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REMEDIATION VALIDATION REPORT – DOMETT STREET, MANCHESTER

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

This report pertains to a c. 0.06 Ha site located to the west of Domett Street, Manchester at the approximate post code M9 8DG. The National Ordnance Survey Grid Reference for the centre of the site is 385441E, 402917N.

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

- Curtins *Phase 1 Preliminary Risk Assessment* (ref: 077873-CUR-00-XX-RP-GE-018 Revision V01, dated: 10 May 2021).
- E3P *Phase II Geoenvironmental Site Assessment* (ref: 16-716-R1-2, dated: August 2024).
- IGE Consulting Ltd., '*Domett Street, Manchester, Remedial Strategy*' (ref: 4307-01, dated: Dec 24).

This report is to be used for submission to the building insurer, to achieve sign-off for the site.

Remedial Requirements

As detailed in the above referenced IGE Consulting Remedial Strategy Report, due to the human health GAC exceedances for the residential without plant uptake scenario recorded within the Made Ground, remedial measures are required for the proposed development. A clean cover system will be required in areas of soft landscaping in order to break the contaminative linkages. Details of the required clean cover system are included below. No private gardens are present given the nature of the proposed development.

No remedial measures are deemed necessary for ground gas or controlled waters. An extract of the proposed site plan is included below as Figure 1:





Figure 1: Extract of the proposed site plan (3784-105-13, Nov 2024)

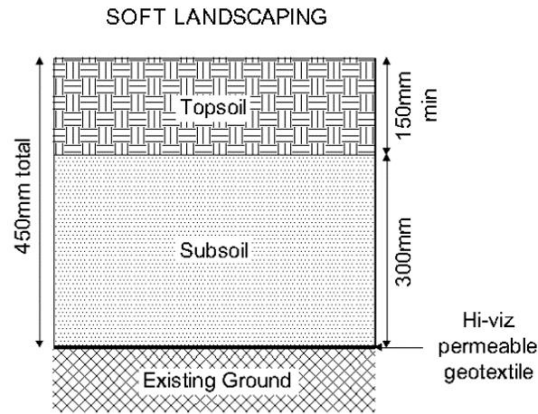
Cover System Requirements

Made Ground containing human health GAC exceedances is present below finalised soft landscaping levels at depths shallower than 450mm across the site. The following procedure is outlined for use in all areas of soft landscaping:

1. Excavate to 450mm bgl in soft landscaping areas.
2. A 450mm clean cover system is recommended to be added to the proposed 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 450mm in areas of soft landscaping, underlain by;
 - A high vis geotextile marker;

- Validate in line with the below strategy.

This is shown diagrammatically below:



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 450mm clean cover system is installed to break contaminative linkages in 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.

No topsoil or subsoil was present on-site therefore all topsoil and subsoil has been imported and this has been 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 Planning and Contaminated Land Technical Guidance (Dated February 2021):

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

- *Inline with Manchester City council chemical testing guidance*

Suitability of Imported Topsoil

The topsoil for the clean cover system was imported from Freeland Horticulture Ltd, Nook Ln, Astley, Manchester, M29 7LW, a topsoil supplier. The topsoil is blended / created on site using compost. Chemical testing of the imported topsoil was provided by the supplier and assessed by IGE Consulting. 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 areas of soft landscaping on site equate to approximately 88m². Utilising an average of 0.20m depth of topsoil this equates to a **volume of 18m³**, consequently 3 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 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.

Suitability of Imported Subsoil

The subsoil for the clean cover system was imported from R Draper Ltd, Barrow Nook Ln, Bickerstaffe, Ormskirk, L39 0ET, a topsoil and aggregates supplier. The material was originally sourced from Mescar Fisheries, Merseyside, Eager Ln, Lydiate L31 4HS. A google aerial image is included below highlighting the source of the subsoil (showing the excavation from which it was taken). 2 No. historical maps of the site are also included in Figure 3 showing that the site was formerly and has always been open fields. Chemical testing of the imported subsoil was provided by the supplier and assessed by IGE Consulting. 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.



Figure 2: Google Aerial Imagery showing the source of the subsoil (red boundary).

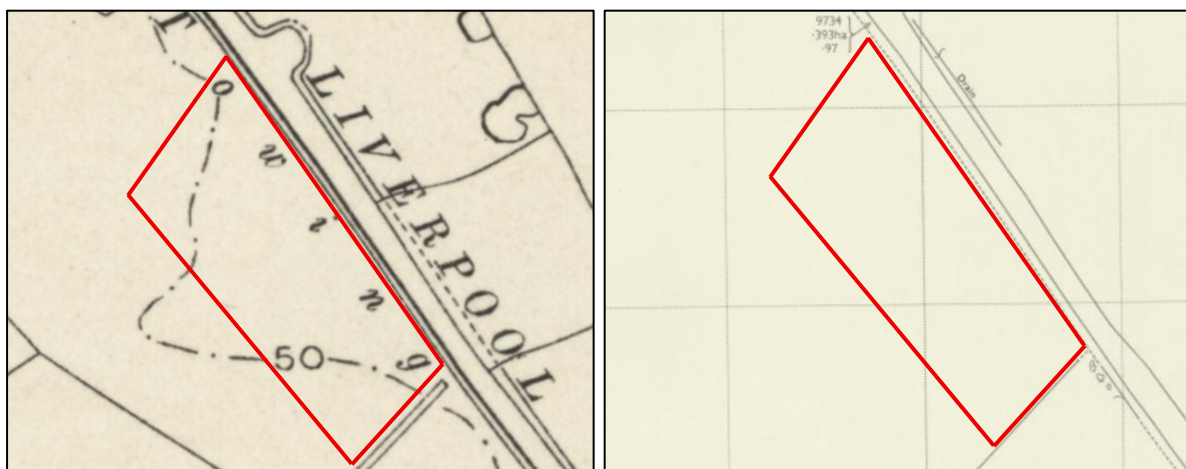


Figure 3: Historical maps extracts dated 1888-1915 (left) and 1944-1974 (right) showing that the site has been open fields throughout its history.

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 areas of soft landscaping on site equate to approximately 88m². Utilising an average of 0.25m depth of subsoil this equates to a **volume of 22m³**, consequently 3 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.

All transfer notes, providing evidence of source and import, are contained in Appendix 5.

Thickness of Clean Cover

Three small holes were dug in total across areas of soft landscaping on site. Photographs were taken of the cover system thickness in these areas, which was found to be equal or greater than the required thickness with the hi-viz geotextile marker present. The photographs and confirmation of cover depth for the soft landscaping areas are contained in the Verification Logs in Appendix 4. A development site layout plan, showing the locations of the 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 the areas of soft landscaping on site.

Conclusion

The remedial objectives for the soft landscaping on site have been met. No further recommendations are made for the site. 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 5 – Waste Tickets

APPENDIX 1



00 Proposed Site Plan
1 : 200

Area Schedule		
Type	Description	Area
BTP - Car Parking	Salmon	50 m²
BTP - Front Garden	Dark Green	45 m²
BTP - Plot Hardstanding	Light Grey	222 m²
BTP - Private Garden	Light Green	61 m²
BTP - Unadopted Drive	Brown	84 m²
Total: 7		462 m²

Fence Schedule			
Type	Length	Fence Height	Count
Fence - TSW 1800mm Trellis	6.8	1800	1
Fence - TSW 2100mm	2.3	2100	2
Metal railings 900mm	3.3	900	3
Railing 300MM	14.1	300	2
Total: 8		26.5	

This drawing is copyright Bernard Taylor Partnership Ltd and must not be copied or disclosed by or to any unauthorised persons without the prior written consent of Bernard Taylor Partnership Ltd.

Do not scale from this drawing. Do not take measurements from the CAD base. Any discrepancies are to be reported to the architect for clarification.

All dimensions are to be checked on site prior to construction, manufacture of any components and ordering of materials and equipment.

All materials and workmanship to be in accordance with the current British Standards and codes of practice.

Schedule of Accommodation

Social Rent		
B2P Flat	2no.	50m2
1B2P Flat	2no.	56m2
TOTAL	4no	

Layout subject to confirmation of red line boundary, all statutory approvals including highways, planning and building regulations, relevant surveys and reports such as topographical, ecology, trees, ground investigation and flood risk.

Indicates approximate location of ASHP to be confirmed and detailed by contractor

Note:
> Make allowance for Brick piers to front boundary wall at max. 2000mm centers
> Timber walls refer to timber sheds in rear gardens
> Make allowance for metal gates to entrance footpaths and carparks if required



View 1



View 2

13	14.11.24	HG	Drawing revised in line with planning conditions and client feedback to form NMA
12	15.12.23	JW	Social rent note added to schedule of accomodation
11	21.11.23	JW	Plan revised to show visibility splay
10	08.10.23	JW	Revisions in line with highway comments on 01.11.23
9	20.10.23	JW	Entrance updated to show new entrance at North of site inline with highways feedback
8	26.07.23	HG	Drawing package revised following feedback at client meeting
7	21.07.23	JW	Drawing package revised following value engineering
6	19.04.23	HG	Layout amended in line with comments following client meeting
5	02.03.23	HG	Layout updated following client meeting and comments
4	04.06.21	AP	GIA amended to corresponde with the Manchester's emerging space standards
3	Date 3	JP	Drawing revised to show amended SoA
2	10.12.20	JP	Drawing revised following meeting with LPA
1	07.12.20	ED	Drawing revised following initial feedback from LPA
Rev	Date	Int	Description

btp
ARCHITECTS

RIBA
Chartered Practice

CLIENT:
Jigsaw

PROJECT:
Domett Street, Manchester

DESCRIPTION:
Proposed Site Plan

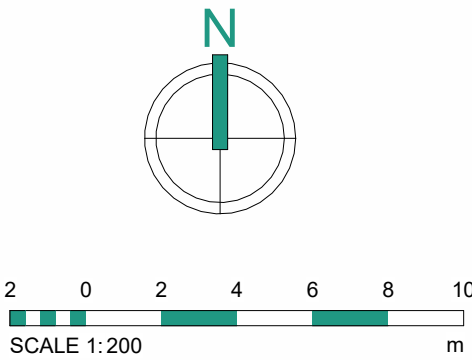
PURPOSE OF ISSUE:
Planning

DRAWN BY:	CHECKED	DATE:	SCALE @ A1:
VS	VS	15.06.21	As indicated

JOB NO:	STATUS CODE:	DRAWING NO:	REV
3784	S2	105	13

FILE IDENTIFIER:
DS-BTP-00-SP-DR-A-3784_105.13

Elizabeth House 486 Didsbury Road Heaton Mersey Stockport SK4 3BS
0161 443 1221 info@bernardtaylor.co.uk www.btparchitects.co.uk



APPENDIX 2



Freeland Horticulture Ltd
Rosedale Nursery
College Road
Hextable
Kent BR8 7LT

Attention: Philippa Lambourne

Our Ref: SLC-1390-SA

23 June 2025

Dear Philippa

Topsoil Analysis Report: Astley, Greater Manchester Topsoil May 2025

We have completed the analysis of the topsoil sample recently taken from the above site and it has been forwarded to an approved laboratory for analysis and have the pleasure of reporting our findings. The purpose of the analysis was to determine the suitability of the topsoil for general landscaping purposes and its compliance with the current British Standard for topsoil (BS3882).

SOIL SAMPLING & EXAMINATION

At the time of our sampling visit the topsoil was stored in a stockpile. A series of 10 hand augered trial holes were constructed across the stockpile for the purpose of soil examination and sample collection. As the soil examination confirmed a consistent topsoil composition, the ten samples were combined together to form one composite sample for analysis purposes. The soil was described as dark brown, slightly moist and friable with a well-developed, fine to medium granular structure. The soil contained a low fraction of small stones and no deleterious materials (eg. building waste materials, glass, roots or rhizomes of pernicious weeds) or unusual odours (eg. hydrocarbons) were recorded.

LABORATORY ANALYSIS

The topsoil sample was submitted to a UKAS and MCERTS accredited laboratory for routine physical and chemical parameters to confirm the composition and fertility of the soil. The following parameters were determined:

- ⊕ pH & electrical conductivity values;
- ⊕ major plant nutrients (N, P, K, Mg) & organic matter content;
- ⊕ particle size distribution and stone content;
- ⊕ heavy metals & potentially toxic elements (As, Cd, Cr, Cu, Pb, Hg, Ni, Se, Zn, B);
- ⊕ sulphate, sulphur, sulphide;
- ⊕ total cyanide and total (mono) phenols;
- ⊕ speciated PAHs (US EPA16)
- ⊕ banded aromatic and aliphatic petroleum hydrocarbons (C₅-C₃₅).
- ⊕ Asbestos

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

Phone: 01322 619161;

*Freeland horticulture Ltd, Registered in England: Rosedale Nursery, College Road, Hextable, Kent BR8 7LT
Company Registration No: 04015968*

COMMENTS***pH & Electrical Conductivity (salinity) Values***

The sample was alkaline in nature (pH 8.4) with a pH value that would be considered suitable for general landscaping purposes.

The electrical conductivity (salinity) value using the soil:water extract was (1135µS/cm) indicating that soluble salts are not present at levels that would be harmful to plants.

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

Organic Matter & Nutrient Status

The sample was rich in organic matter and all major plant nutrients. No further additions of compost or fertiliser are required, or indeed recommended, for at least the first growing season.

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

Particle Size Distribution & Stone Content

The sample contained 73% sand and fell into the sandy loam texture class. This particle size distribution is considered suitable for a broad range of landscape applications, including tree and shrub planting, turfing and seeding.

The sample was Virtually free from stones of 50 mm and upwards in diameter and only contained a slight fraction of smaller stones (12.3%). As such, stones will not restrict the use of the soil for landscaping purposes.

Potential Contaminants

We are not aware of any specified contaminant levels set for the proposed end-use of this topsoil. This includes human health, environmental protection and metals considered toxic to plants. In the absence of any site-specific assessment criteria, the concentrations that affect human health have been compared with the 'residential with homegrown produce' land use in the Suitable For Use Levels presented in 'The LQM/CIEH S4UIs' for Human Health Risk Assessment (2015) and DEFRA SP1010: 'Development of Category 4 Screening Levels' for Assessment of Land Affected by Contamination – Policy Companion Document (2014).

Of the potential contaminants determined, none was found at levels that would exceed their respective guideline values.

CONCLUSION

The purpose of the analysis was to determine the suitability of the topsoil for general landscaping purposes. From the soil examination and laboratory analysis, the soil is described as an alkaline, non-saline, sandy loam. The organic matter and nutrient levels are acceptable, and no significant contamination was found with respect to the parameters determined. This soil would adhere to the current BS3882 specification for 'multipurpose grade'.

To conclude, based on our findings, the topsoil would be considered well-suited to general landscaping purposes provided the physical condition of the soil is maintained.

We hope this report meets with your approval and provides the necessary information. Please do not hesitate to contact the undersigned if you have any queries or comments.

George Longmuir MSc Soil Sci. M.I Soil Sci.

Client	Freeland Horticulture Ltd
Job Name	Topsoil Analysis
Site	Astley, Greater Manchester
Month/Year	May 25
Our Ref	1390-SA
Date	23 June 2025

pH Value & Salinity

pH value (1:2.5 soil/water ext)	units
Electrical Conductivity (1:2.5 soil/water ext)	µS/cm
Electrical Conductivity (1:2.5 soil/CaSO4 ext)	µS/cm

Composite sample

8.4
1135
2983

Organic Matter & Nutrient Status

Organic Matter (LOI)	%
Organic Carbon (Derived)	%
Total Nitrogen	%
Carbon:Nitrogen Ratio	:1
Available Phosphorus	mg/l
Available Potassium	mg/l
Available Magnesium	mg/l

5.6
3.3
0.277
0.6
40.6
820
166

Particle Size Analysis & Stones

Clay (<0.002mm)	%
Silt (0.063-0.002mm)	%
Sand (2.0-0.063mm)	%
Texture Class	UK Class

12
15
73
SandyLoam

Stones 2-20mm	% by DW
Stones 20-50mm	% by DW
Stones >50mm	% by DW

11.3
1.8
0.9

Potential Contaminants

Total Arsenic (As)	mg/kg
Total Cadmium (Cd)	mg/kg
Total Chromium (Cr)	mg/kg
Hexavalent Chromium (CR ^{VI})	mg/kg
Total Copper (Cu)	mg/kg
Total Lead (Pb)	mg/kg
Total Mercury (Hg)	mg/kg
Total Nickel (Ni)	mg/kg
Total Selenium (Se)	mg/kg
Total Zinc (Zn)	mg/kg
Total Beryllium (Be)	mg/kg
Total Barium (Ba)	mg/kg
Total Vanadium (V)	mg/kg
Hot Water Soluble Boron (B)	mg/kg
Total Cyanide (CN)	mg/kg
Elemental Sulphur (S)	mg/kg
Easily Liberated Sulphide (S ⁻²)	mg/kg
Water Soluble Sulphate (SO ²⁻)	mg/l
Total Phenols Index	mg/kg
Asbestos Screen	-

6.3
0.27
15.6
<0.2
25.0
66.1
<0.2
16.7
0.16
68.7
<1
93.2
13.0
1.2
<1
<5
<1
318
<1
N.D.

Polyaromatic Hydrocarbons

Naphthalene	mg/kg
Acenaphthylene	mg/kg
Acenaphthene	mg/kg
Fluorene	mg/kg
Phenanthrene	mg/kg

0.1
<0.05
0.2
0.2
1.1

Client	Freeland Horticulture Ltd	
Job Name	Topsoil Analysis	
Site	Astley, Greater Manchester	
Month/Year	May 25	
Our Ref	1390-SA	
Date	23 June 2025	
Anthracene	mg/kg	0.2
Fluoranthene	mg/kg	1.3
Pyrene	mg/kg	1.1
Benzo[a]anthracene	mg/kg	0.6
Chrysene	mg/kg	0.6
Benzo[b]fluoranthene	mg/kg	0.7
Benzo[k]fluoranthene	mg/kg	0.3
Benzo[a]pyrene	mg/kg	0.6
Indeno[1,2,3-cd]pyrene	mg/kg	0.4
Dibenzo[a,h]anthracene	mg/kg	0.1
Benzo[g,h,i]perylene	mg/kg	<0.1
Total PAHs sum US EPA 16	mg/kg	8.0

Banded Petroleum Hydrocarbons

Aliphatic TPH >C ₅ -C ₆	mg/kg	<0.05
Aliphatic TPH >C ₆ -C ₈	mg/kg	<0.05
Aliphatic TPH >C ₈ -C ₁₀	mg/kg	<0.05
Aliphatic TPH >C ₁₀ -C ₁₂	mg/kg	<10
Aliphatic TPH >C ₁₂ -C ₁₆	mg/kg	<10
Aliphatic TPH >C ₁₆ -C ₂₁	mg/kg	21.0
Aliphatic TPH >C ₂₁ -C ₃₅	mg/kg	170
Aliphatic TPH >C ₃₅ -C ₄₄	mg/kg	20.0

Aromatic TPH >C ₅ -C ₇	mg/kg	<0.05
Aromatic TPH >C ₇ -C ₈	mg/kg	<0.05
Aromatic TPH >C ₈ -C ₁₀	mg/kg	<0.05
Aromatic TPH >C ₁₀ -C ₁₂	mg/kg	<10
Aromatic TPH >C ₁₂ -C ₁₆	mg/kg	<10
Aromatic TPH >C ₁₆ -C ₂₁	mg/kg	98.0
Aromatic TPH >C ₂₁ -C ₃₅	mg/kg	240
Aromatic TPH >C ₃₅ -C ₄₄	mg/kg	35.0

Total Petroleum Hydrocarbons (C ₅ -C ₄₄)	mg/kg	597
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BTEX

Benzene	mg/kg	<0.02
Toluene	mg/kg	<0.2
Ethyl Benzene	mg/kg	<0.04
m- & p- Xylene	mg/kg	<0.2
o-Xylene	mg/kg	<0.1

Chain of Custody requires a Freeland Ticket - 01322 619161



Freeland Horticulture Ltd
Rosedale Nursery
College Road
Hextable
Kent BR8 7LT

Attention: Philippa Lambourne

Our Ref: SLC-1378-SA

19 March 2025

Dear Philippa

Topsoil Analysis Report: Astley, Greater Manchester Topsoil March 2025

We have completed the analysis of the topsoil sample recently taken from the above site and it has been forwarded to an approved laboratory for analysis and have the pleasure of reporting our findings. The purpose of the analysis was to determine the suitability of the topsoil for general landscaping purposes and its compliance with the current British Standard for topsoil (BS3882).

SOIL SAMPLING & EXAMINATION

At the time of our sampling visit the topsoil was stored in a stockpile. A series of 10 hand augered trial holes were constructed across the stockpile for the purpose of soil examination and sample collection. As the soil examination confirmed a consistent topsoil composition, the ten samples were combined together to form one composite sample for analysis purposes. The soil was described as dark brown, slightly moist and friable with a well-developed, fine to medium granular structure. The soil contained a low fraction of small stones and no deleterious materials (eg. building waste materials, glass, roots or rhizomes of pernicious weeds) or unusual odours (eg. hydrocarbons) were recorded.

LABORATORY ANALYSIS

The topsoil sample was submitted to a UKAS and MCERTS accredited laboratory for routine physical and chemical parameters to confirm the composition and fertility of the soil. The following parameters were determined:

- ⊕ pH & electrical conductivity values;
- ⊕ major plant nutrients (N, P, K, Mg) & organic matter content;
- ⊕ particle size distribution and stone content;
- ⊕ heavy metals & potentially toxic elements (As, Cd, Cr, Cu, Pb, Hg, Ni, Se, Zn, B);
- ⊕ sulphate, sulphur, sulphide;
- ⊕ total cyanide and total (mono) phenols;
- ⊕ speciated PAHs (US EPA16)
- ⊕ banded aromatic and aliphatic petroleum hydrocarbons (C₅-C₃₅).
- ⊕ Asbestos

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

Phone: 01322 619161;

*Freeland horticulture Ltd, Registered in England: Rosedale Nursery, College Road, Hextable, Kent BR8 7LT
Company Registration No: 04015968*

COMMENTS

pH & Electrical Conductivity (salinity) Values

The sample was alkaline in nature (pH 8.5) with a pH value that would be considered suitable for general landscaping purposes.

The electrical conductivity (salinity) value using the soil:water extract was (1186 μ S/cm) indicating that soluble salts are not present at levels that would be harmful to plants.

The electrical conductivity values by CaSO₄ extract (BS3882 requirement) fell below the maximum specified value (3300 μ S/cm) given in BS3882:2015.

Organic Matter & Nutrient Status

The sample was rich in organic matter and all major plant nutrients. No further additions of compost or fertiliser are required, or indeed recommended, for at least the first growing season.

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

Particle Size Distribution & Stone Content

The sample contained 81% sand and fell into the sandy loam texture class. This particle size distribution is considered suitable for a broad range of landscape applications, including tree and shrub planting, turfing and seeding.

The sample was Virtually free from stones of 50 mm and upwards in diameter and only contained a slight fraction of smaller stones (1.2%). As such, stones will not restrict the use of the soil for landscaping purposes.

Potential Contaminants

We are not aware of any specified contaminant levels set for the proposed end-use of this topsoil. This includes human health, environmental protection and metals considered toxic to plants. In the absence of any site-specific assessment criteria, the concentrations that affect human health have been compared with the 'residential with homegrown produce' land use in the Suitable For Use Levels presented in, 'The LQM/CIEH S4UIs' for Human Health Risk Assessment (2015) and DEFRA SP1010: 'Development of Category 4 Screening Levels' for Assessment of Land Affected by Contamination – Policy Companion Document (2014).

Of the potential contaminants determined, none was found at levels that would exceed their respective guideline values.

CONCLUSION

The purpose of the analysis was to determine the suitability of the topsoil for general landscaping purposes. From the soil examination and laboratory analysis, the soil is described as an alkaline, non-saline, sandy loam. The organic matter and nutrient levels are acceptable, and no significant contamination was found with respect to the parameters determined. This soil would adhere to the current BS3882 specification for 'multipurpose grade'.

To conclude, based on our findings, the topsoil would be considered well-suited to general landscaping purposes provided the physical condition of the soil is maintained.

We hope this report meets with your approval and provides the necessary information. Please do not hesitate to contact the undersigned if you have any queries or comments.

George Longmuir MSc Soil Sci. M.I Soil Sci.

Client	Freeland Horticulture Ltd
Job Name	Topsoil Analysis
Site	Astley, Greater Manchester
Month/Year	March 25
Our Ref	1378-SA
Date	19 March 2025

Composite sample

pH Value & Salinity

pH value (1:2.5 soil/water ext)	units	8.5
Electrical Conductivity (1:2.5 soil/water ext)	µS/cm	1186
Electrical Conductivity (1:2.5 soil/CaSO4 ext)	µS/cm	3076

Organic Matter & Nutrient Status

Organic Matter (LOI)	%	5.8
Organic Carbon (Derived)	%	3.4
Total Nitrogen	%	0.177
Carbon:Nitrogen Ratio	:1	19.1
Available Phosphorus	mg/l	40.0
Available Potassium	mg/l	939
Available Magnesium	mg/l	130

Particle Size Analysis & Stones

Clay (<0.002mm)	%	8
Silt (0.063-0.002mm)	%	11
Sand (2.0-0.063mm)	%	81
Texture Class	UK Class	Sandy loam

Stones 2-20mm	% by DW	1.2
Stones 20-50mm	% by DW	0.0
Stones >50mm	% by DW	0.0

Potential Contaminants

Total Arsenic (As)	mg/kg	3.9
Total Cadmium (Cd)	mg/kg	<0.1
Total Chromium (Cr)	mg/kg	12.0
Hexavalent Chromium (CR ^{VI})	mg/kg	<0.2
Total Copper (Cu)	mg/kg	15.4
Total Lead (Pb)	mg/kg	54.0
Total Mercury (Hg)	mg/kg	<0.2
Total Nickel (Ni)	mg/kg	<10
Total Selenium (Se)	mg/kg	0.10
Total Zinc (Zn)	mg/kg	40.1
Total Beryllium (Be)	mg/kg	<1
Total Barium (Ba)	mg/kg	54.6
Total Vanadium (V)	mg/kg	<10
Hot Water Soluble Boron (B)	mg/kg	1.8
Total Cyanide (CN)	mg/kg	<1
Elemental Sulphur (S)	mg/kg	7.2
Easily Liberated Sulphide (S ²⁻)	mg/kg	2.2
Water Soluble Sulphate (SO ₄ ²⁻)	mg/l	189
Total Phenols Index	mg/kg	<1
Asbestos Screen	-	N.D.

Polyaromatic Hydrocarbons

Naphthalene	mg/kg	0.1
Acenaphthylene	mg/kg	<0.05
Acenaphthene	mg/kg	0.1
Fluorene	mg/kg	0.1
Phenanthrene	mg/kg	0.5

Client	Freeland Horticulture Ltd	
Job Name	Topsoil Analysis	
Site	Astley, Greater Manchester	
Month/Year	March 25	
Our Ref	1378-SA	
Date	19 March 2025	
Anthracene	mg/kg	0.1
Fluoranthene	mg/kg	0.5
Pyrene	mg/kg	0.5
Benzo[a]anthracene	mg/kg	0.2
Chrysene	mg/kg	0.3
Benzo[b]fluoranthene	mg/kg	0.3
Benzo[k]fluoranthene	mg/kg	0.1
Benzo[a]pyrene	mg/kg	0.2
Indeno[1,2,3-cd]pyrene	mg/kg	0.2
Dibenzo[a,h]anthracene	mg/kg	<0.1
Benzo[g,h,i]perylene	mg/kg	0.2
Total PAHs sum US EPA 16	mg/kg	3.4

Banded Petroleum Hydrocarbons

Aliphatic TPH >C ₅ -C ₆	mg/kg	0.11
Aliphatic TPH >C ₆ -C ₈	mg/kg	0.20
Aliphatic TPH >C ₈ -C ₁₀	mg/kg	<0.05
Aliphatic TPH >C ₁₀ -C ₁₂	mg/kg	<10
Aliphatic TPH >C ₁₂ -C ₁₆	mg/kg	<10
Aliphatic TPH >C ₁₆ -C ₂₁	mg/kg	110
Aliphatic TPH >C ₂₁ -C ₃₅	mg/kg	240
Aliphatic TPH >C ₃₅ -C ₄₄	mg/kg	24.0

Aromatic TPH >C ₅ -C ₇	mg/kg	<0.05
Aromatic TPH >C ₇ -C ₈	mg/kg	<0.05
Aromatic TPH >C ₈ -C ₁₀	mg/kg	<0.05
Aromatic TPH >C ₁₀ -C ₁₂	mg/kg	<10
Aromatic TPH >C ₁₂ -C ₁₆	mg/kg	<10
Aromatic TPH >C ₁₆ -C ₂₁	mg/kg	43.0
Aromatic TPH >C ₂₁ -C ₃₅	mg/kg	280
Aromatic TPH >C ₃₅ -C ₄₄	mg/kg	40.0

Total Petroleum Hydrocarbons (C ₅ -C ₄₄)	mg/kg	757
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BTEX

Benzene	mg/kg	<0.02
Toluene	mg/kg	<0.2
Ethyl Benzene	mg/kg	<0.04
m- & p- Xylene	mg/kg	<0.2
o-Xylene	mg/kg	<0.1



TIM O'HARE ASSOCIATES
SOIL & LANDSCAPE CONSULTANCY

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

14th March 2025
Our Ref: TOHA/25/1747/SS
Your Ref: see below

Dear Sirs

Subsoil Analysis Report: BS8601 Subsoil

We have completed the analysis of the soil sample recently submitted, referenced *BS8601 Subsoil*, and have pleasure reporting our findings.

The purpose of the analysis was to determine the suitability of the sample for use as subsoil in 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 Subsoil (*BS8601:2013 – Specification for subsoil and requirements for use – Table 1, Multipurpose Subsoil*), including analysis of potential contaminants.

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

SAMPLE EXAMINATION

The sample was described as a dark brown (Munsell Colour 10YR 3/3), slightly moist, friable, very slightly calcareous SAND with a single grain structure. The sample was stone-free and no unusual odours, roots or rhizomes of pernicious weeds were observed.

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 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, 20-75mm, >75mm);
- pH and electrical conductivity values;
- exchangeable sodium percentage;
- organic matter content;
- heavy metals (As, B, Cd, Cr, Cu, Pb, Hg, Ni, Se, Zn);
- 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 *sand* texture class and would be described as being light in texture. Such soils typically have good aeration and drainage properties but can possess poor water retention capacities. As a consequence, they often have a greater risk of drought particularly during prolonged dry periods, and additional irrigation should be considered.

The sample was stone-free and, as such, stones should not restrict the use of the soil for use as subsoil in general landscape purposes.

pH and Electrical Conductivity Values

The sample was slightly acid in reaction (pH 6.8), with a pH value that would be considered ideal for subsoil in general landscape purposes.

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

The electrical conductivity value by CaSO₄ extract (*BS8601* requirement) fell below the maximum specified value (2800 µS/cm) given in *BS8601:2013 – Table 1*.

Organic Matter Content

The organic matter content was low (<2%) and compliant with *BS8601:2013 – Table 1*.

Potential Contaminants

With reference to *BS8601:2013 – Section 4.2: Note 2*, there is a recommendation to confirm levels of potential contaminants in relation to the subsoil'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 homegrown 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 *BS8601:2013 – Table 1*.

CONCLUSION

The purpose of the analysis was to determine the suitability of the sample for use as subsoil in 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 Subsoil (*BS8601:2013 – Specification for subsoil and requirements for use – Table 1, Multipurpose Subsoil*), including analysis of potential contaminants.

From the soil examination and subsequent laboratory analysis, the sample was described as a slightly acid, non-saline, very slightly calcareous, stone-free sand with a single grain structure. The organic matter content of the sample was low and consistent with that of subsoil.

Based on our findings, the soil represented by this sample would be considered suitable as subsoil for general landscape purposes (trees, shrubs, amenity grass), provided the physical condition of the soil is satisfactory.

The sample was largely compliant with the requirements of the British Standard for Subsoil (*BS8601:2013 – Specification for subsoil and requirements for use – Table 1, Multipurpose Subsoil*) with the exception of the high total sand content. On this occasion, this non-compliance is considered minor when reviewed in the context of all the results and provided additional irrigation is considered.

Soil Handling Recommendations

Reference should be made to Section 6.0 of *BS8601:2013* with regard to the handling and management of the subsoil:

"Soils generally lose strength and become less resistant to damage as they become wetter; therefore, it is essential that they are stripped, handled and trafficked only in the appropriate conditions of weather and soil moisture, and with suitable machinery. If sustained heavy rainfall (e.g. >10 mm in 24 h) occurs during soil stripping operations, work should be suspended and not restarted until the ground has had at least one dry day or until a suitable moisture content has been reached. A soil can be considered to have a suitable moisture content for stripping and handling if the whole thickness of the subsoil layer being stripped and/or handled is at a moisture content below the plastic limit as determined in accordance with BS 1377-2:1990 (incorporating Amendment No. 1).

Machinery should be selected and routed to minimise soil compaction."

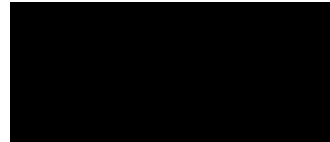
Further guidance is provided in Clauses 6.1–6.5.

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



Neema Senthil Kumar
BSc MSc
Soil Scientist



Rebecca Roberts
BSc MSc M/SoilSci
Senior Soil Scientist

For & on behalf of Tim O'Hare Associates LLP



TIM O'HARE ASSOCIATES
SOIL & LANDSCAPE CONSULTANCY

Client:	R Draper Ltd
Project:	BS8601 Subsoil
Job:	Subsoil Analysis (BS8601:2013)
Date:	14/03/2025
Job Ref No:	TOHA/25/1747/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 (20-75mm)	% DW	GLP
Stones (>75mm)	% 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
Organic Matter (LOI)	%	UKAS
Exchangeable Sodium Percentage	%	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
Benz(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
o-xylene	mg/kg	MCERTS
MTBE (Methyl Tertiary Butyl Ether)	mg/kg	MCERTS

Asbestos Screen	ND/D	ISO 17025
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S = SAND

Visual Examination

The sample was described as a dark brown (Munsell Colour 10YR 3/3), slightly moist, friable, very slightly calcareous SAND with a single grain structure. The sample was stone-free and no unusual odours, 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.

BS8601 Subsoil

1
4
95
S
0
0
0

6.8
47
1982
1.3
0.8

1
< 0.2
7
< 1.8
5
2
< 0.3
3
< 1.0
6
0.4
< 1.0
< 1.0

< 0.05
< 0.05
< 0.05
< 0.05
< 0.05
< 0.05
< 0.05
< 0.05
< 0.05
< 0.05
< 0.05
< 0.05
< 0.05
< 0.05
< 0.05
< 0.05
< 0.05
< 0.80

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

< 0.005
< 0.005
< 0.005
< 0.008
< 0.005
< 0.005

Not-detected



Neema Senthil Kumar
BSC MSc
Soil Scientist

APPENDIX 3

IGE Consulting
Office 11
Bartle House
Oxford Court
Manchester
M2 3WQ

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

t:

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

Analytical Report Number : 25-061964

Replaces Analytical Report Number: 25-061964, issue no. 1
Report split as per client's request.

Project / Site name:	Domett St	Samples received on:	17/11/2025
Your job number:	3590	Samples instructed on/ Analysis started on:	17/11/2025
Your order number:	4307/JA	Analysis completed by:	21/11/2025
Report Issue Number:	2B	Report issued on:	05/12/2025
Samples Analysed:	5 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: 25-061964

Project / Site name: Domett St

Your Order No: 4307/JA

Lab Sample Number	750794	750796	750797	750798	750799
Sample Reference	TS01	TS02	SS02	TS03	SS03
Sample Number	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Water Matrix	N/A	N/A	N/A	N/A	N/A
Depth (m)	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled	13/11/2025	13/11/2025	13/11/2025	13/11/2025	13/11/2025
Time Taken	None Supplied	None Supplied	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	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	20	23	14	20	21
Total mass of sample received	kg	0.1	NONE	1.1	0.9	1	0.8	1

Asbestos

Asbestos in Soil Detected/Not Detected	Type	N/A	ISO 17025	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected
Asbestos Analyst ID	N/A	N/A	N/A	DKI	DKI	SSZ	SSZ	SSZ
Analysis completed	N/A	N/A	N/A	20/11/2025	20/11/2025	20/11/2025	20/11/2025	20/11/2025

General Inorganics

pH (L099)	pH Units	N/A	MCERTS	8.3	8.2	6.2	8.2	8.4
Total Cyanide	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Free Cyanide	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Water Soluble Sulphate as SO ₄ 16hr extraction (2:1)	mg/kg	2.5	MCERTS	240	310	420	320	230
Water Soluble SO ₄ 16hr extraction (2:1 Leachate Equivalent)	mg/l	1.25	MCERTS	118	156	210	160	116
Organic Matter (automated)	%	0.1	MCERTS	4.1	4.9	0.7	4.6	4.9
Total Organic Carbon (TOC) - Automated	%	0.1	MCERTS	-	-	0.4	-	2.8
Water Soluble Nitrate (2:1) as NO ₃	mg/kg	2	NONE	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
Water Soluble Nitrate (2:1) as NO ₃ (leachate equivalent)	mg/l	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0

Speciated PAHs

Naphthalene	mg/kg	0.05	MCERTS	0.06	0.07	< 0.05	< 0.05	0.06
Acenaphthylene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthene	mg/kg	0.05	MCERTS	0.1	0.08	< 0.05	0.05	0.37
Fluorene	mg/kg	0.05	MCERTS	0.09	0.08	< 0.05	< 0.05	0.28
Phenanthrene	mg/kg	0.05	MCERTS	0.59	0.48	< 0.05	0.31	2.5
Anthracene	mg/kg	0.05	MCERTS	0.17	0.12	< 0.05	0.09	0.79
Fluoranthene	mg/kg	0.05	MCERTS	0.84	0.58	< 0.05	0.68	3.5
Pyrene	mg/kg	0.05	MCERTS	0.86	0.55	< 0.05	0.65	3.4
Benzo(a)anthracene	mg/kg	0.05	MCERTS	0.49	0.3	< 0.05	0.39	1.6
Chrysene	mg/kg	0.05	MCERTS	0.44	0.26	< 0.05	0.39	1.5
Benzo(b)fluoranthene	mg/kg	0.05	ISO 17025	0.59	0.33	< 0.05	0.47	1.6
Benzo(k)fluoranthene	mg/kg	0.05	ISO 17025	0.2	0.11	< 0.05	0.16	0.6
Benzo(a)pyrene	mg/kg	0.05	MCERTS	0.5	0.26	< 0.05	0.35	1.4
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	0.23	0.14	< 0.05	0.18	0.63
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	0.17
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	0.28	0.16	< 0.05	0.21	0.75

Total PAH

Speciated Total EPA-16 PAHs	mg/kg	0.8	ISO 17025	5.43	3.53	< 0.80	3.93	19.2
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Analytical Report Number: 25-061964

Project / Site name: Domett St

Your Order No: 4307/JA

Lab Sample Number	750794	750796	750797	750798	750799
Sample Reference	TS01	TS02	SS02	TS03	SS03
Sample Number	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Water Matrix	N/A	N/A	N/A	N/A	N/A
Depth (m)	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled	13/11/2025	13/11/2025	13/11/2025	13/11/2025	13/11/2025
Time Taken	None Supplied	None Supplied	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	5.8	4.9	2.6	3.3	6.1
Barium (aqua regia extractable)	mg/kg	1	MCERTS	110	120	14	51	100
Beryllium (aqua regia extractable)	mg/kg	0.06	MCERTS	0.56	0.55	0.08	0.52	0.45
Boron (water soluble)	mg/kg	0.2	MCERTS	1	1.2	0.2	1.6	1.1
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
Chromium (hexavalent) Low Level	mg/kg	1.2	NONE	< 1.2	< 1.2	< 1.2	< 1.2	< 1.2
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	14	12	4.3	9.1	11
Copper (aqua regia extractable)	mg/kg	1	MCERTS	27	38	4.3	15	22
Lead (aqua regia extractable)	mg/kg	1	MCERTS	33	29	2.3	22	33
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	14	12	5.5	8.5	10
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Vanadium (aqua regia extractable)	mg/kg	1	MCERTS	16	14	3.7	12	13
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	60	62	7.7	39	56

Petroleum Hydrocarbons

TPHCWG - Aliphatic >EC5 - EC6 _{HS_1D_AL}	mg/kg	0.01	MCERTS	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
TPHCWG - Aliphatic >EC6 - EC8 _{HS_1D_AL}	mg/kg	0.01	MCERTS	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
TPHCWG - Aliphatic >EC8 - EC10 _{HS_1D_AL}	mg/kg	0.01	MCERTS	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
TPHCWG - Aliphatic >EC10 - EC12 _{EH_CU_1D_AL}	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPHCWG - Aliphatic >EC12 - EC16 _{EH_CU_1D_AL}	mg/kg	2	MCERTS	4.6	< 2.0	< 2.0	< 2.0	< 2.0
TPHCWG - Aliphatic >EC16 - EC21 _{EH_CU_1D_AL}	mg/kg	8	MCERTS	< 8.0	< 8.0	< 8.0	< 8.0	< 8.0
TPHCWG - Aliphatic >EC21 - EC35 _{EH_CU_1D_AL}	mg/kg	8	MCERTS	14	30	< 8.0	< 8.0	< 8.0
TPHCWG - Aliphatic >EC35 - EC44 _{EH_CU_1D_AL}	mg/kg	8.4	NONE	< 8.4	9.8	< 8.4	< 8.4	< 8.4
TPHCWG - Aliphatic >EC5 - EC35 _{EH_CU+HS_1D_AL}	mg/kg	10	NONE	19	30	< 10	< 10	< 10
TPHCWG - Aliphatic >EC5 - EC44 _{EH_CU+HS_1D_AL}	mg/kg	10	NONE	19	40	< 10	< 10	< 10

TPHCWG - Aromatic >EC5 - EC7 _{HS_1D_AR}	mg/kg	0.01	MCERTS	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
TPHCWG - Aromatic >EC7 - EC8 _{HS_1D_AR}	mg/kg	0.01	MCERTS	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
TPHCWG - Aromatic >EC8 - EC10 _{HS_1D_AR}	mg/kg	0.02	MCERTS	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020
TPHCWG - Aromatic >EC10 - EC12 _{EH_CU_1D_AR}	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPHCWG - Aromatic >EC12 - EC16 _{EH_CU_1D_AR}	mg/kg	2	MCERTS	4.5	< 2.0	< 2.0	< 2.0	< 2.0
TPHCWG - Aromatic >EC16 - EC21 _{EH_CU_1D_AR}	mg/kg	10	MCERTS	< 10	< 10	< 10	< 10	< 10
TPHCWG - Aromatic >EC21 - EC35 _{EH_CU_1D_AR}	mg/kg	10	MCERTS	26	< 10	< 10	< 10	20
TPHCWG - Aromatic >EC35 - EC44 _{EH_CU_1D_AR}	mg/kg	8.4	NONE	17	< 8.4	< 8.4	< 8.4	< 8.4
TPHCWG - Aromatic >EC5 - EC35 _{EH_CU+HS_1D_AR}	mg/kg	10	NONE	31	< 10	< 10	< 10	20
TPHCWG - Aromatic >EC5 - EC44 _{EH_CU+HS_1D_AR}	mg/kg	10	NONE	48	< 10	< 10	< 10	20

VOCs

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

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

Analytical Report Number : 25-061964

Project / Site name: Domett St

* 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 *
750794	TS01	None Supplied	None Supplied	Brown clay and sand with gravel and vegetation
750796	TS02	None Supplied	None Supplied	Brown clay and sand with gravel and vegetation
750797	SS02	None Supplied	None Supplied	Brown sand
750798	TS03	None Supplied	None Supplied	Brown loam and clay with gravel and vegetation
750799	SS03	None Supplied	None Supplied	Brown clay and sand with gravel

Analytical Report Number : 25-061964

Project / Site name: Domett St

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 : 25-061964

Project / Site name: Domett St

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
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

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

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

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

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

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

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

The result for sum should be interpreted with caution

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Analytical Report Number : 25-064097

Project / Site name:	Domett Street	Samples received on:	25/11/2025
Your job number:	4307	Samples instructed on/ Analysis started on:	26/11/2025
Your order number:	4307 NR	Analysis completed by:	04/12/2025
Report Issue Number:	1	Report issued on:	04/12/2025
Samples Analysed:	1 soil sample		

Signed:

Anna Goc
PL Head of Reporting Team
For & on behalf of i2 Analytical Ltd.

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

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

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

soils	- 4 weeks from reporting
leachates	- 2 weeks from reporting
waters	- 2 weeks from reporting
asbestos	- 6 months from reporting
air	- once the analysis is complete

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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: 25-064097

Project / Site name: Domett Street

Your Order No: 4307 NR

Lab Sample Number	762976			
Sample Reference	SS01			
Sample Number	None Supplied			
Water Matrix	N/A			
Depth (m)	None Supplied			
Date Sampled	25/11/2025			
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	15
Total mass of sample received	kg	0.1	NONE	0.7

Asbestos

Asbestos in Soil Detected/Not Detected	Type	N/A	ISO 17025	Not-detected
Asbestos Analyst ID	N/A	N/A	N/A	MJN
Analysis completed	N/A	N/A	N/A	02/12/2025

General Inorganics

pH (L099)	pH Units	N/A	MCERTS	7.9
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	93
Water Soluble SO ₄ 16hr extraction (2:1 Leachate Equivalent)	mg/l	1.25	MCERTS	46.5
Organic Matter (automated)	%	0.1	MCERTS	0.7
Total Organic Carbon (TOC) - Automated	%	0.1	MCERTS	0.4
Water Soluble Nitrate (2:1) as NO ₃	mg/kg	2	NONE	< 2.0
Water Soluble Nitrate (2:1) as NO ₃ (leachate equivalent)	mg/l	5	NONE	< 5.0

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	< 0.05
Anthracene	mg/kg	0.05	MCERTS	< 0.05
Fluoranthene	mg/kg	0.05	MCERTS	< 0.05
Pyrene	mg/kg	0.05	MCERTS	< 0.05
Benzo(a)anthracene	mg/kg	0.05	MCERTS	< 0.05
Chrysene	mg/kg	0.05	MCERTS	< 0.05
Benzo(b)fluoranthene	mg/kg	0.05	ISO 17025	< 0.05
Benzo(k)fluoranthene	mg/kg	0.05	ISO 17025	< 0.05
Benzo(a)pyrene	mg/kg	0.05	MCERTS	< 0.05
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	< 0.05
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	< 0.80
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Analytical Report Number: 25-064097

Project / Site name: Domett Street

Your Order No: 4307 NR

Lab Sample Number	762976			
Sample Reference	SS01			
Sample Number	None Supplied			
Water Matrix	N/A			
Depth (m)	None Supplied			
Date Sampled	25/11/2025			
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	1.8
Barium (aqua regia extractable)	mg/kg	1	MCERTS	9.9
Beryllium (aqua regia extractable)	mg/kg	0.06	MCERTS	< 0.06
Boron (water soluble)	mg/kg	0.2	MCERTS	0.3
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	2.7
Copper (aqua regia extractable)	mg/kg	1	MCERTS	3.8
Lead (aqua regia extractable)	mg/kg	1	MCERTS	1.4
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	< 0.3
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	4.3
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0
Vanadium (aqua regia extractable)	mg/kg	1	MCERTS	2.9
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	6

Petroleum Hydrocarbons

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

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

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 : 25-064097

Project / Site name: Domett 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 *
762976	SS01	None Supplied	None Supplied	Brown sand

Analytical Report Number : 25-064097

Project / Site name: Domett 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 : 25-064097

Project / Site name: Domett 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

IGE consulting			Project: Domett St, Manchester														
			Job No: 4307														
Lab Sample Number			750794	762976	750796	750797	750798	750799	Statistical Analysis					GAC - S4UL unless stated			
Sample Reference			TS01	SS01	TS02	SS02	TS03	SS03	Statistical Results								
Sample Number			None Supplied	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied	Count	Standard Deviation	Minimum	Maximum	Average	Maximum	1% Residential with Home Grown Produce	Pass/ Fail	Exceedances
Depth (m)			None Supplied	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied									
Date Sampled			13/11/2025	25/11/2025	13/11/2025	13/11/2025	13/11/2025	13/11/2025									
Analytical Parameter (Soil Analysis)		Units	LoD														
Stone Content		%	0.1	0.1	0.1	0.1	0.1	0.1	6	0.00	0.1	0.1	0.1	0.1			
Moisture Content		%	0.01	20	15	23	14	20	6	3.54	14.00	23.00	18.83	23.00			
Total mass of sample received		kg	0.1	1.1	0.7	0.9	1	0.8	6	0.15	0.700	1.100	0.917	1.100			
Asbestos																	
Asbestos in Soil Screen		Type	N/A	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected	6	-	-	-	-				
General Inorganics																	
pH - Automated		pH Units	N/A	8.3	7.9	8.2	6.2	8.2	6	0.83	6.20	8.40	7.87				
Total Cyanide		mg/kg	1	1	1	1	1	1	6	0.00	1.00	1.00	1.00	1.00	60	Pass	0
Free Cyanide		mg/kg	1	1	1	1	1	1	6	0.00	1.00	1.00	1.00	1.00	60	Pass	0
Water Soluble Sulfate as SO4 16hr extraction (2:1)		mg/kg	2.5	240	93	310	420	320	6	109.93	93.00	420.00	268.83				
Water Soluble SO4 16hr extraction (2:1 Leachate Equivalent)		mg/l	1.25	118	46.5	156	210	160	6	55.08	46.50	210.00	134.42				
Organic Matter (automated)		%	0.1	4.10	0.70	4.90	0.70	4.60	6	2.05	0.70	4.90	3.32				
Total Organic Carbon (automated)		%	0.1	-	0.400	-	0.400	-	3	1.39	0.40	2.80	1.20				
Water Soluble Nitrate (2:1) as NO3		mg/kg	2	2	2	2	2	2	6	0.00	2.00	2.00	2.00				
Water Soluble Nitrate (2:1) as NO3 (leachate equivalent)		mg/l	5	5	5	5	5	5	6	0.00	5.00	5.00	5.00				
Speciated PAHs																	
Naphthalene		mg/kg	0.05	0.06	0.05	0.07	0.05	0.05	6	0.01	0.05	0.07	0.06	0.07	2.30	Pass	0
Acenaphthylene		mg/kg	0.05	0.05	0.05	0.05	0.05	0.05	6	0.00	0.05	0.05	0.05	0.05	170	Pass	0
Acenaphthene		mg/kg	0.05	0.1	0.05	0.08	0.05	0.05	6	0.13	0.05	0.37	0.12	0.37	210	Pass	0
Fluorene		mg/kg	0.05	0.09	0.05	0.08	0.05	0.05	6	0.09	0.05	0.28	0.10	0.28	170	Pass	0
Phenanthrene		mg/kg	0.05	0.59	0.05	0.48	0.05	0.31	6	0.93	0.05	2.50	0.66	2.50	95	Pass	0
Anthracene		mg/kg	0.05	0.17	0.05	0.12	0.05	0.09	6	0.29	0.05	0.79	0.21	0.79	2400	Pass	0
Fluoranthene		mg/kg	0.05	0.84	0.05	0.58	0.05	0.68	6	1.29	0.05	3.50	0.95	3.50	280	Pass	0
Pyrene		mg/kg	0.05	0.86	0.05	0.55	0.05	0.65	6	1.26	0.05	3.40	0.93	3.40	620	Pass	0
Benzo(a)anthracene		mg/kg	0.05	0.49	0.05	0.3	0.05	0.39	6	0.58	0.05	1.60	0.48	1.60	7.20	Pass	0
Chrysene		mg/kg	0.05	0.44	0.05	0.26	0.05	0.39	6	0.54	0.05	1.50	0.45	1.50	15	Pass	0
Benzo(b)fluoranthene		mg/kg	0.05	0.59	0.05	0.33	0.05	0.47	6	0.57	0.05	1.60	0.52	1.60	2.60	Pass	0
Benzo(k)fluoranthene		mg/kg	0.05	0.2	0.05	0.11	0.05	0.16	6	0.21	0.05	0.60	0.20	0.60	77	Pass	0
Benzo(a)pyrene		mg/kg	0.05	0.5	0.05	0.26	0.05	0.35	6	0.50	0.05	1.40	0.44	1.40	2.20	Pass	0
Indeno(1,2,3-cd)pyrene		mg/kg	0.05	0.23	0.05	0.14	0.05	0.18	6	0.22	0.05	0.63	0.21	0.63	27	Pass	0
Dibenz(a,h)anthracene		mg/kg	0.05	0.05	0.05	0.05	0.05	0.05	6	0.05	0.05	0.17	0.07	0.17	0.24	Pass	0
Benzo(ghi)perylene		mg/kg	0.05	0.28	0.05	0.16	0.05	0.21	6	0.26	0.05	0.75	0.25	0.75	320	Pass	0
Total PAH																	
Speciated Total EPA-16 PAHs		mg/kg	0.8	5.43	0.8	3.53	0.8	3.93	6	6.90	0.80	19.20	5.62				
Heavy Metals / Metalloids																	
Arsenic (aqua regia extractable)		mg/kg	1	5.8	1.8	4.9	2.6	3.3	6	1.77	1.80	6.10	4.08	6.10	37	Pass	0
Barium (aqua regia extractable)		mg/kg	1	110	9.9	120	14	51	6	49.13	9.90	120.00	67.48	120.00	-	Pass	0
Boron (water soluble)		mg/kg	0.2	1	0.3	1.2	0.2	1.6	6	0.54	0.20	1.60	0.90	1.60	290	Pass	0
Cadmium (aqua regia extractable)		mg/kg	0.2	0.2	0.2	0.2	0.2	0.2	6	0.00	0.20	0.20	0.20	0.20	11	Pass	0
Chromium (hexavalent)		mg/kg	1.2	1.2	1.2	1.2	1.2	1.2	6	0.00	1.20	1.20	1.20	1.20	6	Pass	0
Chromium (aqua regia extractable)		mg/kg	1	14	2.7	12	4.3	9.1	6	4.46	2.70	14.00	8.85	14.00	910	Pass	0
Copper (aqua regia extractable)		mg/kg	1	27	3.8	38	4.3	15	6	13.38	3.80	38.00	18.35	38.00	2400	Pass	0
Lead (aqua regia extractable)		mg/kg	1	33	1.4	29	2.3	22	6	14.71	1.40	33.00	20.12	33.00	200	Pass	0
Mercury (aqua regia extractable)		mg/kg	0.3	0.3	0.3	0.3	0.3	0.3	6	0.00	0.30	0.30	0.30	0.30	40	Pass	0
Nickel (aqua regia extractable)		mg/kg	1	14	4.3	12	5.5	8.5	6	3.73	4.30	14.00	9.05	14.00	130	Pass	0
Selenium (aqua regia extractable)		mg/kg	1	1	1	1	1	1	6	0.00	1.00	1.00	1.00	1.00	250	Pass	0
Vanadium (aqua regia extractable)		mg/kg	1	16	2.9	14	3.7	12	6	5.56	2.90	16.00	10.27	16.00	410	Pass	0
Zinc (aqua regia extractable)		mg/kg	1	60	6	62	7.7	39	6	25.79	6.00	62.00	38.45	62.00	3700	Pass	0
Monoaromatics & Oxygenates																	
MTBE (Methyl Tertiary Butyl Ether)		µg/kg	5	5	5	5	5	5	6	0.00	5	5	5.00	5	-		
Benzene		µg/kg	5	5	5	5	5	5	6	0.00	5	5	5.00	5	87	Pass	0
Toluene		µg/kg	5	5	5	5	5	5	6	0.00	5	5	5.00	5	130000	Pass	0
Ethylbenzene		µg/kg	5	5	5	5	5	5	6	0.00	5	5	5.00	5	47000	Pass	0
p & m-xylene		µg/kg	8	8	8	8	8	8	6	0.00	8	8	8.00	8	56000	Pass	0
o-xylene		µg/kg	5	5	5	5	5	5	6	0.00	5	5	5.00	5	60000	Pass	0
Petroleum Hydrocarbons																	
TPH-CWG - Aliphatic >EC5 - EC6		mg/kg	0.01	0.01	0.01	0.01	0.01	0.01	6	0.000	0.010	0.010	0.010	0.010	42	Pass	0
TPH-CWG - Aliphatic >EC6 - EC8		mg/kg	0.01	0.01	0.01	0.01	0.01	0.01	6	0.000	0.010	0.010	0.010	0.010	100	Pass	0
TPH-CWG - Aliphatic >EC8 - EC10		mg/kg	0.01	0.01	0.01	0.01	0.01	0.01	6	0.000	0.010	0.010	0.010	0.010	27	Pass	0
TPH-CWG - Aliphatic >EC10 - EC12		mg/kg	1	1	1	1	1	1	6	0.00	1.00	1.00	1.00	1.00	130	Pass	0
TPH-CWG - Aliphatic >EC12 - EC16		mg/kg	2	4.6	2	2	2	2	6	1.06	2.00	4.60	2.43	4.60	1100	Pass	0
TPH-CWG - Aliphatic >EC16 - EC21		mg/kg	8	8	8	8	8	8	6	0.00	8.00	8.00	8.00	8.00	-		
TPH-CWG - Aliphatic >EC21 - EC35		mg/kg	8	14	8	30	8	8	6	8.82	8.00	30.00	12.67	30.00	65000	Pass	0
TPH-CWG - Aliphatic >EC35 - EC44		mg/kg	8.4	8.4	8.4	9.8	8.4	8.4	6	0.57	8.40	9.80	8.63	9.80	65000	Pass	0
TPH-CWG - Aliphatic (EC5 - EC35)		mg/kg	10	19	10	30	10	10	6	8.26	10.00	30.00	14.83		-		
TPH-CWG - Aliphatic (EC5 - EC44)		mg/kg	10	19	10	40	10	10	6	12.06	10.00	40.00	16.50		-		
TPH-CWG - Aromatic >EC5 - EC7		mg/kg	0.01	0.01	0.01	0.01	0.01	0.01	6	0.000	0.010	0.010	0.010	0.010	70	Pass	0
TPH-CWG - Aromatic >EC7 - EC8		mg/kg	0.01	0.01	0.01	0.01	0.01	0.01	6	0.000	0.010	0.010	0.010	0.010	130	Pass	0
TPH-CWG - Aromatic >EC8 - EC10		mg/kg	0.02	0.02	0.02	0.02	0.02	0.02	6	0.000	0.020	0.020	0.020	0.020	34	Pass	0
TPH-CWG - Aromatic >EC10 - EC12		mg/kg	1	1	1	1	1	1	6	0.00	1.00	1.00	1.00	1.00	74	Pass	0
TPH-CWG - Aromatic >EC12 - EC16		mg/kg	2	4.5	2	2	2	2	6	1.02	2.00	4.50	2.42	4.50	140	Pass	0
TPH-CWG - Aromatic >EC16 - EC21		mg/kg	10	10	10	10	10	10	6	0.00	10.00	10.00	10.00	10.00	260	Pass	0
TPH-CWG - Aromatic >EC21 - EC35		mg/kg	10	26	10	10	10	10	6	6.98	10.00	26.00	14.33	26.00	1100	Pass	0
TPH-CWG - Aromatic >EC35 - EC44		mg/kg	8.4	17	8.4	8.4	8.4	8.4	6	3.51	8.40	17.00	9.83	17.00	1100	Pass	0
TPH-CWG - Aromatic (EC5 - EC35)		mg/kg	10	31	10	10	10	10	6	8.73	10.00	31.00	15.17		-		
TPH-CWG - Aromatic (EC5 - EC44)		mg/kg	10	48	10	10	10	10	6	15.23	10.00	48.00	18.00		-		
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																	

APPENDIX 4



Office 16, Bartle House, Oxford Court,
Manchester, M2 3WQ
email: contact@igeconsulting.co.uk
web: www.igeconsulting.co.uk
tel: 0161 914 9170

Verification Log

Project Name:	Domett Street
Project Number:	4307
Location:	Domett Street, Manchester, M9 8DG
Client:	John Southworth

Remediation Requirements:

A minimum of 150mm of 'clean' topsoil, underlain by 300mm 'clean' subsoil, to a total of 450mm depth, underlain by a hi viz permeable geotextile.

Validation Requirements:

Plot thickness validation photographs at a rate of 3 pits for all the public open space and associated chemical testing.

Plot Number:	POS Hole 1
Grid reference:	E385434.79, N402925.04
Inspection date:	13 th November 2025
Engineer:	JA

Photographs:



Photographs show 200mm of topsoil, 350mm subsoil, hi viz permeable geotextile 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



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Manchester, M2 3WQ
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web: www.igeconsulting.co.uk
tel: 0161 914 9170

Verification Log

Project Name:	Domett Street
Project Number:	4307
Location:	Domett Street, Manchester, M9 8DG
Client:	John Southworth

Remediation Requirements:

A minimum of 150mm of 'clean' topsoil, underlain by 300mm 'clean' subsoil, to a total of 450mm depth, underlain by a hi viz permeable geotextile.

Validation Requirements:

Plot thickness validation photographs at a rate of 3 pits for all the public open space and associated chemical testing.

Plot Number:	POS Hole 2
Grid reference:	E385434.54, N402914.58
Inspection date:	13 th November 2025
Engineer:	JA

Photographs:



Photographs show 200mm of topsoil, 250mm subsoil, hi viz permeable geotextile 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



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Manchester, M2 3WQ
email: contact@igeconsulting.co.uk
web: www.igeconsulting.co.uk
tel: 0161 914 9170

Verification Log

Project Name:	Domett Street
Project Number:	4307
Location:	Domett Street, Manchester, M9 8DG
Client:	John Southworth

Remediation Requirements:

A minimum of 150mm of 'clean' topsoil, underlain by 300mm 'clean' subsoil, to a total of 450mm depth, underlain by a hi viz permeable geotextile.

Validation Requirements:

Plot thickness validation photographs at a rate of 3 pits for all the public open space and associated chemical testing.

Plot Number:	POS Hole 1
Grid reference:	E385445.75, N402930.14
Inspection date:	13 th November 2025
Engineer:	JA

Photographs:



Photographs show 200mm of topsoil, 250mm subsoil, hi viz permeable geotextile and plot context.

This plot has PASSED / FAILED* verification

*Proposed further remedial works (if FAILED):

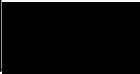
An additional inspection IS / IS NOT required for this plot

APPENDIX 5

Waste Tickets in below link:

**[https://www.dropbox.com/scl/fo/qt0jwvffj1ohc0sguztf9/
AGK4jdx4zo3t2JGpd6akzv0?rlkey=2whx93imstlmnwqg1nkpdxiap&dl=0](https://www.dropbox.com/scl/fo/qt0jwvffj1ohc0sguztf9/AGK4jdx4zo3t2JGpd6akzv0?rlkey=2whx93imstlmnwqg1nkpdxiap&dl=0)**

Customer	John Southworth Builders Limited	Delivery Date
Depot	Drapers	04-Nov-2025

Delivery Address	Ticket No.	66196
Domett Street, Blackley M9 8DX	Finch Order No.	35349
	Customer Order No	796
	Haulier	M O'Keefe Haulage Limited
	Vehicle Reg	

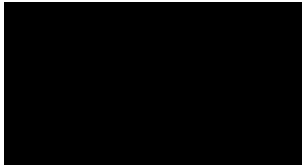
Product Description
Sub Soil BS8601

Gross Weight (Kg)	32,000	Time Arrived Onsite	10:16
Tare Weight (Kg)	12,000	Time Finished Onsite	10:16
Net Weight (Kg) / Loads	20,000	Waiting Time (Minutes)	

Waiting time will be charged per hour 15 minutes after arrival on site.

It is the customers responsibility to provide adequate site access. Neither the company or the driver can be held responsible for damages whilst under the customers instruction. The drivers decision as to the safety of the delivery point will be final.

Goods signed for / on behalf of the customer subject to our standard terms and conditions.

Printed Name	Signature
Jordam	

Freeland
HORTICULTURE LIMITED

Rosedale Nursery, College Road,
Hextable, Kent, BR8 7LT
Tel: 01322 619161
Fax: 01322 619135
enquiries@freelandhorticulture.co.uk

TICKET No.

30242

DELIVERY AND ORDER NOTE

DATE 10-11-75	CUSTOMER REF. 274215	HAULIER REG No. S800RBS
DRIVER'S NAME		HAULIER Broadwood
CUSTOMER		
ADDRESS Domett Street Blacking M9 8DX		
CUSTOMER'S SIGNATURE	CUSTOMER'S NAME PRINT STE	
DESCRIPTION OF LOAD to ROLC		
CONSIGNOR'S SIGNATURE		
PRINT		

TRANSFER WEIGHT

12.400

31.940

19.54

ANY VEHICLE GOING THROUGH
HIGHER GREEN OR ASTLEY GREEN
WILL BE BANNED FROM SITE.

DISCREPANCY TO BE NOTIFIED WITHIN 7 DAYS OF DELIVERY.
ALL TRADING TAKES PLACE ON FREELAND HORTICULTURE LTD CONDITIONS OF SALE, COPIES OF WHICH ARE AVAILABLE ON REQUEST.
CUSTOMERS ORDERING VEHICLE OFF THE PUBLIC ROAD, DO SO ENTIRELY AT THEIR OWN RISK AND WILL BE LIABLE FOR ANY DAMAGE INCURRED.