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LITTLE PADDOCK
HURSTON LANE
STORRINGTON
PULBOROUGH RH20 4HH

Phase II
Geoenvironmental Assessment

Client
Church Barn Homes LLP

Report No. 6033-2 v2

18th November 2025

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LITTLE PADDOCK
HURSTON LANE
STORRINGTON
PULBOROUGH RH20 4HH

Phase II
Geoenvironmental Assessment

Synopsis

An investigation has been carried out on land at Little Paddock, Hurston Lane, Storrington on the instructions of Church Barn Homes LLP. A Phase I Environmental Assessment[1] has been prepared for the site and should be read in conjunction with this report.

The purpose of the investigation was to determine the ground conditions and to provide recommendations in respect of foundation design and other geoenvironmental matters for the proposed residential development.

Two boreholes and six hand augers were carried out, supported by a programme of in situ and laboratory testing.

A raft foundation or deep spread foundations are being considered for the development and appropriate design data is provided. Chemical analysis revealed insufficient contamination to prejudice the development.

[1] *Report No. 6033-1; Phase I Environmental Assessment, Little Paddock, Hurston Lane, Storrington, Pulborough RH20 4HH; AP Geotechnics Ltd.; 10 November 2025*

1
Site description

At the time of the investigation the site comprised a predominantly cleared area where all scrub and semi-mature trees had been removed. The current general arrangement is shown on Figure 1 at Appendix A.

A full site description is contained in the Phase I report to which the reader is referred.

2
Development proposals

It is intended to construct three detached houses on site with associated gardens, landscaping and parking.

We understand that a raft load of some 52 kPa is envisaged.

The proposed general arrangement is given at Figure 2 of Appendix A.

3
Geology

Published records of the British Geological Survey (BGS) indicate the site to lie on material of the Hythe Formation. No superficial deposits are mapped at the subject site.

4
Field work

The extent of the field work was agreed with the Client and comprised two boreholes advanced by light percussive techniques to a maximum depth of 3.5 m. In addition, six hand augers were advanced to a maximum depth of 2.0 m. The original intention had been to drill the cable percussive boreholes to a depth of 20 m but this proved impractical in the ground conditions encountered.

The approximate location of all exploratory points is shown on Figure 1 at Appendix A.

Representative soil samples were recovered from the boreholes and hand augers for subsequent laboratory examination and testing; whilst Standard Penetration Tests (SPT) were carried out as appropriate. Details of the strata encountered are provided on the Borehole Records at Appendix B; together with particulars of the samples recovered, groundwater observations and SPT results.

To aid pavement design, five MEXE probes were carried out to provide a California Bearing Ratio (CBR). The results are available at Appendix C.

Standpipes were installed in BHs 1 & 2 to allow monitoring of groundwater levels and soil gas concentrations. The results of the monitoring will form an addendum.

5
Laboratory testing

The following laboratory tests were conducted on soil samples recovered during the field work:-

- Natural moisture content: to assess the in situ condition of the soil.
- Liquid and Plastic Limits: to classify cohesive soil into behavioural groups.
- Particle size distribution: by sieve analysis to classify granular material.
- Soluble sulphate and pH value: for the specification of buried concrete.
- Contamination: chemical analyses to detect the presence of contaminants as indicated by the Environmental Assessment, viz:-

Metals & metalloids:	Total arsenic, cadmium, chromium, copper, lead, mercury, nickel, selenium and zinc.
	Water soluble boron.
Organic:	Speciated petroleum hydrocarbons with aliphatic/aromatic split, BTEX & MTBE, speciated polyaromatic hydrocarbons (PAH) and phenols.
Others:	Asbestos screen and waste acceptance criteria (WAC).

Results of these tests are presented at Appendix D and the original chemical laboratory test certificates are available at Appendix E.

6
Ground conditions

6.1
Stratigraphy

The stratigraphy of the site as revealed by the investigation is shown in detail at Appendix B and is described in general terms hereafter.

6.1.1
Hythe Formation

All locations were advanced through a surface layer of topsoil up to 0.40 m thick which was underlain by material of the Hythe Formation.

The Hythe Formation was represented by both cohesive and granular material. All locations (save for HA1) encountered a sandy clay underlying the topsoil which contained rootlets locally. Hand auger 1 encountered 0.38 m of silty fine sand underlying the topsoil. The cable percussive boreholes and HA1 and 3 recorded clay to the full depth of the respective exploratory location. The cable percussive boreholes recorded layers of weakly cemented sand and sandstone towards the base of the boreholes.

Hand augers 2, 4, 5 & 6 encountered granular material underlying clay at depths ranging from 0.40 in HA5 to 1.08 in HA2. The granular material was represented by a silty sand, with occasional gravel locally and continued to the base of the augers of 2.0 m.

Atterberg Limits performed on samples of the cohesive portion of the Hythe Formation indicate it to have a low to intermediate plasticity with a corresponding low to medium volume change potential.

6.2
Groundwater

No groundwater was encountered during the investigation and the standpipes have yet to be monitored.

7
Discussion

7.1
General

The site has evidently already carried development although the investigation did not encounter any Made Ground. However, it is possible that pockets of Made Ground may be present even though not detected by this investigation.

Any remnants of previous construction should be removed prior to redevelopment to enable the proposals to be constructed without hindrance and to perform satisfactorily.

7.2
Raft

The ground conditions revealed by the investigation comprised Topsoil overlying material of the Hythe Formation. Laboratory tests confirmed the predominately low plasticity with one result being in the intermediate category of cohesive clays at shallow depth, thus rendering them slightly to moderately susceptible to shrinkage and swelling movements associated with changes in moisture content. Tree root action can cause shrinkage and swelling of the subsoil to considerable depth as shown by the NHBC[2] and others. The raft foundation depth should be designed in accordance with the requirements of the NHBC taking into account the plasticity of the subsoil and the relevant trees that are to remain along with those removed as part of the development.

---

[2] *NHBC Standards Chapter 4.2 Building near trees. National House Building Council, April 2003*

It is understood that a uniformly distributed load of some 52 kPa is to be imparted by the building, which includes both dead and live loads.

At this low intensity of net applied load, the factor of safety against shear failure of the soil is adequate with a bearing capacity in excess of that required.

The immediate settlement of the Hythe Formation under the applied load is expected to be minimal, again in the order of a few millimeters. This will be followed by some 40 mm of consolidation settlement at gradually decreasing rate in the years following construction.

The clay will quickly degrade on exposure, especially if there is water present. Foundations should therefore be cast immediately the excavation is complete unless protected by a layer of blinding concrete.

Alternatively, foundations could bear on the competent sandstone identified by the investigation at some 2.8 in BH1 and 3.1 m depth in BH2. A net allowable bearing capacity of some 175 kPa is available. Total settlement of these foundations is not expected to exceed 25 mm.

7.3
Excavations

The cohesive portion of the Hythe Formation will be able to maintain vertical excavated faces of moderate height in the short term although it is surcharged by unstable Topsoil. The granular portion will not. All excavations should therefore be supported at all times unless battered to a safe angle of repose. In any event, excavations to greater than 1.2 m depth should be supported at all times.

Provision of adequate support is especially important for the safety of personnel when required to work in or close to excavations. Temporary and permanent works should be designed to resist the additional lateral earth pressures arising from any superimposed loads in addition to those generated by the soil itself, without significant deformation.

Groundwater observations during the investigation suggests that general construction excavations should remain above the local groundwater level. However, a perched water may be present in the near surface material, but this is expected to be controlled by conventional pumping from shallow sumps.

7.4
Pavement construction

The results of the five MEXE Probe tests are presented at Appendix C and show CBR values ranging from 2.1 % to 3.5 %, depending on the particular composition and moisture content of the material under test.

It is well documented that CBR values decrease as soil moisture content increases. Unless efficient sub - grade drainage is installed and can be guaranteed to perform throughout the life of the proposed pavement, it is likely that the sub - grade moisture content will increase in service, leading to a reduction in the CBR value. Therefore, although the test results may be used as a guide for pavement design, it would be prudent to allow a reduction to reflect the in - service condition beneath the pavement.

Where low CBR values are anticipated, consideration could be given to the use of a capping layer of compacted granular fill. As a rule of thumb, a 300 mm thick layer of suitable granular fill can double the design CBR.

The formation should be inspected on exposure and any unsuitable material replaced with suitable compacted fill. Proof rolling of the formation will provide a more uniform surface for construction, although this will not improve the properties of the material at depth.

It is recommended that flexible construction techniques such as block paving or wholly bituminous materials are employed due to the possibility of post - construction movement. This type of construction is better able to accommodate movement and can be more easily realigned should deformations become unacceptable.

7.5
Contaminant analysis

7.5.1
Solid phase

Contaminant testing was undertaken on selected soil samples and the results have been compared with the limited number of CLEA[3] Soil Guideline Values (SGVs) for residential land use with plant uptake that have been published to date. Where not available from that source, reference has also been made to the LQM/CIEH S4ULs for Human Health Risk Assessment[4]. Appropriate trigger levels are given with the results at Appendix E and the original analytical laboratory result sheets are presented at Appendix F.

Analysis for metals/metalloids revealed all determinands to be below the triggers for residential land use with plant uptake.

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[3] *The Contaminated Land Exposure Assessment Model, Department for Environment, Food and Rural Affairs, The Environment Agency, R & D Publications SGV 1 et al., March 2002*

[4] *The LQM/CIEH S4ULs for Human Health Risk Assessment. Land Quality Press, 2015*

No SGV exists for lead (the old SGV of 450 mg/kg having been withdrawn) and LQM have not calculated one. However, provisional Category 4 Screening Levels (C4SLs) have been published by Defra which suggest a maximum concentration of 210 mg/kg lead for residential land use with plant uptake (a number of different concentrations have been published, dependant on differing exposure scenarios). No lead was recorded above this value in any sample.

No phenols were recorded above the limit of detection for the test of 1 mg/kg.

No TPH was recorded above the limits of detection for the various carbon bands.

No BTEX or MTBE was recorded above the limits of detection for the tests.

Analysis for speciated PAH recorded all individual PAHs below the limit of detection for the test of 0.05 mg/kg.

No asbestos fibres were detected in the five samples tested.

7.5.2
Gas phase

The standpipes installed in BH1 & BH2 have yet to be monitored. Results will be issued as an addendum.

As stated in Section 11.2 of the Phase I Report, the BGS/Public Health England estimate that less than 1 % of properties exceed the Radon Action Level and no further action is required.

7.5.3
Waste Acceptance Criteria (WAC)

Two samples were subject to the WAC full solid waste suite and the WAC single stage leachate suite. The results have been compared to the criteria contained in the Landfill Regulations 2002 as amended and are presented at Appendix E.

Within the solid waste suite, all results were within the Inert Waste Landfill criteria limits.

Similarly, parameters determined on the compliance leaching test were also within the Inert Waste Landfill criteria limits.

The contamination test results and the WAC results should be forwarded to the contractor appointed to remove arisings from site. Transfer notes and chain of custody sheets should be retained for all spoil removed from site.

7.6
Conclusion

The Phase I Environmental Assessment concluded there to be a low risk of significant or widespread contamination arising from past or present site usage and activities in the surrounding area also constitute a low risk of significant contamination migrating to the subject site. The potential for ground gas, principally methane and carbon dioxide migrating to the subject site or emanating thereon was assessed as low to negligible.

Laboratory analysis of soil samples recovered during the intrusive investigation have not revealed any significant concentrations of either organic or inorganic contamination.

Although not anticipated to be present ouwith the former house footprint, as with any site, areas of Made Ground not identified during the intrusive investigation may come to light during the redevelopment phase. Should any Made Ground, discoloured or odorous soils be encountered then AP Geotechnics should be informed and work stopped in that area.

The formation level should be inspected by a suitable qualified geotechnical engineer if there is any doubt as to the presence of competent sandstone.

7.7
Buried concrete

Laboratory tests on soil samples yielded a maximum soluble sulphate concentration of 0.15 g/l which results in a Design Sulphate Class[5] of DS-1.

The groundwater is considered to be mobile and all pH determinations were greater than 5.5. Therefore the Aggressive Chemical Environment for Concrete, ACEC, is classed as AC-1.

R G Chapman
AP GEOTECHNICS LTD.
18th November 2025

This report has been prepared for the sole and specific use of Church Barn Homes LLP for the purpose of the proposed development at Little Paddock, Hurston Lane, Storrington, Pulborough RH20 4HH and should not be relied upon by any third party. Any other persons who use any information contained herein without the written permission of AP GEOTECHNICS LTD. do so at their own risk.
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[5] *Concrete in aggressive ground. BRE Special Digest 1. Building Research Establishment, 2005*

PROCEDURAL NOTES for GROUND INVESTIGATIONS

General

This report has been prepared generally in accordance with CLR 11: Model Procedures for the Management of Land Contamination (Defra & Environment Agency 2004).

This report is based upon data obtained from field descriptions of the strata and examination of the samples by an engineer, together with the results of in situ and laboratory tests as appropriate. Responsibility cannot be accepted for variations in ground conditions between and around any of the exploratory points that is not revealed by the data. Whilst the report may offer an opinion on the ground conditions between exploratory points and below the depth of investigation, this is for guidance only and no liability is accepted for its accuracy. Unless specifically included in the report, it should be assumed that no testing has been carried out in respect of asbestos or Japanese Knotweed and no liability will is inferred or accepted.

Drilling procedure

Boring by light cable percussion drilling allows the ground conditions to be reasonably well established. However, a certain amount of disturbance is inevitable and some mixing of soils can occur.

Sampling procedure

"Undisturbed" samples of predominantly cohesive soils are taken with a 100mm diameter open tube sampler, generally in accordance with BS 5930: 1999.

Where appropriate, or where an undisturbed sample is unsuccessful, disturbed samples are recovered and sealed into polythene bags.

Groundwater samples are taken when water is encountered in sufficient quantity.

Standard penetration tests

The test is conducted generally in accordance with BS 1377: Part 9: 1990. The sampler tube is subject to a seating drive of 150mm into the soil at the base of the borehole. Results are given on the Borehole Records as the number of blows required to drive the sampler tube a further 300mm and this is known as the "N" value. Where the driving resistance is such that full penetration is not achieved, the test is generally terminated after 50 blows and the actual distance penetrated is recorded.

Groundwater

Groundwater observations necessarily reflect the conditions encountered at the time of the exploratory work. Long term monitoring of standpipes is usually required to establish an equilibrium water level since the normal rate of boring is too fast to permit steady state conditions to be achieved.

Groundwater levels are subject to variations caused by changes in drainage conditions and seasonal climatic changes.

Water may necessarily be added to advance the bore whilst casing may be required to maintain an open hole. These can both mask subsequent groundwater observations and are therefore noted on the individual Borehole Record.

APPENDICES

A Figures

Figure 1: Approximate Exploratory Hole Locations
Figure 2: Proposed Development

B Borehole Records

Symbols and Abbreviations
Borehole Records

C MEXE Probe and DCP Results

MEXE Probe DCP Results
Perth Penetrometer Results

D Laboratory Test Results

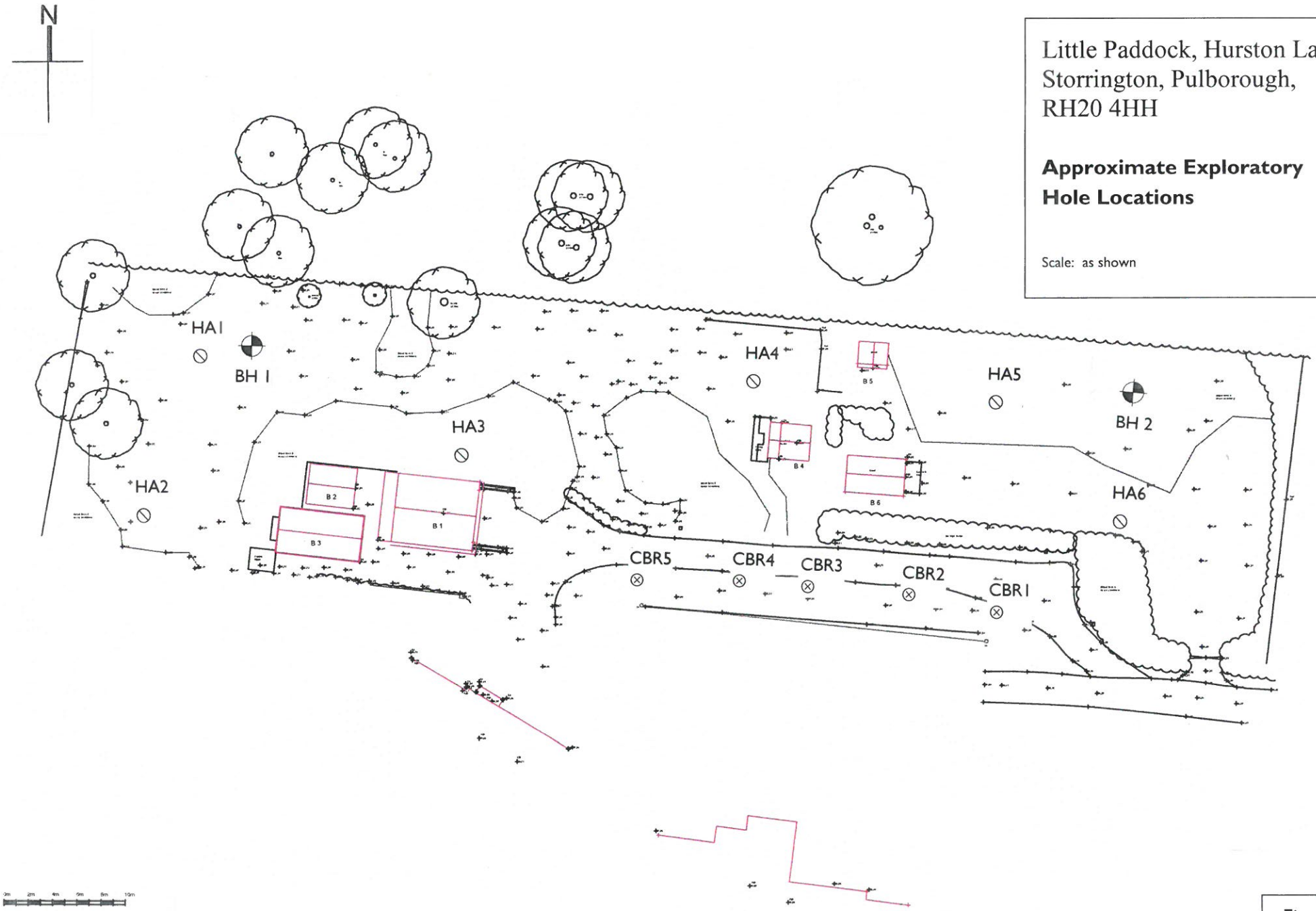
Summary of Geotechnical Tests
Particle size Distribution
Contaminants in Soil
Waste Acceptance Criteria (WAC)

E Original Testing House Certificates

Analytical Reports

APPENDIX A

FIGURES



Little Paddock, Hurston Lane, Storrington, Pulborough, RH20 4HH

Approximate Exploratory Hole Locations

Scale: as shown

Figure 1

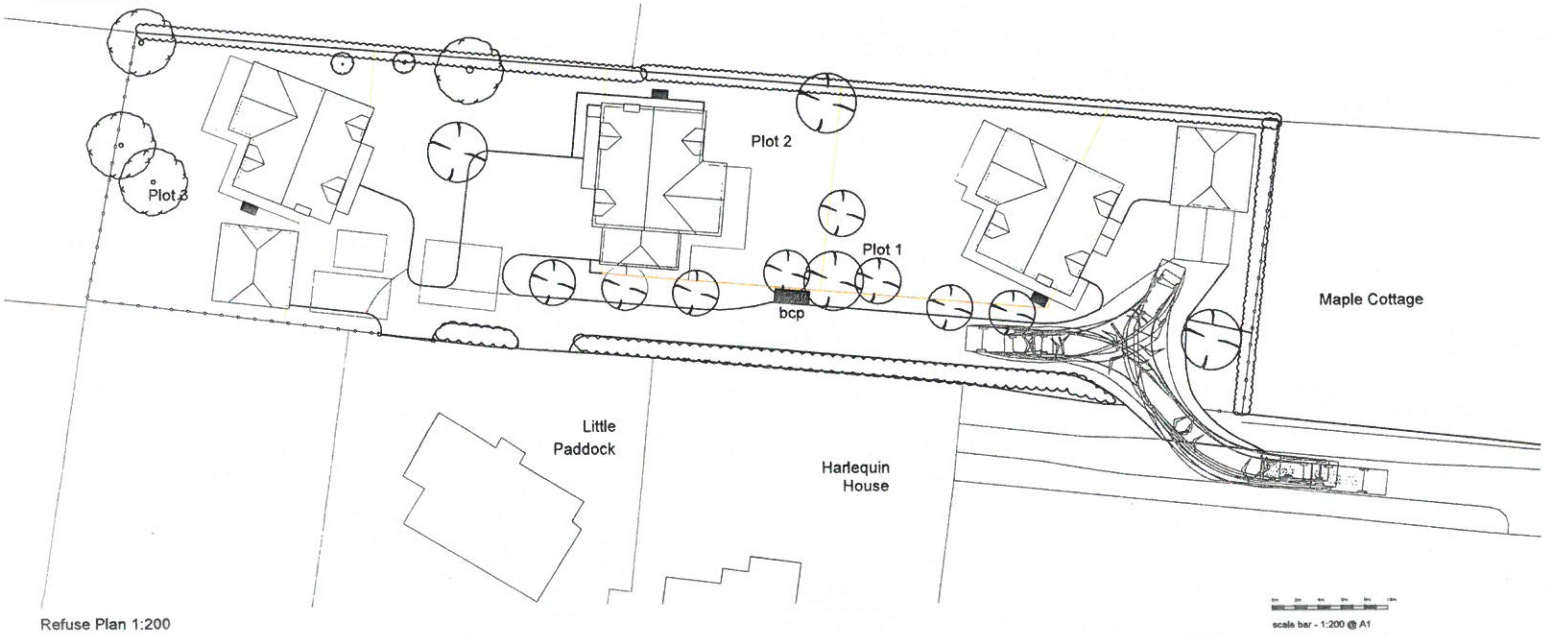
Little Paddock, Hurston Lane, Storrington, Pulborough, RH20 4HH

Proposed Development

Scale: as shown



Site Plan 1:200



Refuse Plan 1:200



Figure 2

APPENDIX B

BOREHOLE RECORDS

SYMBOLS and ABBREVIATIONS

Samples

Undisturbed

U	Standard open drive "undisturbed" 102mm dia. in boreholes 38mm dia. in trial pits, window sampler and hand auger
T	Thin wall open drive
P	Piston
CBR	CBR mould
L	Windowless sampler liner

Disturbed

D	Small
B	Bulk
W	Water
C	Contaminants: plastic tub
J	Contaminants: brown glass jar

In situ tests

SPT CPT	Standard Penetration Test, open shoe solid cone N value is number of blows for 300mm penetration. Blow count also given as seating drive followed by four increments of 75mm.
V ( )	Vane test (c_u kPa)
P ( )	Hand penetrometer (c_u kg/cm^2)
M ( )	Mexe probe (CBR %)

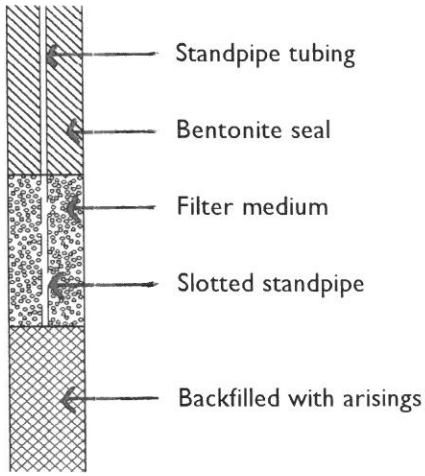
Water records

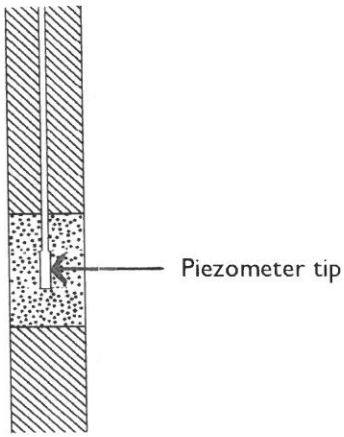
$\blacktriangledown_2$ Standing level

$\triangledown_2$ Depth encountered

suffix identifies separate strikes

Standpipes





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Site	Borehole Number
LITTLE PADDOCK, HURSTON LANE, STORRINGTON, PULBOROUGH, RH20 4HH	BH1

Boring Method	Casing Diameter	Ground Level (mOD)	Client	Job Number
Cable Percussion	150mm cased to 2.50m		Church Barn Homes LLP	6033-2
	Location	**Dates**	**Engineer**	**Sheet**
	See site plan	21/10/2025		1/1

Depth (m)	Sample / Tests	Casing Depth (m)	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water
						(0.40)	Sandy TOPSOIL with roots		
						0.40			
0.50	B1						Soft to firm orange brown and brown mottled silty sandy CLAY with some clayey silt pockets and occasional gravel		
1.00	D1								
						(2.00)			
1.50-1.95	SPT N=38		DRY	1,2/3,8,12,15					
1.50-2.00	B2								
							...becomingh more gravelly		
2.40	D2					2.40			
2.50-2.75	SPT 50/95	2.50	DRY	2,8/15,35		2.50	Black and brown weakly cemented SAND		
2.50-2.85	B3					(0.20)			
						2.70	Soft to firm orange brown and brown mottled very sandy CLAY with black and brown weakly cemented sand layers		
						(0.15)			
						2.85	SANDSTONE		
							Terminated at 2.85m		

Remarks
Borehole dry
Very soft and needed excavator to move tools and casing - 0.5 hrs
SPT hammer bouncing on final SPT
Chiselling from 2.40m to 2.50m for 0.25 hours. Chiselling from 2.70m to 2.85m for 0.50 hours. Excavating from 0.00m to 1.20m for 1.0 hour.

Scale (approx)	Logged By
1:50	ljs

Figure No. 6033-2.BH1

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Site	Borehole Number
LITTLE PADDOCK, HURSTON LANE, STORRINGTON, PULBOROUGH, RH20 4HH	BH2

Boring Method	Casing Diameter	Ground Level (mOD)	Client	Job Number
Cable Percussion	150mm cased to 2.80m		Church Barn Homes LLP	6033-2
	Location	**Dates**	**Engineer**	**Sheet**
	See site plan	20/10/2025		1/1

Depth (m)	Sample / Tests	Casing Depth (m)	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water
						(0.30) 0.30	TOPSOIL with roots		
0.50	B1					(0.65)	Soft to firm orange brown and brown mottled silty sandy CLAY with some clayey silt pockets and occasional gravel		
1.00	D1					0.95			
1.50-1.90	SPT 50/250		DRY	6,8/12,13,15,10			Soft to firm orange brown and brown mottled very sandy CLAY with black and brown weakly cemented sand layers		
1.50-2.00	B2					(1.55)			
2.50-2.76	SPT(C) 25*/125 50/135	2.50	DRY	10,15/27,23		2.50 (0.20)	SANDSTONE		
2.50-3.00	B3					2.70 (0.40)	Soft to firm orange brown and brown mottled very sandy CLAY with black and brown weakly cemented sand layers		
3.20	D2					3.10 (0.40)	SANDSTONE		
3.50-3.78	SPT(C) 50/125	2.50	DRY	10,13/14,36		3.50	Terminated at 3.50m		

Remarks
Borehole dry
SPT hammer bouncing on final SPT
Rig stuck in mud and needed dumper to move to BH position - 0.5 hrs
Chiselling from 2.50m to 2.70m for 0.25 hours. Chiselling from 3.10m to 3.50m for 0.75 hours. Excavating from 0.00m to 1.20m for 1.0 hour.

Scale (approx)	Logged By
1:50	ljs

Figure No. 6033-2.BH2

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Site	Trial Pit Number
LITTLE PADDOCK, HURSTON LANE, STORRINGTON, PULBOROUGH, RH20 4HH	HA1

Excavation Method	Dimensions	Ground Level (mOD)	Client	Job Number
Trial Pit			Church Barn Homes LLP	6033-2
	Location	**Dates**	**Engineer**	**Sheet**
	See site plan	08/10/2025		1/1

Depth (m)	Sample / Tests	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water
					(0.06) 0.06	TOPSOIL		
					(0.38)	Orange brown and brown silty fine SAND with rootlets and rare gravel		
0.40 0.45-0.60	D1 B1				0.44	Orange brown and brown mottled silty sandy CLAY with some clayey silt pockets		
0.90	D2					...occasional fine to medium gravel from 0.9 m depth		
					(1.56)			
1.40	D3							
2.00	D4				2.00	Complete at 2.00m		

Plan

Remarks

Borehole dry and backfilled with arisings

Scale (approx)	Logged By	Figure No.
1:20	ljs	6033.HA1

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Site	Trial Pit Number
LITTLE PADDOCK, HURSTON LANE, STORRINGTON, PULBOROUGH, RH20 4HH	HA2

Excavation Method	Dimensions	Ground Level (mOD)	Client	Job Number
Trial Pit			Church Barn Homes LLP	6033-2
	Location See site plan	**Dates** 08/10/2025	**Engineer**	**Sheet** 1/1

Depth (m)	Sample / Tests	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water
					(0.30)	TOPSOIL		
0.30-0.50	B1				0.30	Orange brown and brown mottled silty sandy CLAY with some clayey silt pockets		
0.50	D1				(0.78)			
1.00	D2				1.08	Orange brown very silty SAND with occasional gravel		
1.50	D3				(0.92)			
2.00	D4				2.00	Complete at 2.00m		

Plan

Remarks

Borehole dry and backfilled with arisings

Scale (approx)	Logged By	Figure No.
1:20	ljs	6033.HA2

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Site	Trial Pit Number
LITTLE PADDOCK, HURSTON LANE, STORRINGTON, PULBOROUGH, RH20 4HH	HA3

Excavation Method	Dimensions	Ground Level (mOD)	Client	Job Number
Trial Pit			Church Barn Homes LLP	6033-2
	Location See site plan	**Dates** 08/10/2025	**Engineer**	**Sheet** 1/1

Depth (m)	Sample / Tests	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water
					(0.20)	TOPSOIL		
0.20-0.50	B1				0.20	Firm dark brown, orange brown and brown mottled silty, very sandy CLAY with roots and occasional gravel		
0.50	D1				(0.56)			
					0.76	Orange brown and brown mottled silty sandy CLAY with some clayey silt pockets. Roots and rootlets noted to 2 m depth		
1.00	D2							
					(1.24)			
1.50	D3							
2.00	D4				2.00	Complete at 2.00m		

Plan

Remarks

Borehole dry and backfilled with arisings

Scale (approx)	Logged By	Figure No.
1:20	ljs	6033.HA3

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Site	Trial Pit Number
LITTLE PADDOCK, HURSTON LANE, STORRINGTON, PULBOROUGH, RH20 4HH	HA4

Excavation Method	Dimensions	Ground Level (mOD)	Client	Job Number
Trial Pit			Church Barn Homes LLP	6033-2
	Location	**Dates**	**Engineer**	**Sheet**
	See site plan	08/10/2025		1/1

Depth (m)	Sample / Tests	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water
					(0.08) 0.08	TOPSOIL		
						Soft brown very sandy CLAY with roots and rootlets		
0.30-0.50	B1				(0.56)			
0.50	D1							
					0.64	Soft to firm dark brown silty, very sandy CLAY with rootlets		
					(0.16)			
					0.80	Orange brown, brown and yellow mottled very silty gravelly SAND		
1.00	D2							
					(1.20)			
1.50	D3							
2.00	D4				2.00	Complete at 2.00m		

Plan

Remarks

Borehole dry and backfilled with arisings

Scale (approx)	Logged By	Figure No.
1:20	ljs	6033.HA4

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Site	Trial Pit Number
LITTLE PADDOCK, HURSTON LANE, STORRINGTON, PULBOROUGH, RH20 4HH	HA5

Excavation Method	Dimensions	Ground Level (mOD)	Client	Job Number
Trial Pit			Church Barn Homes LLP	6033-2
	Location	**Dates**	**Engineer**	**Sheet**
	See site plan	08/10/2025		1/1

Depth (m)	Sample / Tests	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water
					(0.09) 0.09	Gravelly TOPSOIL		
0.20-0.50	B1				(0.31) 0.40	Dark brown and brown mottled very sandy CLAY with roots and rootlets		
0.50	D1					Orange brown very silty gravelly SAND with occasional very sandy CLAY layers		
1.00	D2				(1.60)			
1.50	D3							
2.00	D4				2.00	Complete at 2.00m		

Plan

Remarks

Borehole dry and backfilled with arisings

Scale (approx)	Logged By	Figure No.
1:20	ljs	6033.HA5

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Site	Trial Pit Number
LITTLE PADDOCK, HURSTON LANE, STORRINGTON, PULBOROUGH, RH20 4HH	HA6

Excavation Method	Dimensions	Ground Level (mOD)	Client	Job Number
Trial Pit			Church Barn Homes LLP	6033-2
	Location	**Dates**	**Engineer**	**Sheet**
	See site plan	08/10/2025		1/1

Depth (m)	Sample / Tests	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water
					(0.08) 0.08	TOPSOIL		
0.10-0.40	B1					Soft brown very sandy CLAY		
					(0.48)			
0.45	D1				0.56	Brown very silty gravelly SAND with rootlets		
1.00	D2					...and orange brown		
					(1.44)			
1.50	D3							
2.00	D4				2.00	Complete at 2.00m		

Plan

Remarks

Borehole dry and backfilled with arisings

Scale (approx)	Logged By	Figure No.
1:20	ljs	6033.HA6

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APPENDIX C

MEXE PROBE & DCP RESULTS

MEXE PROBE & DCP RESULTS

Project: LITTLE PADDOCK HURSTON LANE, STORRINGTON Project No: 6033-2
Client: Church Barn Homes LLP Sheet No: 1/1

MEXE Probe			Dynamic Cone Penetrometer			
Location	Depth (mm)	CBR (%)	Location	No. of blows	Penetration (mm)	CBR equivalent (%)
CBR 1	0.42	2.2				
CBR 2	0..45	3.1				
CBR 3	0.40	2.4				
CBR 4	0.45	2.1				
CBR 5	0.40	3.5				

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PERTH PENETROMETER RESULTS

Project: LITTLE PADDOCK, HURSTON LANE, STORRINGTON, PULBOROUGH, RH20 4HH
Client: Church Barn Homes LLP

Project No: 6033-2
Sheet No: 1/2

Test location & depth: HA1 @ 1.00 - 1.65 m

No. of Blows	Depth below start point (mm)	Penetration/ Blow	No. of Blows	Depth below start point (mm)	Penetration/ Blow
0	0		50	370	10
1	10	10	51	370	0
2	20	10	52	380	10
3	30	10	53	380	0
4	40	10	54	390	10
5	50	10	55	390	0
6	60	10	56	400	10
7	70	10	57	400	0
8	80	10	58	410	10
9	90	10	59	410	0
10	100	10	60	420	10
11	110	10	61	420	0
12	120	10	62	430	10
13	130	10	63	430	0
14	130	0	64	440	10
15	140	10	65	440	0
16	140	0	66	450	10
17	150	10	67	450	0
18	160	10	68	460	10
19	170	10	69	460	0
20	180	10	70	470	10
21	190	10	71	470	0
22	200	10	72	480	10
23	210	10	73	480	0
24	210	0	74	490	10
25	220	10	75	490	0
26	220	0	76	500	10
27	230	10	77	500	0
28	230	0	78	510	10
29	240	10	79	510	0
30	240	0	80	520	10
31	250	10	81	520	0
32	260	10	82	530	10
33	270	10	83	530	0
34	280	10	84	540	10
35	280	0	85	540	0
36	290	10	86	550	10
37	300	10	87	550	0
38	310	10	88	560	10
39	310	0	89	560	0
40	320	10	90	560	0
41	320	0	91	570	10
42	330	10	92	570	0
43	330	0	93	570	0
44	340	10	94	580	10
45	340	0	95	580	0
46	350	10	96	580	0
47	350	0	97	590	10
48	360	10	98	590	0
49	360	0	99	590	0

Comments:-

PERTH PENETROMETER RESULTS

Project: LITTLE PADDOCK, HURSTON LANE, STORRINGTON, PULBOROUGH, RH20 4HH
Client: Church Barn Homes LLP

Project No: 6033-2
Sheet No: 2/2

Test location & depth: HA1 @ 1.00 - 1.65 m

No. of Blows	Depth below start point (mm)	Penetration/ Blow	No. of Blows	Depth below start point (mm)	Penetration/ Blow
100	600	0			
101	600	0			
102	600	0			
103	610	10			
104	610	0			
105	610	0			
106	610	0			
107	620	10			
108	620	0			
109	620	0			
110	620	0			
111	630	10			
112	630	0			
113	630	0			
114	630	0			
115	640	10			
116	640	0			
117	640	0			
118	640	0			
119	650	10			
120	650	0			
121	650	0			
122	650	0			

Comments:-

PERTH PENETROMETER RESULTS

Project: LITTLE PADDOCK, HURSTON LANE, STORRINGTON, PULBOROUGH, RH20 4HH
Client: Church Barn Homes LLP

Project No: 6033-2
Sheet No: 1/2

Test location & depth: HA3 @ 1.00 - 1.60 m

No. of Blows	Depth below start point (mm)	Penetration/ Blow	No. of Blows	Depth below start point (mm)	Penetration/ Blow
0	0		50	480	10
1	30	30	51	480	0
2	60	30	52	490	10
3	80	20	53	490	0
4	100	20	54	500	10
5	120	20	55	500	0
6	140	20	56	510	10
7	160	20	57	510	0
8	170	10	58	510	0
9	180	10	59	510	0
10	190	10	60	520	10
11	200	10	61	520	0
12	210	10	62	520	0
13	220	10	63	520	0
14	230	10	64	530	10
15	240	10	65	530	0
16	250	10	66	530	0
17	260	10	67	530	0
18	270	10	68	540	10
19	280	10	69	540	0
20	290	10	70	540	0
21	300	10	71	540	0
22	310	10	72	550	10
23	310	0	73	550	0
24	320	10	74	550	0
25	320	0	75	550	0
26	330	10	76	560	10
27	330	0	77	560	0
28	340	10	78	560	0
29	340	0	79	560	0
30	350	10	80	560	0
31	360	10	81	570	10
32	370	10	82	570	0
33	380	10	83	570	0
34	390	10	84	570	0
35	400	10	85	570	0
36	410	10	86	580	10
37	410	0	87	580	0
38	420	10	88	580	0
39	420	0	89	580	0
40	430	10	90	580	0
41	430	0	91	590	10
42	440	10	92	590	0
43	440	0	93	590	0
44	450	10	94	590	0
45	450	0	95	590	0
46	460	10	96	600	10
47	460	0	97	600	0
48	470	10	98	600	0
49	470	0	99	600	0

Comments:-

PERTH PENETROMETER RESULTS

Project: LITTLE PADDOCK, HURSTON LANE, STORRINGTON, PULBOROUGH, RH20 4HH
Project No: 6033-2
Sheet No: 2/2

Client: Church Barn Homes LLP

Test location & depth: HA3 @ 1.00 - 1.60 m

No. of Blows	Depth below start point (mm)	Penetration/ Blow	No. of Blows	Depth below start point (mm)	Penetration/ Blow
100	600	0			

Comments:-

PERTH PENETROMETER RESULTS

Project: LITTLE PADDOCK, HURSTON LANE, STORRINGTON, PULBOROUGH, RH20 4HH
Client: Church Barn Homes LLP

Project No: 6033-2
Sheet No: 1/2

Test location & depth: HA5 @ 1.00 - 1.55 m

No. of Blows	Depth below start point (mm)	Penetration/ Blow	No. of Blows	Depth below start point (mm)	Penetration/ Blow
0	0		50	360	0
1	20	20	51	370	10
2	40	20	52	370	0
3	60	20	53	380	10
4	80	20	54	380	0
5	100	20	55	390	10
6	120	20	56	390	0
7	130	10	57	400	10
8	140	10	58	400	0
9	150	10	59	410	10
10	160	10	60	410	0
11	170	10	61	410	0
12	180	10	62	410	0
13	190	10	63	420	10
14	200	10	64	420	0
15	210	10	65	420	0
16	210	0	66	420	0
17	220	10	67	430	10
18	220	0	68	430	0
19	230	10	69	430	0
20	230	0	70	430	0
21	240	10	71	440	10
22	240	0	72	440	0
23	250	10	73	440	0
24	250	0	74	440	0
25	260	10	75	450	10
26	260	0	76	450	0
27	270	10	77	450	0
28	270	0	78	450	0
29	280	10	79	460	10
30	280	0	80	460	0
31	290	10	81	460	0
32	290	0	82	460	0
33	300	10	83	470	10
34	300	0	84	470	0
35	310	10	85	470	0
36	310	0	86	470	0
37	310	0	87	480	10
38	320	10	88	480	0
39	320	0	89	480	0
40	320	0	90	480	0
41	330	10	91	490	10
42	330	0	92	490	0
43	330	0	93	490	0
44	340	10	94	490	0
45	340	0	95	500	10
46	340	0	96	500	0
47	350	10	97	500	0
48	350	0	98	500	0
49	360	10	99	510	10

Comments:-

PERTH PENETROMETER RESULTS

Project: LITTLE PADDOCK, HURSTON LANE, STORRINGTON, PULBOROUGH, RH20 4HH
Client: Church Barn Homes LLP

Project No: 6033-2
Sheet No: 2/2

Test location & depth: HA5 @ 1.00 - 1.55 m

No. of Blows	Depth below start point (mm)	Penetration/ Blow	No. of Blows	Depth below start point (mm)	Penetration/ Blow
100	510	0			
101	510	0			
102	510	0			
103	510	0			
104	510	0			
105	520	10			
106	520	0			
107	520	0			
108	520	0			
109	520	0			
110	520	0			
111	530	10			
112	530	0			
113	530	0			
114	530	0			
115	530	0			
116	530	0			
117	540	10			
118	540	0			
119	540	0			
120	540	0			
121	540	0			
122	540	0			
123	550	10			
124	550	0			
125	550	0			
126	550	0			
127	550	0			
128	550	0			

Comments:-

APPENDIX D

LABORATORY TEST RESULTS

SUMMARY OF GEOTECHNICAL TESTS

Project: LITTLE PADDOCK, HURSTON LANE, STORRINGTON, PULBOROUGH, RH20 4HH
Client: Church Barn Homes LLP

Project No: 6033-2
Sheet No: 1/1

Location	Sample No	Depth m	Description	CLASSIFICATION							TRIAXIAL COMPRESSION - TOTAL STRESS							CHEMICAL		
				Natural Moisture Content %	Liquid Limit %	Plastic Limit %	Plast. Index %	Passing 425µm %	Mod. Plast. Index %	Class	Type	Moisture Content %	Bulk Density Mg/m³	Radial Stress kPa	Deviator Stress kPa	Cohesion cu, kPa assuming Øu = 0	Cohesion cu, kPa Øu, deg	Sulphate (SO4) Water g/l	Sulphate (SO4) Soil (Sol) g/l	pH
HA1	D2	0.90	Orange brown and brown mottled silty sandy CLAY with some clayey silt pockets	19	38	12	26	93	24	CI									0.15	7.43
	D3	1.40	Orange brown and brown mottled silty sandy CLAY with some clayey silt pockets	19	38	22	16	100		CI										
HA2	D1	0.50	Orange brown and brown mottled silty sandy CLAY with some clayey silt pockets	20	36	23	13	97	13	CI										
	D3+D4	1.5-2.0																	0.08	7.26
HA3	D1	0.50	Firm dark brown, orange brown and brown mottled silty, very sandy CLAY with roots and occasional gravel	19	27	19	8	82	7	CL										
	D2	1.00	Orange brown and brown mottled silty sandy CLAY with some clayey silt pockets	21	38	22	16	98	16	CL										
HA6	D1	0.45	Brown very sandy CLAY	18	28	19	9	85	8	CL										

Note: Soil Classification based upon unmodified Plasticity Index

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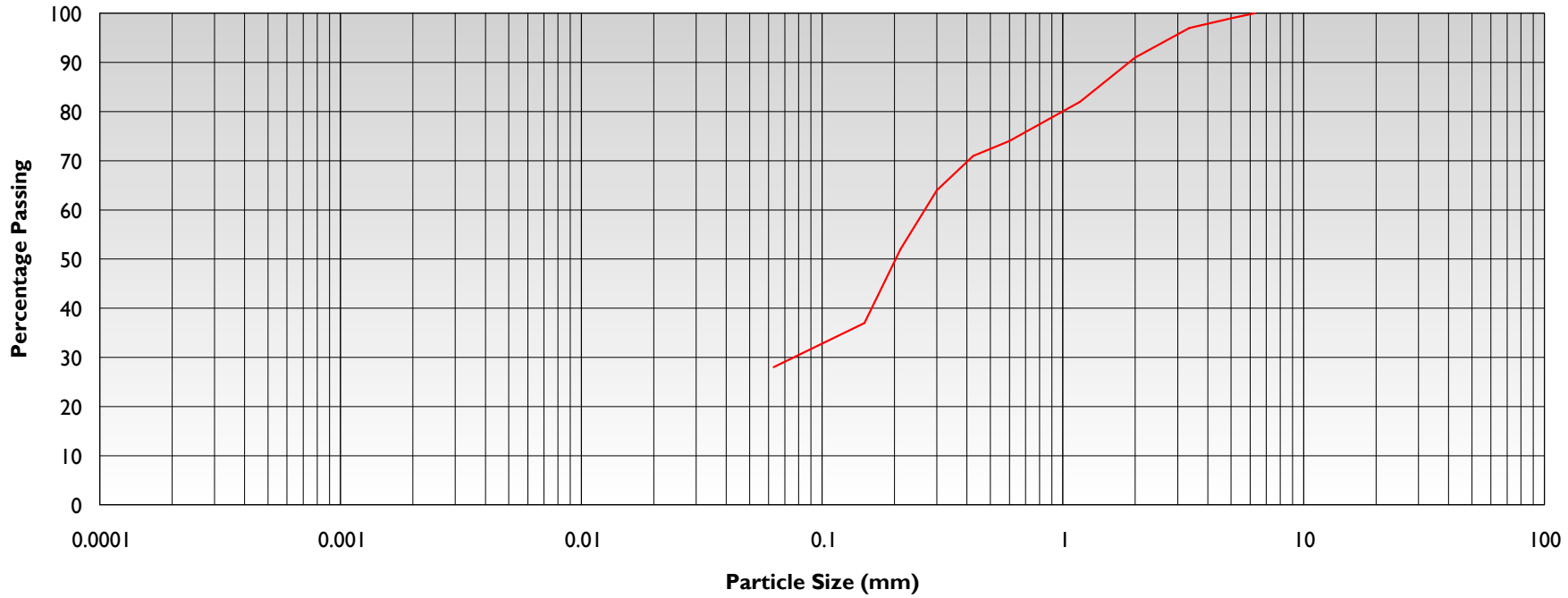
PARTICLE SIZE DISTRIBUTION

Project: LITTLE PADDOCK, HURSTON LANE, STORRINGTON, PULBOROUGH, RH20 4HH
Client: Church Barn Homes LLP

Project No: 6033-2
Sheet No: 1/4



	fine	medium	coarse	fine	medium	coarse	fine	medium	coarse	
Clay	Silt			Sand			Gravel			Cobbles
Hydrometer				Sieve						

Location: **HA2**
Sample: **D3+D4**
Depth, m: **1.5-2.5**

Description:-
Orange brown very silty SAND with occasional gravel

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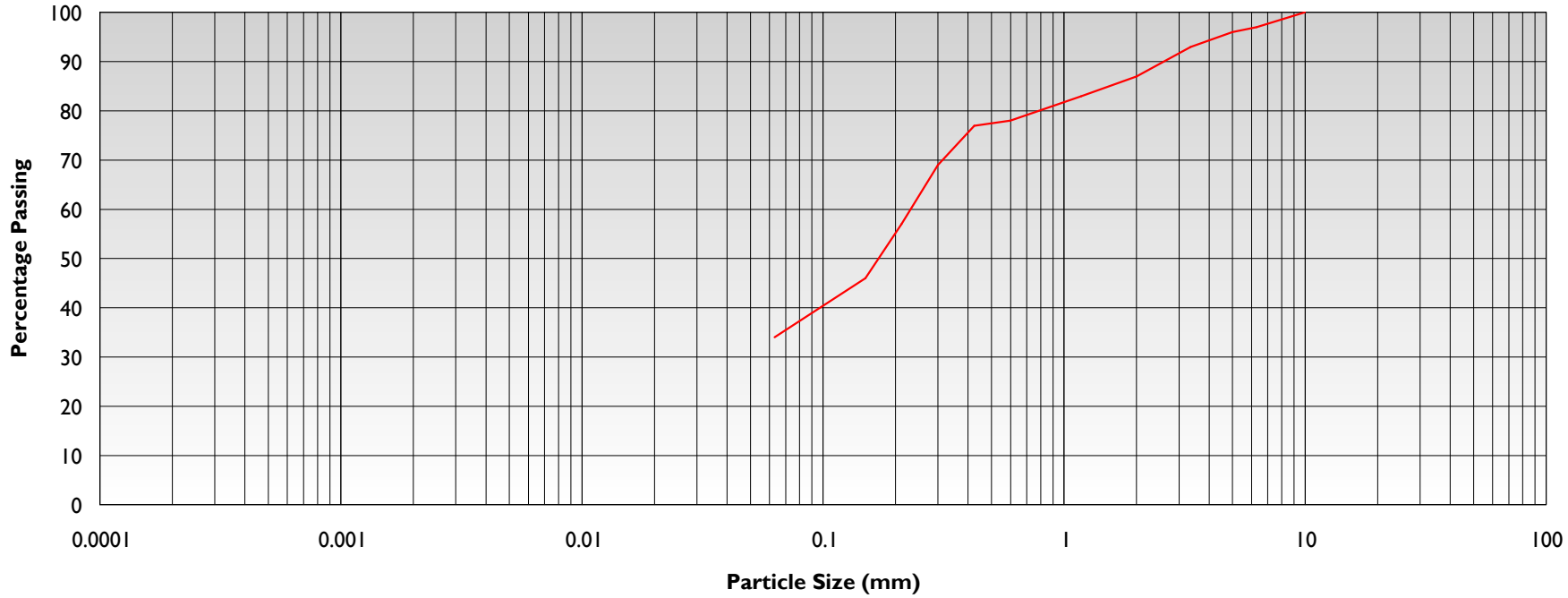
Project: LITTLE PADDOCK, HURSTON LANE, STORRINGTON, PULBOROUGH, RH20 4HH
Client: Church Barn Homes LLP

Project No: 6033-2
Sheet No: 2/4



	fine	medium	coarse	fine	medium	coarse	fine	medium	coarse	
Clay	Silt			Sand			Gravel			Cobbles
Hydrometer				Sieve						

Location: **HA4**
Sample: **D2+D3**
Depth, m: **1.0-1.5**

Description:-
Orange brown, brown and yellow mottled very silty gravelly SAND

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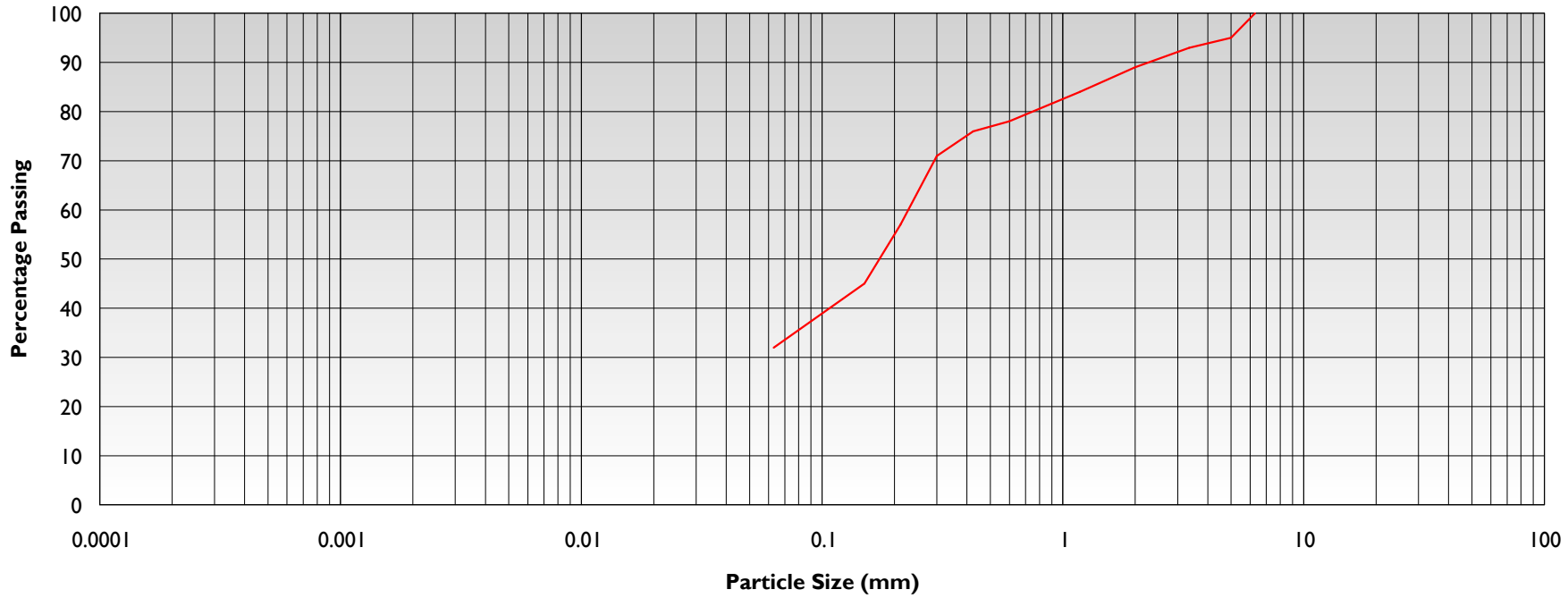
Client: Church Barn Homes LLP

Project No: 6033-2
Sheet No: 3/4



	fine	medium	coarse	fine	medium	coarse	fine	medium	coarse	
Clay	Silt			Sand			Gravel			Cobbles
Hydrometer				Sieve						

Location: **HA5**
Sample: **D1+D2**
Depth, m: **0.5-1.0**

Description:-
Orange brown very silty gravelly SAND

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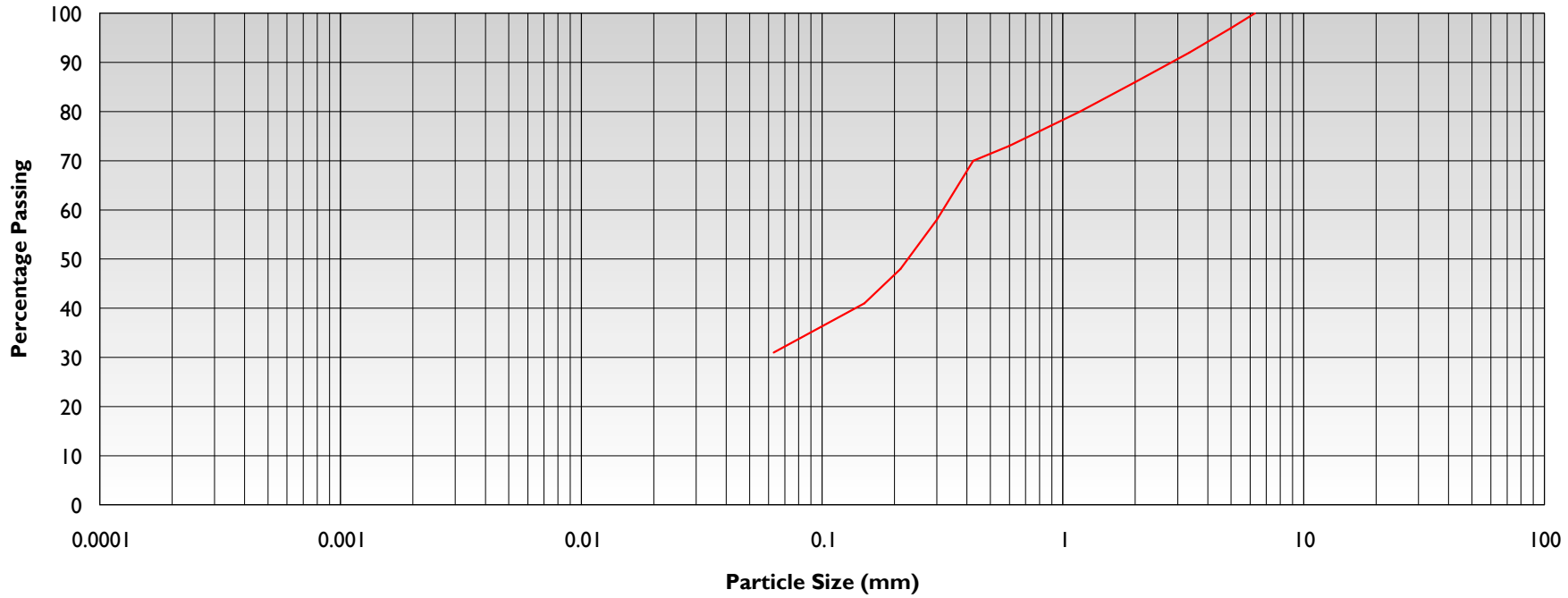
Project: LITTLE PADDOCK, HURSTON LANE, STORRINGTON, PULBOROUGH, RH20 4HH
Client: Church Barn Homes LLP

Project No: 6033-2
Sheet No: 4/4



	fine	medium	coarse	fine	medium	coarse	fine	medium	coarse	
Clay	Silt			Sand			Gravel			Cobbles
Hydrometer				Sieve						

Location: **HA6**
Sample: **D2+D3**
Depth, m: **1.0-1.5**

Description:-
Brown very silty gravelly SAND

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CONTAMINANTS IN SOIL

Project: LITTLE PADDOCK, HURSTON LANE, STORRINGTON, PULBOROUGH, RH20 4HH
Client: Church Barn Homes LLP

Project No: 6033-2
Sheet No: 1/1

Location	Sample	Depth m	Arsenic	Cadmium	Chromium trivalent	Copper	Lead	Mercury inorganic	Nickel	Selenium	Zinc	Boron water sol.	Chromium hexavalent	Phenols tot. monohydric	Sulphate water sol.	TPH by GCMS C8 - C10	TPH by GCMS C10 - C12	TPH by GCMS C12 - C16	TPH by GCMS C16 - C21	TPH by GCMS C21 - C35	TPH by GCMS C35 - C40	TPH by GCMS	pH
HA1	D1	0.40	7.2	<0.2	16	9.1	12	<0.3	10	<1.0	30	0.2		<1.0									
HA2	B1	0.30-0.50	7.7	<0.2	18	9	7.1	<0.3	13	<1.0	28	0.3		<1.0									
HA3	B1	0.20-0.50	7.3	<0.2	16	8.1	6.7	<0.3	12	1.2	27	<0.2		<1.0									
HA4	B1	0.30-0.50	6.0	<0.2	13	8.1	11	<0.3	8.8	<1.0	26	0.4		<1.0									
HA6	B1	0.10-0.40	7.9	<0.2	15	14	13	<0.3	11	<1.0	35	0.2		<1.0									
S4UL[1]	residential[3]		37	11	910	2400		40	180	250	3700	290	6	380									
	residential[3a]		40	85	910	7100		56	180	430	40000	11000	6	1200									
	commercial		640	190	8600	68000		1100	980	12000	730000	240000	33	1300									
	POS resi*		79	120	1500	12000		120	230	1100	81000	21000	7.7										
CLEA[2]	residential		32					170	130	350													
	commercial		640					3600	1800	13000													

Notes

1. S4UL given at 6% soil organic matter
2. CLEA SGVs given at 6% soil organic matter
3. Residential with plant uptake

3a. Residential without plant uptake

All units are mg/kg dry weight of soil unless otherwise stated, except for pH which is dimensionless

Exceptions denoted thus: Residential XX
Commercial XX

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CONTAMINANTS IN SOIL

Project: LITTLE PADDOCK, HURSTON LANE, STORRINGTON, PULBOROUGH, RH20 4HH
Client: Church Barn Homes LLP

Project No: 6033-2
Sheet No: 1/1

Speciated Total Petroleum Hydrocarbons (Aromatic / Aliphatic Split with BTEX)											
Location	HA1	HA2	HA3	HA4	HA6				LQM/CIEH S4UL		
Sample	D1	B1	B1	B1	B1						
Depth, m	0.40	0.30-0.50	0.20-0.50	0.30-0.50	0.10-0.40				residential	allotments	commercial
Determinand	Concentration, mg/kg										
Aromatic Hydrocarbons											
C5 - C7	<0.010	<0.010	<0.010	<0.010	<0.010				300	57	86000
>C7 - C8	<0.010	<0.010	<0.010	<0.010	<0.010				660	120	180000
>C8 - C10	<0.020	<0.020	<0.020	<0.020	<0.020				190	51	17000
>C10 - C12	<1.0	<1.0	<1.0	<1.0	<1.0				380	74	34000
>C12 - C16	<2.0	<2.0	<2.0	<2.0	<2.0				660	130	38000
>C16 - C21	<10	<10	<10	<10	<10				930	260	28000
>C21 - C35	<10	<10	<10	<10	<10				1700	1600	28000
Total Aromatic Hydrocarbons	**<10**	**<10**	**<10**	**<10**	**<10**						
Aliphatic Hydrocarbons											
C5 - C6	<0.010	<0.010	<0.010	<0.010	<0.010				160	3900	12000
>C6 - C8	<0.010	<0.010	<0.010	<0.010	0.024				530	13000	40000
>C8 - C10	<0.010	<0.010	<0.010	<0.010	<0.010				150	1700	11000
>C10 - C12	<1.0	<1.0	<1.0	<1.0	<1.0				760	7300	47000
>C12 - C16	<2.0	<2.0	<2.0	<2.0	<2.0				4300	13000	90000
>C16 - C21	<8.0	<8.0	<8.0	<8.0	<8.0						
>C21 - C35	<8.0	<8.0	<8.0	<8.0	<8.0						
Total Aliphatic Hydrocarbons	**<10**	**<10**	**<10**	**<10**	**<10**						
Total Petroleum Hydrocarbons	**<5**	**<5**	**<5**	**<5**	**<5**						
BTEX	Concentration, µg/kg										
Benzene	<5.0	<5.0	<5.0	<5.0	<5.0				370	75	90000
Toluene	<5.0	<5.0	<5.0	<5.0	<5.0				660000	120000	180000000
Ethyl Benzene	<5.0	<5.0	<5.0	<5.0	<5.0				260000	91000	27000000
p & m-xylene	<8.0	<8.0	<8.0	<8.0	<8.0						
o-xylene	<5.0	<5.0	<5.0	<5.0	<5.0				310000	160000	30000000
MTBE (Methyl Tertiary Butyl Ether)	<5.0	<5.0	<5.0	<5.0	<5.0						

Notes
Total = Sum of compounds above detection limit.
S4UL given at 6% soil organic matter
*Results given as total of (ortho), (meta) and (para) xylene. SGV given is the lowest permissible value for any xylene compound

Exceptions denoted thus: Residential XX
Commercial XX

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CONTAMINANTS IN SOIL

Project: LITTLE PADDOCK, HURSTON LANE, STORRINGTON, PULBOROUGH, RH20 4HH
Client: Church Barn Homes LLP

Project No: 6033-2
Sheet No: 1/1

Speciated Polyaromatic Hydrocarbons by GCMS

Location	HA1	HA2	HA3	HA4	HA6							LQM/CIEH S4UL[3]		
Sample	D1	B1	B1	B1	B1									
Depth, m	0.40	0.30-0.50	0.20-0.50	0.30-0.50	0.10-0.40							residential4	residential5	allotments	commercial
Determinand	Concentration, mg/kg														
PAH															
Naphthalene	<0.05	<0.05	<0.05	<0.05	<0.05							13	13	24	1100
Acenaphthylene	<0.05	<0.05	<0.05	<0.05	<0.05							920	6000	160	100000
Acenaphthene	<0.05	<0.05	<0.05	<0.05	<0.05							1100	6000	200	100000
Fluorene	<0.05	<0.05	<0.05	<0.05	<0.05							860	4500	160	71000
Phenanthrene	<0.05	<0.05	<0.05	<0.05	<0.05							440	1500	90	23000
Anthracene	<0.05	<0.05	<0.05	<0.05	<0.05							11000	37000	2200	540000
Fluoranthene	<0.05	<0.05	<0.05	<0.05	<0.05							890	1600	290	23000
Pyrene	<0.05	<0.05	<0.05	<0.05	<0.05							2000	3800	620	54000
Benzo(a)anthracene	<0.05	<0.05	<0.05	<0.05	<0.05							13	15	13	180
Chrysene	<0.05	<0.05	<0.05	<0.05	<0.05							27	32	19	350
Benzo(b)fluoranthene	<0.05	<0.05	<0.05	<0.05	<0.05							3.7	4.0	3.9	45
Benzo(k)fluoranthene	<0.05	<0.05	<0.05	<0.05	<0.05							100	110	130	1200
Benzo(a)pyrene	<0.05	<0.05	<0.05	<0.05	<0.05							3	3.2	3.5	36
Indeno(123-cd)pyrene	<0.05	<0.05	<0.05	<0.05	<0.05							41	46	39	510
Dibenzo(ah)anthracene	<0.05	<0.05	<0.05	<0.05	<0.05							0.3	0.32	0.43	3.6
Benzo(ghi)perylene	<0.05	<0.05	<0.05	<0.05	<0.05							350	360	640	4000
Total PAH (16)	**<0.80**	**<0.80**	**<0.80**	**<0.80**	**<0.80**										

Notes

1. Total PAH = Sum of EPA16 identified components
2. The results are expressed as mg/kg dry weight soil after correction for moisture content
3. S4UL given at 6% soil organic matter
4. Residential with plant uptake
5. Residential without plant uptake

Exceptions denoted thus: Residential XX
Commercial XX

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CONTAMINANTS IN SOIL

Project: LITTLE PADDOCK, HURSTON LANE, STORRINGTON, PULBOROUGH, RH20 4HH
Client: Church Barn Homes LLP

Project No: 6033-2
Sheet No: 1/1

Location	Sample	Depth	Asbestos identification		
		m	Description of matrix	Overall percentage of asbestos identified (approx.)	Type of asbestos identified
HA1	D1	0.40	Brown loam and sand with gravel and vegetation		none detected
HA2	B1	0.30-0.50	Brown clay and sand with vegetation		none detected
HA3	B1	0.20-0.50	Brown clay and sand with gravel and vegetation		none detected
HA4	B1	0.30-0.50	Brown clay and sand with gravel and vegetation		none detected
HA6	B1	0.10-0.40	Brown clay and sand with gravel and vegetation		none detected

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Waste Acceptance Criteria Analytical Results

Report No:	25-054899						
					Client:	AP Geotechnics Ltd	
Location	Little Paddock						
Lab Reference (Sample Number)	711943				Landfill Waste Acceptance Criteria Limits		
Sampling Date	09/10/2025				Inert Waste Landfill	Stable Non-reactive HAZARDOUS waste in non-hazardous Landfill	Hazardous Waste Landfill
Sample ID	HA1 B1						
Depth (m)	0.45-0.60						
Solid Waste Analysis							
TOC (%)**	0.5				3%	5%	6%
Loss on Ignition (%) **	1.8				--	--	10%
BTEX (µg/kg) **	< 10				6000	--	--
Sum of PCBs (mg/kg) **	< 0.007				1	--	--
Mineral Oil (mg/kg) EH_1D_CU_AL	< 10				500	--	--
Total PAH (WAC-17) (mg/kg)	< 0.85				100	--	--
pH (units)**	6.4				--	>6	--
Acid Neutralisation Capacity (mmol / kg)	-2				--	To be evaluated	To be evaluated
Eluate Analysis (BS EN 12457 - 2 preparation utilising end over end leaching procedure)	10:1 mg/l			10:1 mg/kg	Limit values for compliance leaching test using BS EN 12457-2 at L/S 10 l/kg (mg/kg)		
Arsenic *	< 0.00100			< 0.0100	0.5	2	25
Barium *	0.00296			0.0296	20	100	300
Cadmium *	< 0.000100			< 0.00100	0.04	1	5
Chromium *	0.0009			0.009	0.5	10	70
Copper *	0.011			0.11	2	50	100
Mercury *	< 0.000500			< 0.00500	0.01	0.2	2
Molybdenum *	0.000531			0.00531	0.5	10	30
Nickel *	0.00069			0.0069	0.4	10	40
Lead *	0.002			0.02	0.5	10	50
Antimony *	< 0.0017			< 0.017	0.06	0.7	5
Selenium *	< 0.0040			< 0.040	0.1	0.5	7
Zinc *	0.0075			0.075	4	50	200
Chloride *	1.4			14	800	15000	25000
Fluoride*	0.1			1	10	150	500
Sulphate *	1.4			14	1000	20000	50000
TDS*	12			120	4000	60000	100000
Phenol Index (Monohydric Phenols) *	< 0.010			< 0.10	1	-	-
DOC	7.58			75.8	500	800	1000
Leach Test Information							
Stone Content (%)	< 0.1						
Sample Mass (kg)	2						
Dry Matter (%)	86						
Moisture (%)	14						

Results are expressed on a dry weight basis, after correction for moisture content where applicable.

*= UKAS accredited (liquid eluate analysis only)

Stated limits are for guidance only and i2 cannot be held responsible for any discrepancies with current legislation

** = MCERTS accredited

Landfill WAC analysis (specifically leaching test results) must not be used for hazardous waste classification purposes as defined by the Waste (England and Wales) Regulations 2011 (as amended) and EA Guidance WM3. This analysis is only applicable for landfill acceptance criteria (The Environmental Permitting (England and Wales) Regulations) and does not give any indication as to whether a waste may be hazardous or non-hazardous.

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Waste Acceptance Criteria Analytical Results

Report No:	**25-054899**						
					Client:	**AP Geotechnics Ltd**	
Location	**Little Paddock**						
Lab Reference (Sample Number)	711944				**Landfill Waste Acceptance Criteria Limits**		
Sampling Date	09/10/2025				Inert Waste Landfill	Stable Non-reactive HAZARDOUS waste in non-hazardous Landfill	Hazardous Waste Landfill
Sample ID	HA5 B1						
Depth (m)	0.20-0.50						
Solid Waste Analysis							
TOC (%)**	0.7				3%	5%	6%
Loss on Ignition (%) **	2.2				--	--	10%
BTEX (µg/kg) **	< 10				6000	--	--
Sum of PCBs (mg/kg) **	< 0.007				1	--	--
Mineral Oil (mg/kg) EH_1D_CU_AL	< 10				500	--	--
Total PAH (WAC-17) (mg/kg)	< 0.85				100	--	--
pH (units)**	5.6				--	>6	--
Acid Neutralisation Capacity (mmol / kg)	-19				--	To be evaluated	To be evaluated
Eluate Analysis (BS EN 12457 - 2 preparation utilising end over end leaching procedure)	10:1 mg/l			10:1 mg/kg	Limit values for compliance leaching test using BS EN 12457-2 at L/S 10 l/kg (mg/kg)		
Arsenic *	< 0.00100			< 0.0100	0.5	2	25
Barium *	0.00316			0.0316	20	100	300
Cadmium *	< 0.000100			< 0.00100	0.04	1	5
Chromium *	0.00057			0.0057	0.5	10	70
Copper *	0.021			0.21	2	50	100
Mercury *	< 0.000500			< 0.00500	0.01	0.2	2
Molybdenum *	< 0.000400			< 0.00400	0.5	10	30
Nickel *	0.0013			0.013	0.4	10	40
Lead *	0.0031			0.031	0.5	10	50
Antimony *	0.0026			0.026	0.06	0.7	5
Selenium *	< 0.0040			< 0.040	0.1	0.5	7
Zinc *	0.0056			0.056	4	50	200
Chloride *	2.1			21	800	15000	25000
Fluoride*	0.14			1.4	10	150	500
Sulphate *	2.2			22	1000	20000	50000
TDS*	15			150	4000	60000	100000
Phenol Index (Monohydric Phenols) *	< 0.010			< 0.10	1	-	-
DOC	9.65			96.4	500	800	1000
Leach Test Information							
Stone Content (%)	< 0.1						
Sample Mass (kg)	2						
Dry Matter (%)	87						
Moisture (%)	13						

Results are expressed on a dry weight basis, after correction for moisture content where applicable.

*= UKAS accredited (liquid eluate analysis only)

Stated limits are for guidance only and i2 cannot be held responsible for any discrepancies with current legislation

** = MCERTS accredited

Landfill WAC analysis (specifically leaching test results) must not be used for hazardous waste classification purposes as defined by the Waste (England and Wales) Regulations 2011 (as amended) and EA Guidance WM3. This analysis is only applicable for landfill acceptance criteria (The Environmental Permitting (England and Wales) Regulations) and does not give any indication as to whether a waste may be hazardous or non-hazardous.

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APPENDIX E

ORIGINAL TESTING CERTIFICATES

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Analytical Report Number : 25-054899

Project / Site name:	Little Paddock	**Samples received on:**	10/10/2025
Your job number:	6033	**Samples instructed on/ Analysis started on:**	10/10/2025
Your order number:		**Analysis completed by:**	22/10/2025
Report Issue Number:	1	**Report issued on:**	22/10/2025
Samples Analysed:	2 soil samples - 2 leachate samples		

Signed:

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

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

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

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

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

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.

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Analytical Report Number: 25-054899
Project / Site name: Little Paddock

Lab Sample Number				711943	711944
Sample Reference				HA1	HA5
Sample Number				B1	B1
Water Matrix				N/A	N/A
Depth (m)				0.45-0.60	0.20-0.50
Date Sampled				09/10/2025	09/10/2025
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	14	13
Total mass of sample received	kg	0.1	NONE	2	2
General Inorganics					
pH (L005B)	pH Units	N/A	MCERTS	6.4	5.6
Total Organic Carbon (TOC) - Automated	%	0.1	MCERTS	0.5	0.7
Loss on Ignition @ 450°C	%	0.2	MCERTS	1.8	2.2
Acid Neutralisation Capacity	+/- mmol/kg	-9999	NONE	-2	-19
Speciated PAHs					
Naphthalene	mg/kg	0.05	MCERTS	< 0.05	< 0.05
Acenaphthylene	mg/kg	0.05	MCERTS	< 0.05	< 0.05
Acenaphthene	mg/kg	0.05	MCERTS	< 0.05	< 0.05
Fluorene	mg/kg	0.05	MCERTS	< 0.05	< 0.05
Phenanthrene	mg/kg	0.05	MCERTS	< 0.05	< 0.05
Anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05
Fluoranthene	mg/kg	0.05	MCERTS	< 0.05	0.07
Pyrene	mg/kg	0.05	MCERTS	< 0.05	0.06
Benzo(a)anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05
Chrysene	mg/kg	0.05	MCERTS	< 0.05	< 0.05
Benzo(b)fluoranthene	mg/kg	0.05	ISO 17025	< 0.05	< 0.05
Benzo(k)fluoranthene	mg/kg	0.05	ISO 17025	< 0.05	< 0.05
Benzo(a)pyrene	mg/kg	0.05	MCERTS	< 0.05	< 0.05
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	< 0.05	< 0.05
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	< 0.05	< 0.05
Coronene	mg/kg	0.05	NONE	< 0.05	< 0.05
Total PAH					
Total WAC-17 PAHs	mg/kg	0.85	NONE	< 0.85	< 0.85
Petroleum Hydrocarbons					
Mineral Oil (EC10 - EC40) EH_CU_1D_AL	mg/kg	10	NONE	< 10	< 10
VOCs					
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
Total BTEX	µg/kg	10	MCERTS	< 10	< 10

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Analytical Report Number: 25-054899
Project / Site name: Little Paddock

Lab Sample Number				711943	711944
Sample Reference				HA1	HA5
Sample Number				B1	B1
Water Matrix				N/A	N/A
Depth (m)				0.45-0.60	0.20-0.50
Date Sampled				09/10/2025	09/10/2025
Time Taken				None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Test Limit of detection	Test Accreditation Status		
PCBs by GC-MS					
PCB Congener 28	mg/kg	0.001	MCERTS	< 0.001	< 0.001
PCB Congener 52	mg/kg	0.001	MCERTS	< 0.001	< 0.001
PCB Congener 101	mg/kg	0.001	MCERTS	< 0.001	< 0.001
PCB Congener 118	mg/kg	0.001	MCERTS	< 0.001	< 0.001
PCB Congener 138	mg/kg	0.001	MCERTS	< 0.001	< 0.001
PCB Congener 153	mg/kg	0.001	MCERTS	< 0.001	< 0.001
PCB Congener 180	mg/kg	0.001	MCERTS	< 0.001	< 0.001
Total PCBs	mg/kg	0.007	MCERTS	< 0.007	< 0.007

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

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Analytical Report Number: 25-054899
Project / Site name: Little Paddock

Lab Sample Number				711943	711944
Sample Reference				HA1	HA5
Sample Number				B1	B1
Water Matrix				N/A	N/A
Depth (m)				0.45-0.60	0.20-0.50
Date Sampled				09/10/2025	09/10/2025
Time Taken				None Supplied	None Supplied
Analytical Parameter (Leachate Analysis)	Units	Test Limit of detection	Test Accreditation Status		
10:1 WAC Leachate					
Arsenic	mg/l	0.001	ISO 17025	< 0.00100	< 0.00100
Barium	mg/l	0.00005	ISO 17025	0.00296	0.00316
Cadmium	mg/l	0.0001	ISO 17025	< 0.000100	< 0.000100
Chromium	mg/l	0.0004	ISO 17025	0.0009	0.00057
Copper	mg/l	0.0007	ISO 17025	0.011	0.021
Mercury	mg/l	0.0005	ISO 17025	< 0.000500	< 0.000500
Molybdenum	mg/l	0.0004	ISO 17025	0.000531	< 0.000400
Nickel	mg/l	0.0003	ISO 17025	0.00069	0.0013
Lead	mg/l	0.001	ISO 17025	0.002	0.0031
Antimony	mg/l	0.0017	ISO 17025	< 0.0017	0.0026
Selenium	mg/l	0.004	ISO 17025	< 0.0040	< 0.0040
Zinc	mg/l	0.0004	ISO 17025	0.0075	0.0056
Chloride	mg/l	0.15	ISO 17025	1.4	2.1
Fluoride	mg/l	0.05	ISO 17025	0.1	0.14
Sulphate	mg/l	0.045	ISO 17025	1.4	2.2
Total dissolved solids	mg/l	6	ISO 17025	12	15
Total monohydric phenols	mg/l	0.01	ISO 17025	< 0.010	< 0.010
Dissolved organic carbon	mg/l	0.1	NONE	7.58	9.65
10:1 WAC Leachate					
Arsenic	mg/kg	0.01	NONE	< 0.0100	< 0.0100
Barium	mg/kg	0.0005	NONE	0.0296	0.0316
Cadmium	mg/kg	0.001	NONE	< 0.00100	< 0.00100
Chromium	mg/kg	0.004	NONE	0.009	0.0057
Copper	mg/kg	0.007	NONE	0.11	0.21
Mercury	mg/kg	0.005	NONE	< 0.00500	< 0.00500
Molybdenum	mg/kg	0.004	NONE	0.00531	< 0.00400
Nickel	mg/kg	0.003	NONE	0.0069	0.013
Lead	mg/kg	0.01	NONE	0.02	0.031
Antimony	mg/kg	0.017	NONE	< 0.017	0.026
Selenium	mg/kg	0.04	NONE	< 0.040	< 0.040
Zinc	mg/kg	0.004	NONE	0.075	0.056
Chloride	mg/kg	1.5	NONE	14	21
Fluoride	mg/kg	0.5	NONE	1	1.4
Sulphate	mg/kg	0.45	NONE	14	22
Total dissolved solids	mg/kg	60	NONE	120	150
Total monohydric phenols	mg/kg	0.1	NONE	< 0.10	< 0.10
Dissolved organic carbon	mg/kg	1	NONE	75.8	96.4

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

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Waste Acceptance Criteria Analytical Results

Report No:	25-054899						
					Client:	AP Geotechnics Ltd	
Location	Little Paddock						
Lab Reference (Sample Number)	711943				Landfill Waste Acceptance Criteria Limits		
Sampling Date	09/10/2025				Inert Waste Landfill	Stable Non-reactive HAZARDOUS waste in non-hazardous Landfill	Hazardous Waste Landfill
Sample ID	HA1 B1						
Depth (m)	0.45-0.60						
Solid Waste Analysis							
TOC (%)**	0.5				3%	5%	6%
Loss on Ignition (%) **	1.8				--	--	10%
BTEX (µg/kg) **	< 10				6000	--	--
Sum of PCBs (mg/kg) **	< 0.007				1	--	--
Mineral Oil (mg/kg) EH_1D_CU_AL	< 10				500	--	--
Total PAH (WAC-17) (mg/kg)	< 0.85				100	--	--
pH (units)**	6.4				--	>6	--
Acid Neutralisation Capacity (mmol / kg)	-2				--	To be evaluated	To be evaluated
Eluate Analysis (BS EN 12457 - 2 preparation utilising end over end leaching procedure)	10:1 mg/l			10:1 mg/kg	Limit values for compliance leaching test using BS EN 12457-2 at L/S 10 l/kg (mg/kg)		
Arsenic *	< 0.00100			< 0.0100	0.5	2	25
Barium *	0.00296			0.0296	20	100	300
Cadmium *	< 0.000100			< 0.00100	0.04	1	5
Chromium *	0.0009			0.009	0.5	10	70
Copper *	0.011			0.11	2	50	100
Mercury *	< 0.000500			< 0.00500	0.01	0.2	2
Molybdenum *	0.000531			0.00531	0.5	10	30
Nickel *	0.00069			0.0069	0.4	10	40
Lead *	0.002			0.02	0.5	10	50
Antimony *	< 0.0017			< 0.017	0.06	0.7	5
Selenium *	< 0.0040			< 0.040	0.1	0.5	7
Zinc *	0.0075			0.075	4	50	200
Chloride *	1.4			14	800	15000	25000
Fluoride*	0.1			1	10	150	500
Sulphate *	1.4			14	1000	20000	50000
TDS*	12			120	4000	60000	100000
Phenol Index (Monohydric Phenols) *	< 0.010			< 0.10	1	-	-
DOC	7.58			75.8	500	800	1000
Leach Test Information							
Stone Content (%)	< 0.1						
Sample Mass (kg)	2						
Dry Matter (%)	86						
Moisture (%)	14						

Results are expressed on a dry weight basis, after correction for moisture content where applicable.

*= UKAS accredited (liquid eluate analysis only)

Stated limits are for guidance only and i2 cannot be held responsible for any discrepancies with current legislation

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Waste Acceptance Criteria Analytical Results

Report No:	**25-054899**						
					Client:	**AP Geotechnics Ltd**	
Location	**Little Paddock**						
Lab Reference (Sample Number)	711944				**Landfill Waste Acceptance Criteria Limits**		
Sampling Date	09/10/2025				Inert Waste Landfill	Stable Non-reactive HAZARDOUS waste in non-hazardous Landfill	Hazardous Waste Landfill
Sample ID	HA5 B1						
Depth (m)	0.20-0.50						
Solid Waste Analysis							
TOC (%)**	0.7				3%	5%	6%
Loss on Ignition (%) **	2.2				--	--	10%
BTEX (µg/kg) **	< 10				6000	--	--
Sum of PCBs (mg/kg) **	< 0.007				1	--	--
Mineral Oil (mg/kg) EH_1D_CU_AL	< 10				500	--	--
Total PAH (WAC-17) (mg/kg)	< 0.85				100	--	--
pH (units)**	5.6				--	>6	--
Acid Neutralisation Capacity (mmol / kg)	-19				--	To be evaluated	To be evaluated
Eluate Analysis (BS EN 12457 - 2 preparation utilising end over end leaching procedure)	10:1 mg/l			10:1 mg/kg	Limit values for compliance leaching test using BS EN 12457-2 at L/S 10 l/kg (mg/kg)		
Arsenic *	< 0.00100			< 0.0100	0.5	2	25
Barium *	0.00316			0.0316	20	100	300
Cadmium *	< 0.000100			< 0.00100	0.04	1	5
Chromium *	0.00057			0.0057	0.5	10	70
Copper *	0.021			0.21	2	50	100
Mercury *	< 0.000500			< 0.00500	0.01	0.2	2
Molybdenum *	< 0.000400			< 0.00400	0.5	10	30
Nickel *	0.0013			0.013	0.4	10	40
Lead *	0.0031			0.031	0.5	10	50
Antimony *	0.0026			0.026	0.06	0.7	5
Selenium *	< 0.0040			< 0.040	0.1	0.5	7
Zinc *	0.0056			0.056	4	50	200
Chloride *	2.1			21	800	15000	25000
Fluoride*	0.14			1.4	10	150	500
Sulphate *	2.2			22	1000	20000	50000
TDS*	15			150	4000	60000	100000
Phenol Index (Monohydric Phenols) *	< 0.010			< 0.10	1	-	-
DOC	9.65			96.4	500	800	1000
Leach Test Information							
Stone Content (%)	< 0.1						
Sample Mass (kg)	2						
Dry Matter (%)	87						
Moisture (%)	13						

Results are expressed on a dry weight basis, after correction for moisture content where applicable.

*= UKAS accredited (liquid eluate analysis only)

Stated limits are for guidance only and i2 cannot be held responsible for any discrepancies with current legislation

** = MCERTS accredited

Landfill WAC analysis (specifically leaching test results) must not be used for hazardous waste classification purposes as defined by the Waste (England and Wales) Regulations 2011 (as amended) and EA Guidance WM3. This analysis is only applicable for landfill acceptance criteria (The Environmental Permitting (England and Wales) Regulations) and does not give any indication as to whether a waste may be hazardous or non-hazardous.

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Analytical Report Number : 25-054899
Project / Site name: Little Paddock

* 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 *
711943	HA1	B1	0.45-0.60	Brown clay and sand with gravel and vegetation
711944	HA5	B1	0.20-0.50	Brown clay and sand with gravel and vegetation

Analytical Report Number : 25-054899
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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
pH at 20°C in soil	Determination of pH in soil by addition of water followed by electrometric measurement	In-house method	L005B	W	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
PCB's By GC-MS in soil	Determination of PCB by extraction with hexane followed by GC-MS	In-house method based on USEPA 8082	L027B	D	MCERTS
Total dissolved solids 10:1 WAC	Determination of total dissolved solids in water by electrometric measurement	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L031B	W	ISO 17025
Fluoride 10:1 WAC	Determination of fluoride in leachate by 1:1ratio with a buffer solution followed by Ion Selective Electrode	In-house method based on Use of Total Ionic Strength Adjustment Buffer for Electrode Determination	L033B	W	ISO 17025
Dissolved organic carbon 10:1 WAC	Determination of dissolved organic carbon in leachate by TOC/DOC NDIR Analyser	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L037B	W	NONE
Metals in leachate by ICP-OES	Determination of metals in leachate by acidification followed by ICP-OES	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil	L039B	W	ISO 17025
One stage WAC 10:1 leachate preparation	One stage batch test at a liquid to solid ratio of 10 L/kg	BS EN 12457-2-2002	L043B	W	ISO 17025
Acid neutralisation capacity of soil	Determination of acid neutralisation capacity by addition of acid or alkali followed by electronic probe	In-house method based on Guidance an Sampling and Testing of Wastes to Meet Landfill Waste Acceptance	L046B	W	NONE
Loss on ignition of soil @ 450°C	Determination of loss on ignition in soil by gravimetrically with the sample being ignited in a muffle furnace	In-house method	L047-PL	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 by GC-FID in soil	Determination of total petroleum hydrocarbons in soil by GC-FID	In-house method	L076B	D	NONE
Monohydric phenols 10:1 WAC	Determination of phenols in leachate by distillation followed by colorimetry	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L080-PL	W	ISO 17025

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Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Chloride 10:1 WAC	Determination of Chloride colorimetrically by discrete analyser	In-house based on MEWAM Method ISBN 0117516260	L082B	W	ISO 17025
Soil Descriptions	Textural classification	In-house method	L019B	W	NONE

For method numbers ending in 'UK' or 'A' analysis have been carried out in our laboratory in the United Kingdom (Watford).
For method numbers ending in 'F' analysis have been carried out in our laboratory in the United Kingdom (East Kilbride).
For method numbers ending in 'PL' or 'B' analysis have been carried out in our laboratory in Poland.
Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC.
Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.

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

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

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

Sample ID	Other ID	Sample Type	Lab Sample Number	Sample Deviation	Test Name	Test Ref	Test Deviation
HA1	B1	L	711943	b	One stage WAC 10:1 leachate preparation	L043B	b
HA5	B1	L	711944	b	One stage WAC 10:1 leachate preparation	L043B	b

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Analytical Report Number : 25-054901

Project / Site name:	Little Paddock	**Samples received on:**	10/10/2025
Your job number:	6033	**Samples instructed on/ Analysis started on:**	10/10/2025
Your order number:		**Analysis completed by:**	20/10/2025
Report Issue Number:	1	**Report issued on:**	20/10/2025
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.

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Analytical Report Number: 25-054901
Project / Site name: Little Paddock

Lab Sample Number				711945	711946	711947	711948	711949
Sample Reference				HA1	HA2	HA3	HA4	HA6
Sample Number				D1	B1	B1	B1	B1
Water Matrix				N/A	N/A	N/A	N/A	N/A
Depth (m)				0.40	0.30-0.50	0.20-0.50	0.30-0.50	0.10-0.40
Date Sampled				09/10/2025	09/10/2025	09/10/2025	09/10/2025	09/10/2025
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	13	13	12	12	12
Total mass of sample received	kg	0.1	NONE	1	1.1	1	1	1.1
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	PKU	PKU	WEM	WEM	WEM
Analysis completed	N/A	N/A	N/A	17/10/2025	17/10/2025	17/10/2025	17/10/2025	17/10/2025
Total Phenols								
Total Phenols (monohydric)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Speciated PAHs								
Naphthalene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthylene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Fluorene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Phenanthrene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Fluoranthene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Pyrene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Benzo(a)anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Chrysene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Benzo(b)fluoranthene	mg/kg	0.05	ISO 17025	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Benzo(k)fluoranthene	mg/kg	0.05	ISO 17025	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Benzo(a)pyrene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Total PAH								
Speciated Total EPA-16 PAHs	mg/kg	0.8	ISO 17025	< 0.80	< 0.80	< 0.80	< 0.80	< 0.80
Heavy Metals / Metalloids								
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	7.2	7.7	7.3	6	7.9
Boron (water soluble)	mg/kg	0.2	MCERTS	0.2	0.3	< 0.2	0.4	0.2
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	16	18	16	13	15
Copper (aqua regia extractable)	mg/kg	1	MCERTS	9.1	9	8.1	8.1	14
Lead (aqua regia extractable)	mg/kg	1	MCERTS	12	7.1	6.7	11	13
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	10	13	12	8.8	11
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0	1.2	< 1.0	< 1.0
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	30	28	27	26	35

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Lab Sample Number				711945	711946	711947	711948	711949
Sample Reference				HA1	HA2	HA3	HA4	HA6
Sample Number				D1	B1	B1	B1	B1
Water Matrix				N/A	N/A	N/A	N/A	N/A
Depth (m)				0.40	0.30-0.50	0.20-0.50	0.30-0.50	0.10-0.40
Date Sampled				09/10/2025	09/10/2025	09/10/2025	09/10/2025	09/10/2025
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Test Limit of detection	Test Accreditation Status					
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	0.024
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	< 2.0	< 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	< 8.0	< 8.0	< 8.0	< 8.0	< 8.0
TPHCWG - Aliphatic >EC5 - EC35 $_{EH_CU+HS_1D_AL}$	mg/kg	10	NONE	< 10	< 10	< 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	< 2.0	< 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	< 10	< 10	< 10	< 10	< 10
TPHCWG - Aromatic >EC5 - EC35 $_{EH_CU+HS_1D_AR}$	mg/kg	10	NONE	< 10	< 10	< 10	< 10	< 10
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

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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 *
711945	HA1	D1	0.4	Brown loam and sand with gravel and vegetation
711946	HA2	B1	0.30-0.50	Brown clay and sand with vegetation
711947	HA3	B1	0.20-0.50	Brown clay and sand with gravel and vegetation
711948	HA4	B1	0.30-0.50	Brown clay and sand with gravel and vegetation
711949	HA6	B1	0.10-0.40	Brown clay and sand with gravel and vegetation

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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
Moisture Content	Moisture content, determined gravimetrically (up to 30°C)	In-house method	L019B	W	NONE
Stones content of soil	Standard preparation for all samples unless otherwise detailed. Gravimetric determination of stone > 10 mm as % dry weight	In-house method based on British Standard Methods and MCERTS requirements.	L019B	D	NONE
Metals in soil by ICP-OES	Determination of metals in soil by aqua-regia digestion followed by ICP-OES	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil	L038B	D	MCERTS
Boron, water soluble, in soil	Determination of water soluble boron in soil by hot water extract followed by ICP-OES	In-house method based on Second Site Properties version 3	L038B	D	MCERTS
Speciated PAHs and/or Semi-volatile organic compounds in soil	Determination of semi-volatile organic compounds (including PAH) in soil by extraction in dichloromethane and hexane followed by GC-MS	In-house method based on USEPA 8270	L064B	D	MCERTS
BTEX and/or Volatile organic compounds in soil	Determination of volatile organic compounds in soil by headspace GC-MS	In-house method based on USEPA 8260	L073B	W	MCERTS
Total petroleum hydrocarbons with carbon banding by GC-FID in soil	Determination of total petroleum hydrocarbons in soil by GC-FID with carbon banding aliphatic and aromatic	In-house method	L076B	D	MCERTS
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
Monohydric phenols in soil	Determination of phenols in soil by extraction with sodium hydroxide followed by distillation followed by colorimetry	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L080-PL	W	MCERTS
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
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.
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