	0.20
Water Soluble Nitrate (2:1) as NO3	mg/kg	2	9.00	10.00	8.90
Water Soluble Nitrate (2:1) as NO3 (leachate equivalent)	mg/l	5	5.00	5.20	5.00
Speciated PAHs					
Naphthalene	mg/kg	0.05	0.05	0.05	0.05
Acenaphthylene	mg/kg	0.05	0.05	0.05	0.05
Acenaphthene	mg/kg	0.05	0.05	0.05	0.05
Fluorene	mg/kg	0.05	0.05	0.05	0.05
Phenanthrene	mg/kg	0.05	0.13	0.05	0.05
Anthracene	mg/kg	0.05	0.05	0.05	0.05
Fluoranthene	mg/kg	0.05	0.20	0.05	0.05
Pyrene	mg/kg	0.05	0.19	0.05	0.05
Benzo(a)anthracene	mg/kg	0.05	0.13	0.05	0.05
Chrysene	mg/kg	0.05	0.11	0.05	0.05
Benzo(b)fluoranthene	mg/kg	0.05	0.13	0.05	0.05
Benzo(k)fluoranthene	mg/kg	0.05	0.06	0.05	0.05
Benzo(a)pyrene	mg/kg	0.05	0.10	0.05	0.05
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	0.06	0.05	0.05
Dibenz(a,h)anthracene	mg/kg	0.05	0.05	0.05	0.05
Benzo(ghi)perylene	mg/kg	0.05	0.05	0.05	0.05
Total PAH					
Speciated Total EPA-16 PAHs	mg/kg	0.8	1.10	< 0.80	< 0.80
Heavy Metals / Metalloids					
Arsenic (aqua regia extractable)	mg/kg	1	1.30	1.30	1.50
Barium (aqua regia extractable)	mg/kg	1	24.00	26.00	35.00
Boron (water soluble)	mg/kg	0.2	0.50	0.20	0.60
Cadmium (aqua regia extractable)	mg/kg	0.2	0.20	0.20	0.20
Chromium (hexavalent)	mg/kg	1.2	1.20	1.20	1.20
Chromium (aqua regia extractable)	mg/kg	1	4.10	3.20	4.10
Copper (aqua regia extractable)	mg/kg	1	7.30	6.00	6.70
Lead (aqua regia extractable)	mg/kg	1	3.70	1.60	3.80
Mercury (aqua regia extractable)	mg/kg	0.3	0.30	0.30	0.30
Nickel (aqua regia extractable)	mg/kg	1	3.70	3.40	4.30
Selenium (aqua regia extractable)	mg/kg	1	1.00	1.00	1.00
Vanadium (aqua regia extractable)	mg/kg	1	4.40	3.70	5.00
Zinc (aqua regia extractable)	mg/kg	1	13.00	7.90	14.00
Monoaromatics & Oxygenates					
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	5	5.00	5.00	5.00
Benzene	µg/kg	5	5.00	5.00	5.00
Toluene	µg/kg	5	5.00	5.00	5.00
Ethylbenzene	µg/kg	5	5.00	5.00	5.00
p & m-xylene	µg/kg	8	8.00	8.00	8.00
o-xylene	µg/kg	5	5.00	5.00	5.00
Petroleum Hydrocarbons					
TPH-CWG - Aliphatic >EC5 - EC6	mg/kg	0.01	0.01	0.01	0.01
TPH-CWG - Aliphatic >EC6 - EC8	mg/kg	0.01	0.01	0.01	0.01
TPH-CWG - Aliphatic >EC8 - EC10	mg/kg	0.01	0.01	0.01	0.01
TPH-CWG - Aliphatic >EC10 - EC12	mg/kg	1	1.00	1.00	1.00
TPH-CWG - Aliphatic >EC12 - EC16	mg/kg	2	2.00	2.00	2.00
TPH-CWG - Aliphatic >EC16 - EC21	mg/kg	8	8.00	8.00	8.00
TPH-CWG - Aliphatic >EC21 - EC35	mg/kg	8	8.00	8.00	8.00
TPH-CWG - Aliphatic >EC35 - EC44	mg/kg	8.4	8.40	8.40	8.40
TPH-CWG - Aliphatic (EC5 - EC35)	mg/kg	10	10.00	10.00	10.00
TPH-CWG - Aliphatic (EC5 - EC44)	mg/kg	10	10.00	10.00	10.00
TPH-CWG - Aromatic >EC5 - EC7	mg/kg	0.01	0.01	0.01	0.01
TPH-CWG - Aromatic >EC7 - EC8	mg/kg	0.01	0.01	0.01	0.01
TPH-CWG - Aromatic >EC8 - EC10	mg/kg	0.02	0.02	0.02	0.02
TPH-CWG - Aromatic >EC10 - EC12	mg/kg	1	1.00	1.00	1.00
TPH-CWG - Aromatic >EC12 - EC16	mg/kg	2	2.00	2.00	2.00
TPH-CWG - Aromatic >EC16 - EC21	mg/kg	10	10.00	10.00	10.00
TPH-CWG - Aromatic >EC21 - EC35	mg/kg	10	10.00	10.00	10.00
TPH-CWG - Aromatic >EC35 - EC44	mg/kg	8.4	8.40	8.40	8.40
TPH-CWG - Aromatic (EC5 - EC35)	mg/kg	10	10.00	10.00	10.00
TPH-CWG - Aromatic (EC5 - EC44)	mg/kg	10	10.00	10.00	10.00
GAC used: LQM/CIEH Suitable 4 Use Levels for Human Health Risk Assessment (3rd edition, 2015)					
Category 4 Screening Levels (March 2014) used for Arsenic					
In-house methodology used for Cyanide - no GAC currently available					
			Exceeded GAC & C4SL		
			Exceeded GAC but not C4SL		
			Recorded below laboratory detection limit		
This spreadsheet has been developed by IGE Consulting Ltd					

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Analytical Report Number : 25-047042

Project / Site name:	Princedom Street	Samples received on:	03/09/2025
Your job number:	4048	Samples instructed on/ Analysis started on:	03/09/2025
Your order number:	4048 LL	Analysis completed by:	09/09/2025
Report Issue Number:	1	Report issued on:	09/09/2025
Samples Analysed:	3 soil samples		



Signed:

Rafał Szczepańczyk
Technical Reviewer
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: 25-047042
Project / Site name: Princedom Street
Your Order No: 4048 LL

Lab Sample Number	668738	668739	668740
Sample Reference	SS01	SS02	SS03
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	02/09/2025	02/09/2025	02/09/2025
Time Taken	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Test Limit of detection	Test Accreditation Status

Stone Content	%	0.1	NONE	< 0.1	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	8.4	4.7	5.1
Total mass of sample received	kg	0.1	NONE	0.9	0.5	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	DKI	DKI	DKI
Analysis completed	N/A	N/A	N/A	08/09/2025	08/09/2025	08/09/2025

General Inorganics

pH (L099)	pH Units	N/A	MCERTS	8.3	7.2	8.6
Total Cyanide	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0
Free Cyanide	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0
Water Soluble Sulphate as SO ₄ 16hr extraction (2:1)	mg/kg	2.5	MCERTS	620	59	38
Water Soluble SO ₄ 16hr extraction (2:1 Leachate Equivalent)	mg/l	1.25	MCERTS	309	29.7	18.8
Organic Matter (automated)	%	0.1	MCERTS	0.4	0.1	0.2
Total Organic Carbon (TOC) - Automated	%	0.1	MCERTS	0.2	< 0.1	0.1
Water Soluble Nitrate (2:1) as NO ₃	mg/kg	2	NONE	4.5	5.3	3.4
Water Soluble Nitrate (2:1) as NO ₃ (leachate equivalent)	mg/l	5	NONE	< 5.0	< 5.0	< 5.0

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	0.1	< 0.05	0.07
Anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05
Fluoranthene	mg/kg	0.05	MCERTS	0.16	< 0.05	0.13
Pyrene	mg/kg	0.05	MCERTS	0.16	< 0.05	0.11
Benzo(a)anthracene	mg/kg	0.05	MCERTS	0.08	< 0.05	0.07
Chrysene	mg/kg	0.05	MCERTS	0.09	< 0.05	0.08
Benzo(b)fluoranthene	mg/kg	0.05	ISO 17025	0.1	< 0.05	0.07
Benzo(k)fluoranthene	mg/kg	0.05	ISO 17025	< 0.05	< 0.05	< 0.05
Benzo(a)pyrene	mg/kg	0.05	MCERTS	0.08	< 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	0.06	< 0.05	< 0.05

Total PAH

Speciated Total EPA-16 PAHs	mg/kg	0.8	ISO 17025	0.88	< 0.80	< 0.80
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Analytical Report Number: 25-047042
Project / Site name: Princedom Street
Your Order No: 4048 LL

Lab Sample Number	668738	668739	668740
Sample Reference	SS01	SS02	SS03
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	02/09/2025	02/09/2025	02/09/2025
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	4.3	1.2	1.3
Barium (aqua regia extractable)	mg/kg	1	MCERTS	100	30	25
Beryllium (aqua regia extractable)	mg/kg	0.06	MCERTS	0.37	0.09	0.11
Boron (water soluble)	mg/kg	0.2	MCERTS	0.4	< 0.2	< 0.2
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	< 0.2	< 0.2	< 0.2
Chromium (hexavalent) Low Level	mg/kg	1.2	NONE	< 1.2	< 1.2	< 1.2
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	10	2.9	3.4
Copper (aqua regia extractable)	mg/kg	1	MCERTS	17	7.2	8
Lead (aqua regia extractable)	mg/kg	1	MCERTS	12	1.9	2.3
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	10	3.1	3.3
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0
Vanadium (aqua regia extractable)	mg/kg	1	MCERTS	12	3.3	3.9
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	28	7.9	7.9

Petroleum Hydrocarbons

TPHCWG - Aliphatic >EC5 - EC6 _{HS_1D_AL}	mg/kg	0.01	MCERTS	< 0.010	< 0.010	< 0.010
TPHCWG - Aliphatic >EC6 - EC8 _{HS_1D_AL}	mg/kg	0.01	MCERTS	< 0.010	< 0.010	< 0.010
TPHCWG - Aliphatic >EC8 - EC10 _{HS_1D_AL}	mg/kg	0.01	MCERTS	< 0.010	< 0.010	< 0.010
TPHCWG - Aliphatic >EC10 - EC12 _{EH_CU_1D_AL}	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0
TPHCWG - Aliphatic >EC12 - EC16 _{EH_CU_1D_AL}	mg/kg	2	MCERTS	< 2.0	< 2.0	< 2.0
TPHCWG - Aliphatic >EC16 - EC21 _{EH_CU_1D_AL}	mg/kg	8	MCERTS	< 8.0	< 8.0	< 8.0
TPHCWG - Aliphatic >EC21 - EC35 _{EH_CU_1D_AL}	mg/kg	8	MCERTS	< 8.0	< 8.0	< 8.0
TPHCWG - Aliphatic >EC35 - EC44 _{EH_CU_1D_AL}	mg/kg	8.4	NONE	< 8.4	< 8.4	< 8.4
TPHCWG - Aliphatic >EC5 - EC35 _{EH_CU+HS_1D_AL}	mg/kg	10	NONE	< 10	< 10	< 10
TPHCWG - Aliphatic >EC5 - EC44 _{EH_CU+HS_1D_AL}	mg/kg	10	NONE	< 10	< 10	< 10

TPHCWG - Aromatic >EC5 - EC7 _{HS_1D_AR}	mg/kg	0.01	MCERTS	< 0.010	< 0.010	< 0.010
TPHCWG - Aromatic >EC7 - EC8 _{HS_1D_AR}	mg/kg	0.01	MCERTS	< 0.010	< 0.010	< 0.010
TPHCWG - Aromatic >EC8 - EC10 _{HS_1D_AR}	mg/kg	0.02	MCERTS	< 0.020	< 0.020	< 0.020
TPHCWG - Aromatic >EC10 - EC12 _{EH_CU_1D_AR}	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0
TPHCWG - Aromatic >EC12 - EC16 _{EH_CU_1D_AR}	mg/kg	2	MCERTS	< 2.0	< 2.0	< 2.0
TPHCWG - Aromatic >EC16 - EC21 _{EH_CU_1D_AR}	mg/kg	10	MCERTS	< 10	< 10	< 10
TPHCWG - Aromatic >EC21 - EC35 _{EH_CU_1D_AR}	mg/kg	10	MCERTS	< 10	< 10	< 10
TPHCWG - Aromatic >EC35 - EC44 _{EH_CU_1D_AR}	mg/kg	8.4	NONE	< 8.4	< 8.4	< 8.4
TPHCWG - Aromatic >EC5 - EC35 _{EH_CU+HS_1D_AR}	mg/kg	10	NONE	< 10	< 10	< 10
TPHCWG - Aromatic >EC5 - EC44 _{EH_CU+HS_1D_AR}	mg/kg	10	NONE	< 10	< 10	< 10

VOCs

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

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

Analytical Report Number : 25-047042

Project / Site name: Princedom 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 *
668738	SS01	None Supplied	None Supplied	Brown sand with gravel
668739	SS02	None Supplied	None Supplied	Light brown sand
668740	SS03	None Supplied	None Supplied	Light brown sand

Analytical Report Number : 25-047042

Project / Site name: Princedom Street

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
Total organic carbon (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
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
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
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
Water Soluble Nitrate (leachate equivalent)	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
Nitrate, water soluble, 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
Hexavalent chromium in soil (low level)	Determination of hexavalent chromium in soil by extraction in water then by acidification, addition of 1,5 diphenylcarbazide followed by colorimetry	In-house method	L080-PL	W	NONE
Free cyanide in soil	Determination of free cyanide by distillation followed by colorimetry	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L080-PL	W	MCERTS

Analytical Report Number : 25-047042

Project / Site name: Princedom Street

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
Total cyanide in soil	Determination of total cyanide by distillation followed by colorimetry	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	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
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
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).

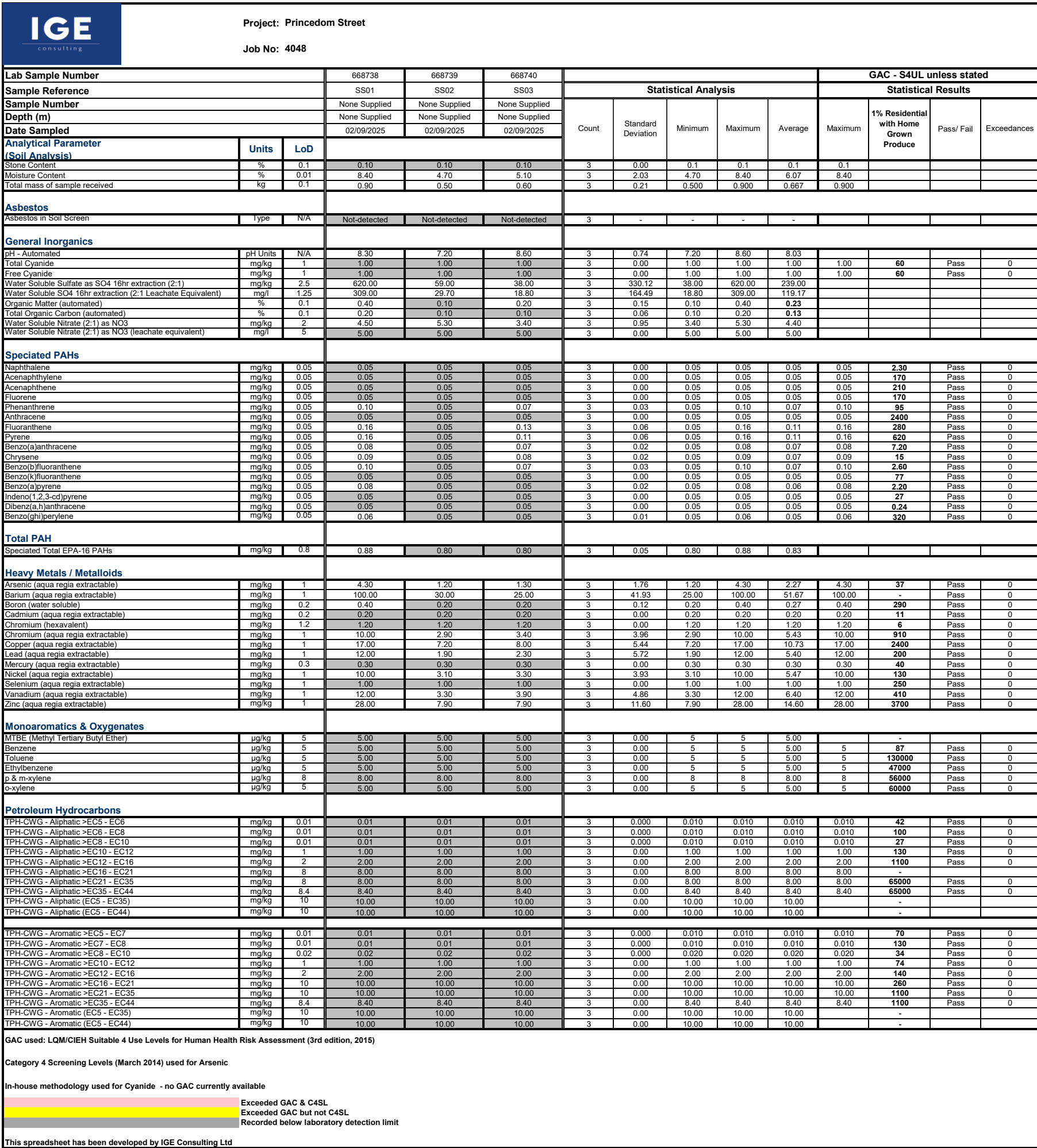
For method numbers ending in 'PL' or 'B' analysis have been carried out in our laboratory in Poland.

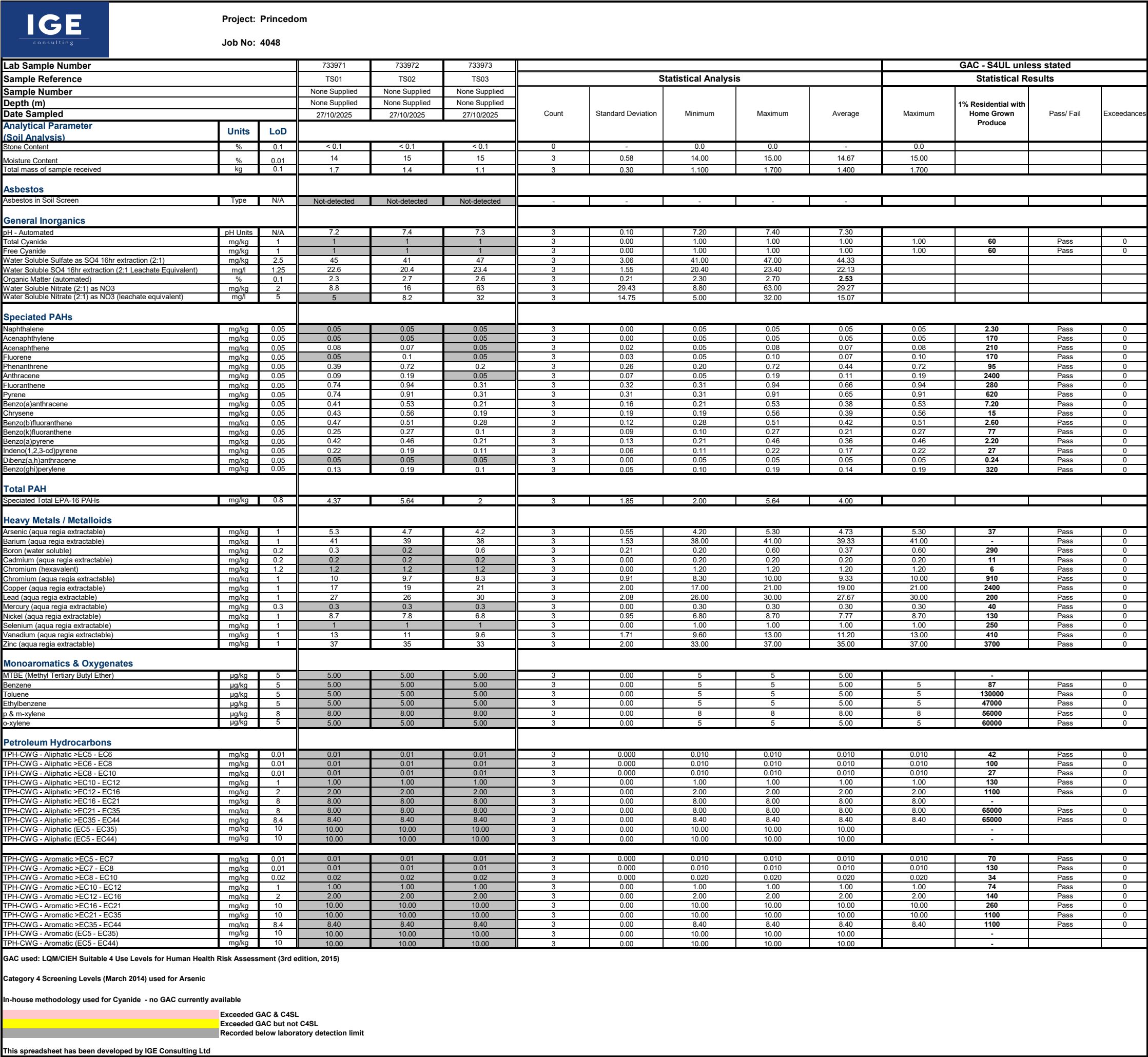
Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC.

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





APPENDIX 4

Verification Log

Project Name:	Princedom
Project Number:	4048
Location:	Princedom Street, Manchester
Client:	John Southworth Builders Ltd

Remediation Requirements:

150mm-300mm 'clean' topsoil, underlain by up to 450mm 'clean' subsoil, to a total of 600mm depth, underlain by a hi viz permeable geotextile in private gardens

150mm-300mm 'clean' topsoil, underlain by up to 300mm 'clean' subsoil, to a total of 450mm depth, underlain by a hi viz permeable geotextile in areas of soft landscaping

Validation Requirements:

Plot thickness validation photographs at a rate of 1 pit per three plot and associated chemical testing.

Plot Number:	Plot 2 Rear
Inspection date:	8 th October 2025
Engineer:	LL + JA

Photographs:

Photographs show 150mm of topsoil; underlain by 450mm subsoil; underlain by hi-vis membrane (underwater) and plot context.

This plot has PASSED / FAILED* verification

*Proposed further remedial works (if FAILED):

An additional inspection IS / IS NOT required for this plot

Verification Log

Project Name:	Princedom
Project Number:	4048
Location:	Princedom Street, Manchester
Client:	John Southworth Builders Ltd

Remediation Requirements:

150mm-300mm 'clean' topsoil, underlain by up to 450mm 'clean' subsoil, to a total of 600mm depth, underlain by a hi viz permeable geotextile in private gardens

150mm-300mm 'clean' topsoil, underlain by up to 300mm 'clean' subsoil, to a total of 450mm depth, underlain by a hi viz permeable geotextile in areas of soft landscaping

Validation Requirements:

Plot thickness validation photographs at a rate of 1 pit per three plot and associated chemical testing.

Plot Number:	Plot 3 Front
Inspection date:	2 nd September 2025
Engineer:	LL

Photographs:

Photographs show 200mm of topsoil; underlain by 300mm subsoil; underlain by hi-vis membrane and plot context.

This plot has PASSED / FAILED* verification

*Proposed further remedial works (if FAILED):

An additional inspection IS / IS NOT required for this plot

Verification Log

Project Name:	Princedom
Project Number:	4048
Location:	Princedom Street, Manchester
Client:	John Southworth Builders Ltd

Remediation Requirements:

150mm-300mm 'clean' topsoil, underlain by up to 450mm 'clean' subsoil, to a total of 600mm depth, underlain by a hi viz permeable geotextile in private gardens

150mm-300mm 'clean' topsoil, underlain by up to 300mm 'clean' subsoil, to a total of 450mm depth, underlain by a hi viz permeable geotextile in areas of soft landscaping

Validation Requirements:

Plot thickness validation photographs at a rate of 1 pit per three plot and associated chemical testing.

Plot Number:	Plot 4 Front
Inspection date:	2 nd September 2025
Engineer:	LL

Photographs:

Photographs show 200mm of topsoil; underlain by 300mm subsoil; underlain by hi-vis membrane and plot context.

This plot has PASSED / FAILED* verification

*Proposed further remedial works (if FAILED):

An additional inspection IS / IS NOT required for this plot

Verification Log

Project Name:	Princedom
Project Number:	4048
Location:	Princedom Street, Manchester
Client:	John Southworth Builders Ltd

Remediation Requirements:

150mm-300mm 'clean' topsoil, underlain by up to 450mm 'clean' subsoil, to a total of 600mm depth, underlain by a hi viz permeable geotextile in private gardens

150mm-300mm 'clean' topsoil, underlain by up to 300mm 'clean' subsoil, to a total of 450mm depth, underlain by a hi viz permeable geotextile in areas of soft landscaping

Validation Requirements:

Plot thickness validation photographs at a rate of 1 pit per three plot and associated chemical testing.

Plot Number:	Plot 5 Rear
Inspection date:	8 th October 2025
Engineer:	LL + JA

Photographs:

Photographs show 150mm of topsoil; underlain by 500mm subsoil; underlain by hi-vis membrane (underwater) and plot context.

This plot has PASSED / FAILED* verification

*Proposed further remedial works (if FAILED):

An additional inspection IS / IS NOT required for this plot

Verification Log

Project Name:	Princedom
Project Number:	4048
Location:	Princedom Street, Manchester
Client:	John Southworth Builders Ltd

Remediation Requirements:

150mm-300mm 'clean' topsoil, underlain by up to 450mm 'clean' subsoil, to a total of 600mm depth, underlain by a hi viz permeable geotextile in private gardens

150mm-300mm 'clean' topsoil, underlain by up to 300mm 'clean' subsoil, to a total of 450mm depth, underlain by a hi viz permeable geotextile in areas of soft landscaping

Validation Requirements:

Plot thickness validation photographs at a rate of 1 pit per three plot and associated chemical testing.

Plot Number:	Plot 8 Rear
Inspection date:	8 th October 2025
Engineer:	LL + JA

Photographs:

Photographs show 200mm of topsoil; underlain by 500mm subsoil; underlain by hi-vis membrane (underwater) and plot context.

This plot has PASSED / FAILED* verification

*Proposed further remedial works (if FAILED):

An additional inspection IS / IS NOT required for this plot

Verification Log

Project Name:	Princedom
Project Number:	4048
Location:	Princedom Street, Manchester
Client:	John Southworth Builders Ltd

Remediation Requirements:

150mm-300mm 'clean' topsoil, underlain by up to 450mm 'clean' subsoil, to a total of 600mm depth, underlain by a hi viz permeable geotextile in private gardens

150mm-300mm 'clean' topsoil, underlain by up to 300mm 'clean' subsoil, to a total of 450mm depth, underlain by a hi viz permeable geotextile in areas of soft landscaping

Validation Requirements:

Plot thickness validation photographs at a rate of 1 pit per three plot and associated chemical testing.

Plot Number:	Plot 10 Rear
Inspection date:	8 th October 2025
Engineer:	LL + JA

Photographs:

Photographs show 200mm of topsoil; underlain by 550mm subsoil; underlain by hi-vis membrane (underwater) and plot context.

This plot has PASSED / FAILED* verification

*Proposed further remedial works (if FAILED):

An additional inspection IS / IS NOT required for this plot

Verification Log

Project Name:	Princedom
Project Number:	4048
Location:	Princedom Street, Manchester
Client:	John Southworth Builders Ltd

Remediation Requirements:

150mm-300mm 'clean' topsoil, underlain by up to 450mm 'clean' subsoil, to a total of 600mm depth, underlain by a hi viz permeable geotextile in private gardens

150mm-300mm 'clean' topsoil, underlain by up to 300mm 'clean' subsoil, to a total of 450mm depth, underlain by a hi viz permeable geotextile in areas of soft landscaping

Validation Requirements:

Plot thickness validation photographs at a rate of 1 pit per three plot and associated chemical testing.

Plot Number:	Plot 11 Front - POS
Inspection date:	27 th October 2025
Engineer:	AH

Photographs:

Photographs show 150mm of topsoil; underlain by 350mm subsoil; underlain by hi-vis membrane and plot context.

This plot has PASSED / FAILED* verification

*Proposed further remedial works (if FAILED):

An additional inspection IS / IS NOT required for this plot

Verification Log

Project Name:	Princedom
Project Number:	4048
Location:	Princedom Street, Manchester
Client:	John Southworth Builders Ltd

Remediation Requirements:

150mm-300mm 'clean' topsoil, underlain by up to 450mm 'clean' subsoil, to a total of 600mm depth, underlain by a hi viz permeable geotextile in private gardens

150mm-300mm 'clean' topsoil, underlain by up to 300mm 'clean' subsoil, to a total of 450mm depth, underlain by a hi viz permeable geotextile in areas of soft landscaping

Validation Requirements:

Plot thickness validation photographs at a rate of 1 pit per three plot and associated chemical testing.

Plot Number:	Plot 12 Front - POS
Inspection date:	27 th October 2025
Engineer:	AH

Photographs:

Photographs show 150mm of topsoil; underlain by 350mm subsoil; underlain by hi-vis membrane and plot context.

This plot has PASSED / FAILED* verification

*Proposed further remedial works (if FAILED):

An additional inspection IS / IS NOT required for this plot

Verification Log

Project Name:	Princedom
Project Number:	4048
Location:	Princedom Street, Manchester
Client:	John Southworth Builders Ltd

Remediation Requirements:

150mm-300mm 'clean' topsoil, underlain by up to 450mm 'clean' subsoil, to a total of 600mm depth, underlain by a hi viz permeable geotextile in private gardens

150mm-300mm 'clean' topsoil, underlain by up to 300mm 'clean' subsoil, to a total of 450mm depth, underlain by a hi viz permeable geotextile in areas of soft landscaping

Validation Requirements:

Plot thickness validation photographs at a rate of 1 pit per three plot and associated chemical testing.

Plot Number:	Plot 12 Rear
Inspection date:	27 th October 2025
Engineer:	AH

Photographs:

Photographs show 200mm of topsoil; underlain by 500mm subsoil; underlain by hi-vis membrane and plot context.

This plot has PASSED / FAILED* verification

*Proposed further remedial works (if FAILED):

An additional inspection IS / IS NOT required for this plot