Appendix D
SITE RECONNAISSANCE PHOTOGRAPHS

PHOTOGRAPHIC LOG	
Photo no. **1**	
General	
Description: Photo facing north – Toward the front of the leisure centre	

Photo No. **2**	
General	
Description: **View of playing field – facing south east**	

Photo No. **3**	
General	
Description: View of car park – facing west	

Photo No. **4**	
General	
Description: View of field to the east – facing east	

Photo No. **5**	
General	
Description: Front of Cascade Leisure Centre	

Photo No. **6**	
General	
Description: View of the lane down the eastern flank of the Cascade Leisure centre – Facing south	

Photo No. **7** General **Description:** View of a closed off area which contains an electrical substation – Facing south	

Photo No. **8** General **Description:** Tarmac area to the north of the Gravesham Leisure Centre	

Photo No. **9**	
General	
Description: Netball and tennis courts to the west of the Cascade Leisure Centre	

Photo No. **10**	
General	
Description: View of the landscaped area between the leisure centre and Thong Lane – facing east	

Photo No. 11	
General	
Description: View of Regans Bar & Cafe – facing east	

Appendix E
TECHNICAL BACKGROUND

H1 Desk Study

Aquifer designation and Source protection zones

Principal aquifer: layers of rock or drift deposit that have high intergranular and/or fracture permeability (usually providing a high level of water storage). They may support water supply and/or river base flow on a strategic scale.

Secondary A aquifer: permeable layers capable of supporting water supplies at a local rather than strategic scale, and in some cases forming an important source of base flow to rivers.

Secondary B aquifer: predominantly lower permeability layers that may store and yield limited amounts of groundwater due to localised features such as fissures, thin permeable horizons and weathering.

Secondary undifferentiated aquifer: it has not been possible to attribute either a category A or B to a rock type. In most cases this means that it was previously designated as both a minor and non-aquifer in different locations owing to the variable characteristics.

Unproductive' strata: low permeability with negligible significance for water supply or river base flow.

The EA generally adopts a three-fold classification of source protection zones (SPZ) surround abstractions for public water supply. The Site is situated in an area defined as follows:

- Zone 1 or the 'inner protection zone' is located immediately adjacent to the groundwater source and is based on a 50-day travel time from any point below the water table to the source. It is designed to protect against the effects of human activity and biological/chemical contaminants that may have an immediate effect on the source
- Zone 2 or the 'outer protection zone' is defined by a 400-day travel time from a point below the water table to the source. The travel time is designed to provide delay and attenuation of slowly degrading pollutants
- Zone 3 or the 'total catchment' is the area around the source within which all groundwater recharge is presumed to be discharged at the source.

Preliminary risk assessment methodology

LCRM outlines the framework to be followed for risk assessment in the UK. The framework is designed to be consistent with UK legislation and policies including planning. An outline conceptual model should be formed at the preliminary risk assessment stage that collates all the existing information pertaining to a site in text, tabular or diagrammatic form. The outline conceptual model identifies potentially complete (termed possible) contaminant linkages (contaminant–pathway–receptor) and is used as the basis for the design of the site investigation. The outline conceptual model is updated as further information becomes available, for example as a result of the site investigation.

Production of a conceptual model requires an assessment of risk to be made. Risk is a combination of the likelihood of an event occurring and the magnitude of its consequences. Therefore, both the

likelihood and the consequences of an event must be taken into account when assessing risk. RSK has adopted guidance provided in CIRIA C552 for use in the production of conceptual models.

The likelihood of an event can be classified on a four-point system using the following terms and definitions based on CIRIA C552:

- highly likely: the event appears very likely in the short term and almost inevitable over the long term or there is evidence at the receptor of harm or pollution
- likely: it is probable that an event will occur or circumstances are such that the event is not inevitable, but possible in the short term and likely over the long term
- low likelihood: circumstances are possible under which an event could occur, but it is not certain even in the long term that an event would occur and it is less likely in the short term
- unlikely: circumstances are such that it is improbable the event would occur even in the long term.

The severity can be classified using a similar system also based on CIRIA C552. The terms and definitions relating to severity are:

- severe: short term (acute) risk to human health likely to result in 'significant harm' as defined by the Environment Protection Act 1990, Part IIA. Short-term risk of pollution of sensitive water resources. Catastrophic damage to buildings or property. Short-term risk to an ecosystem or organism forming part of that ecosystem (note definition of ecosystem in 'Draft Circular on Contaminated Land', DETR 2000)
- medium: chronic damage to human health ('significant harm' as defined in 'Draft Circular on Contaminated Land', DETR 2000), pollution of sensitive water resources, significant change in an ecosystem or organism forming part of that ecosystem
- mild: pollution of non-sensitive water resources. Significant damage to crops, buildings, structures and services ('significant harm' as defined in 'Draft Circular on Contaminated Land', DETR 2000). Damage to sensitive buildings, structures or the environment
- minor: harm, not necessarily significant, but that could result in financial loss or expenditure to resolve. Non-permanent human health effects easily prevented by use of personal protective clothing. Easily repairable damage to buildings, structures and services.

Once the probability of an event occurring and its consequences have been classified, a risk category can be assigned according to the table below.

		Consequences			
		Severe	**Medium**	**Mild**	**Minor**
Probability	**Highly likely**	Very high	High	Moderate	Moderate/low
	Likely	High	Moderate	Moderate/low	Low
	Low likelihood	Moderate	Moderate/low	Low	Very low
	Unlikely	Moderate/low	Low	Very low	Very low

Definitions of these risk categories are as follows together with an assessment of the further work that may be required:

- very high: there is a high probability that severe harm could occur or there is evidence that severe harm is currently happening. This risk, if realised, could result in substantial liability; urgent investigation and remediation are likely to be required
- high: harm is likely to occur. Realisation of the risk is likely to present a substantial liability. Urgent investigation is required. Remedial works may be necessary in the short term and are likely over the long term
- moderate: it is possible that harm could arise, but it is unlikely that the harm would be severe and it is more likely that the harm would be relatively mild. Investigation is normally required to clarify the risk and determine the liability. Some remedial works may be required in the longer term
- low: it is possible that harm could occur, but it is likely that if realised this harm would at worst normally be mild
- very low: there is a low possibility that harm could occur and if realised the harm is unlikely to be severe.

H2 Site Investigation Methodology

Ground gas monitoring

An infrared gas meter was used to measure gas flow, concentrations of carbon dioxide (CO_2), methane (CH_4) and oxygen (O_2) in percentage by volume, while hydrogen sulphide (H_2S) and carbon monoxide (CO) were recorded in parts per million. Initial and steady state concentrations were recorded. In addition, during the first monitoring round, all wells were screened with a PID to establish if there are any interferences and cross-sensitivity of other hydrocarbons with the infrared gas meter.

Reuse of suitable materials

The Definition of Waste: Development Industry Code of Practice (CL:AIRE, 2011) (CoP) was developed in consultation with the Environment Agency and development industry to enable the re-use of materials under certain scenarios and subject to demonstrating that specific criteria are met. The current reuse scenarios covered by the CoP comprise

- reuse on the site of origin (with or without treatment)
- direct transfer of clean and natural soils between sites
- use in the development of land other than the site of origin following treatment at an authorised Hub site (including a fixed soil treatment facility).

The importation of made ground soils (irrespective of contamination status) or crushed demolition materials is not permitted currently under the CoP and requires either a standard rules environmental permit or a U1 waste exemption (see below).

In the context of excavated materials used on-sites undergoing development, four factors are considered to be of particular relevance in determining if the material is a waste or when it ceases to be waste:

- the aim of the Waste Framework Directive is not undermined, i.e. if the use of the material will create an unacceptable risk of pollution of the environment or harm to human health it is likely to be waste
- the material is certain to be used
- the material is suitable for use both chemically and geotechnically
- only the required quantity of material will be used.

The CoP requires the preparation of a materials management plan (MMP) that confirms the above factors will be met. This plan needs to be reviewed by a 'Qualified Person' (QP) who will then issue a declaration form to the EA. As the project progresses, data must be collated and on completion a verification report produced that shows the MMP was followed and describes any changes.

The MMP establishes whether specific materials are classified as waste and how excavated materials will be treated and/or reused in line with the CoP. The MMP is likely to form part of the site waste management plan.

Appendix F
EXPLORATORY HOLE RECORDS

Contract Reference: **52511**

KEY TO EXPLORATORY HOLE LOGS - SUMMARY OF GRAPHIC SYMBOLS

WATER COLUMN SYMBOLS



First water strike, second water strike etc.

Standing water level following first strike, standing water level following second strike etc.

Seepage.

Standing water level recorded at documented date.

MATERIAL GRAPHIC LEGENDS

	CLAY		CLAY with BOULDERS		CLAY with COBBLES		Clayey GRAVEL
	Clayey gravelly SAND		Gravelly clayey SAND		Clayey gravelly SAND with BOULDERS		Coal
	Clayey SAND		Clayey sandy GRAVEL		GRAVEL		Gravelly CLAY
	Gravelly silty CLAY		Silty gravelly CLAY		Gravelly SAND		Gravelly SAND with BOULDERS
	MADE GROUND		Mudstone		Possible MADE GROUND		SAND

INSTRUMENTATION SYMBOLS

	Backfill		Bentonite cement grout		Bentonite seal		Concrete
	Gravel filter		Sand filter		Stopcock cover		Upstanding cover
	Plain pipe		Slotted pipe				

GINT_LIBRARY_V8_06.GLB!GrfcText G - LEGEND - 2 OF 2 | 322185 - CUTACRE OCCS.GPJ - v8_06 | 29/09/16 - 14:23 | AW1
RSK Environment Ltd, Spring Lodge, 172 Chester Road, Helsby, Cheshire, WA6 0AR. Tel: 01928 726006, Fax: 01928 725633, Web: www.rsk.co.uk.

KEY TO EXPLORATORY HOLE LOGS - SUMMARY OF ABBREVIATIONS

SAMPLING

Sample type codes

B	=	Bulk disturbed sample.
C	=	Core sample.
CBR	=	CBR mould sample.
D	=	Small disturbed sample.
DSPT	=	Small disturbed sample originating from SPT test.
ES	=	Soil sample for environmental testing.
NR	=	
U	=	Undisturbed driven tube sample - Number of blows indicated. % recovery reported.

Undisturbed sample detail codes

$U_{(100)}$	=	100mm diameter undisturbed sample.

IN-SITU TESTING

$SPT_{(c)}$	=	Standard Penetration Test using a solid 60 degree cone.
SPT	=	Standard Penetration Test using split spoon sampler. ($SPT_{(NR)}$ indicates 'No Sample Recovery').
	=	* denotes extrapolated N value. NP denotes 'No Penetration'.
HP	=	Hand Penetrometer Test. Value given as shear strength c_u, in kPa.
V	=	Field Vane Test. Peak value (c_u) & Residual value (c_r), given as shear strength in kPa.

ROTARY DRILLING INFORMATION

W	=	Water flush returns (%)
TCR	=	Total core recovery (%)
SCR	=	Solid core recovery (%)
RQD	=	Rock quality designations (%)
If	=	Fracture spacing (mm). In the fracture column (i) denotes discontinuity is infilled (refer to Fracture Table for details). Where variable the minimum - average - maximum spacing may be quoted. 'NI' denotes non-intact core. 'NA' denotes not applicable.

All lengths used to determine rock core mechanical properties taken along the centre line of the core.
Obvious induced fractures have been ignored.
The assessment of solid core is based on lengths that show a full diameter and not necessarily a full circumference.
AZCL = Assessed zone of core loss.

ADDITIONAL NOTES

1. All soil and rock descriptions and legends in general accordance with BS EN ISO 14688-1, 14688-2, 14689-1, and BS5930:2015.
2. Material types divided by a broken line (- - -) indicates an unclear boundary.
3. The data on any sheet within the report showing the AGS icon is available in the AGS format.

GINT_LIBRARY_V8_06.GLB|GrfcText G - LEGEND - 1 OF 2 | 322185 - CUTACRE OCCS.GPJ - v8_06 | 29/09/16 - 14:23 | AW1
RSK Environment Ltd, Spring Lodge, 172 Chester Road, Helsby, Cheshire, WA6 0AR. Tel: 01928 726006, Fax: 01928 725633, Web: www.rsk.co.uk.

RSK GEOSCIENCES

PRELIMINARY

BOREHOLE LOG

Contract:	Client:	Borehole:
Gravesham Leisure Centre	**Furness Partnership**	**BH1**

Contract Ref:	Start:	Ground Level:	National Grid Co-ordinate:	Sheet:
52511	**17.03.23** End: **20.03.23**	**65.73**	**E:567025.2 N:171668.2**	**1** of **1**

Samples and In-situ Tests				Water	Backfill & Instrumentation	Description of Strata	Reduced Level	Depth (Thickness)	Material Graphic Legend
Depth	No	Type	Results						
0.05	1	ES	1xT+1xJ+1xV			Bituminous bound layer. (MADE GROUND)	65.68	0.05	
0.05		PID	0.0ppm				65.43	0.30	
0.30	2	D				Sandy gravel comprising MOT Type 1 aggregate. Strong sulphur aroma noted throughout. (MADE GROUND)	64.83	0.90	
0.50	3	D							
1.00	4	D							
1.20-1.65	1	SPT	N=6			Firm orangish brown gravelly sandy silty CLAY with rootlets. Gravel is subangular to rounded fine to medium flint. Sand is fine to medium. (REWORKED GROUND)		(4.10)	
1.75	5	D							
2.00-2.45	2	SPT	N=29						
2.75	6	D							
3.75-4.20	3	SPT	N=13			Cream gravelly SILT. Gravel is subangular fine to medium chalk. (WHITE CHALK SUBGROUP)			
4.00-4.45	4	SPT	N=41						
4.75	7	D					60.73	5.00	
5.00-5.45	5	SPT	N=14			Structureless CHALK composed of cream, gravelly SILT. Gravel is weak medium density white with black specks and subrounded with rare flint fragments. (Grade Dm) (WHITE CHALK SUBGROUP)			
5.00	8	D							
5.50-5.95	6	SPT	N=16						
7.50	9	D							
8.00-8.45	7	SPT	N=30						
9.00	10	D							
9.50-9.95	8	SPT	N=16						
10.50	11	D						(15.45)	
11.00-11.45	9	SPT	N=17						
12.50-12.95	10	SPT	N=51						
13.50	12	D							
14.00-14.45	11	SPT	N=24						
15.00	13	D				. . . Flint band at 15.00m to 15.20m depth.			
15.50-15.95	12	SPT	N=26						
16.00	14	D				. . . Flint band at 16.50m to 16.70m depth.			
17.00-17.45	13	SPT	N=36						
18.00	15	D							
18.50-18.95	14	SPT	N=28						
19.50	16	D							
20.00-20.45	15	SPT	N=49				45.28	20.45	
						Borehole terminated at 20.45m depth.			

Boring Progress and Water Observations					
Date	Time	Borehole Depth	Casing Depth	Borehole Diameter (mm)	Water Depth

Chiselling / Slow Progress		
From	To	Duration (hh:mm)
0.00	0.20	00:30

General Remarks

1. Position checked with Ground Penetrating Radar, CAT and Genny prior to excavation.
2. Inspection pit hand dug to 1.20m depth.
3. Down borehole checks for buried ferrous objects carried out during drilling by specialist unexploded ordnance (UXO) officer using magnetometer at regular intervals.
4. No groundwater encountered.
5. 50mm diameter standpipe piezometer (complete with flush protective cover) installed to 20.00m depth on completion. Response zone 1.00m to 20.00m depth.

All dimensions in metres | Scale: **1:117**

Method Used:	Plant Used:	Drilled By:	Logged By:	Checked By:
Inspection pit + Cable percussion	**Pilcon Wayfarer 2000**	**PJ Drilling**	**JCurnow**	AGS

GINT_LIBRARY_V10_01.GLB LibVersion: v8_07_001 PrjVersion: v8_07 | Log CABLE PERCUSSION LOG - A4P | 52511 GRAVESHAM LEISURE.GPJ - v10_01. | 23/05/23 - 16:37 | BD2 |

RSK GEOSCIENCES

PRELIMINARY

BOREHOLE LOG

Contract:	Client:	Borehole:
Gravesham Leisure Centre	**Furness Partnership**	**BH2**

Contract Ref:	Start:	Ground Level:	National Grid Co-ordinate:	Sheet:
52511	**21.03.23** End: **22.03.23**	**65.91**	**E:567099.7 N:171674.3**	**1** of **1**

Samples and In-situ Tests				Water	Backfill & Instrumentation	Description of Strata	Reduced Level	Depth (Thickness)	Material Graphic Legend
Depth	No	Type	Results						
0.30	1	D				Grass over firm dark brown gravelly sandy silty CLAY with rootlets. Gravel is subangular fine chalk. Sand is fine to medium. (TOPSOIL)	65.51	0.40	
0.50	2	D					64.91	1.00	
1.00	3	D				Reddish brown slightly gravelly silty CLAY with rootlets. Gravel is subangular to subrounded fine to medium flint (REWORKED GROUND).	64.41	1.50	
1.20-1.65	1	SPT	N=40						
1.75	4	D				Brown gravelly clayey SILT. Gravel is subangular to subrounded fine to coarse of flint and chalk (REWORKED GROUND).			
2.00-2.45	2	SPT	N=9						
2.75	5	D							
3.00-3.45	3	SPT(c)	N=33			Structureless CHALK composed of cream, gravelly SILT. Gravel is weak medium density white with black specks and subrounded with rare flint fragments. (Grade Dm) (WHITE CHALK SUBGROUP)			
3.75	6	D							
4.00-4.45	4	SPT	N=16						
4.75	7	D							
5.00-5.45	5	SPT	N=17						
5.00	8	D				. . . Flint band at 3.00m to 3.20m depth.			
6.50-6.95	6	SPT	N=17						
7.50	9	D							
8.00-8.45	7	SPT	N=20						
9.00	10	D							
9.50-9.95	8	SPT(c)	N=67						
10.50	11	D						(18.95)	
11.00-11.45	9	SPT	N=18						
12.00	12	D							
12.50-12.95	10	SPT	N=21						
13.50	13	D							
14.00-14.45	11	SPT	N=24						
15.00	14	D							
15.50-15.95	12	SPT	N=38						
16.50	15	D							
17.00-17.45	13	SPT	N=28			. . . Flint band from 17.50m to 17.80m depth.			
18.00	16	D							
18.50-18.95	14	SPT	N=29						
19.50	17	D							
20.00-20.45	15	SPT	N=43				45.46	20.45	
						Borehole terminated at 20.45m depth.			

Boring Progress and Water Observations					
Date	Time	Borehole Depth	Casing Depth	Borehole Diameter (mm)	Water Depth

Chiselling / Slow Progress		
From	To	Duration (hh:mm)
3.00	17.50	00:30
3.20	17.70	00:30

General Remarks

1. Position checked with Ground Penetrating Radar, CAT and Genny prior to excavation.
2. Inspection pit hand dug to 1.20m depth.
3. Down borehole checks for buried ferrous objects carried out during drilling by specialist unexploded ordnance (UXO) officer using magnetometer at regular intervals.
4. No groundwater encountered.
5. 50mm diameter standpipe piezometer (complete with flush protective cover) installed to 19.75m depth on completion. Response zone 1.00m to 20.00m depth.

All dimensions in metres | Scale: **1:117**

Method Used:	Plant Used:	Drilled By:	Logged By:	Checked By:
Inspection pit + Cable percussion	**Pilcon Wayfarer 2000**	**PJ Drilling**	**JCurnow**	AGS

GINT_LIBRARY_V10_01.GLB LibVersion: v8_07_001 PrjVersion: v8_07 | Log CABLE PERCUSSION LOG - A4P | 52511 GRAVESHAM LEISURE.GPJ - v10_01. | 23/05/23 - 16:37 | BD2 |

RSK GEOSCIENCES

PRELIMINARY

BOREHOLE LOG

Contract:	Client:	Borehole:
Gravesham Leisure Centre	**Furness Partnership**	**BH3**

Contract Ref:	Start:	Ground Level:	National Grid Co-ordinate:	Sheet:
52511	**23.03.23** End: **24.03.23**	**66.92**	**E:567107.6 N:171632.8**	**1** of **1**

Samples and In-situ Tests				Water	Backfill & Instru-mentation	Description of Strata	Reduced Level	Depth (Thick ness)	Material Graphic Legend
Depth	No	Type	Results						
0.30	1	D				Grass over dark brown gravelly silty clayey fine to medium SAND with rootlets. Gravel is rounded to subangular fine to medium flint, chalk and brick. (TOPSOIL)	66.62	0.30	
0.50	2	D						(1.20)	
1.00	3	D					65.42	1.50	
1.20-1.65	1	SPT(c)	N=17			Dark brown slightly sandy gravelly CLAY with rootlets. Gravel is subangular to subrounded fine to coarse of flint, chalk and brick. (MADE GROUND)	65.22	1.70	
1.75	4	D							
2.00-2.45	2	SPT	N=10						
2.75	5	D				Firm brown mottled creamish white gravelly silty CLAY. Gravel is subangular to subrounded fine to medium chalk (REWORKED GROUND).			
3.00-3.45	3	SPT	N=53						
3.75	6	D							
4.00-4.45	4	SPT	N=18			Structureless CHALK composed of cream, gravelly SILT. Gravel is weak medium density white with black specks and subrounded with rare flint fragments. (Grade Dm) (WHITE CHALK SUBGROUP)			
4.50	7	D							
5.00-5.45	5	SPT	N=23			. . . Flint band from 3.00m to 3.20m depth.			
6.00	8	D							
6.50-6.95	6	SPT	N=22						
7.50	9	D							
8.00-8.45	7	SPT	N=25						
9.00	10	D							
9.50-9.95	8	SPT	N=27						
10.50	11	D						(18.75)	
11.00-11.45	9	SPT	N=27						
12.00	12	D							
12.50-12.95	10	SPT	N=28						
13.50-13.95	12	SPT	N=35						
13.50	13	D							
14.00-14.45	11	SPT	N=60						
15.00	14	D							
						. . . Flint band from 16.00m to 16.20m depth.			
16.50	15	D							
17.00-17.45	13	SPT	N=35						
18.00	16	D							
18.50-18.80	14	SPT(c)	17,18/20,15 for 75mm			. . . Flint band from 18.50m to 18.80m depth.			
19.50	17	D							
20.00-20.45	15	SPT	N=36				46.47	20.45	
						Borehole terminated at 20.45m depth.			

Boring Progress and Water Observations					
Date	Time	Borehole Depth	Casing Depth	Borehole Diameter (mm)	Water Depth

Chiselling / Slow Progress		
From	To	Duration (hh:mm)
3.00	3.20	00:30
16.00	18.50	00:30
16.20	18.80	00:30

General Remarks

1. Position checked with Ground Penetrating Radar, CAT and Genny prior to excavation.
2. Inspection pit hand dug to 1.20m depth.
3. Down borehole checks for buried ferrous objects carried out during drilling by specialist unexploded ordnance (UXO) officer using magnetometer at regular intervals.
4. No groundwater encountered.
5. 50mm diameter standpipe piezometer (complete with flush protective cover) installed to 17.66m depth on completion. Response zone 1.00m to 20.00m depth.

All dimensions in metres | Scale: **1:117**

Method Used:	Plant Used:	Drilled By:	Logged By:	Checked By:
Inspection pit + Cable percussion	**Pilcon Wayfarer 2000**	**PJ Drilling**	**JCurnow**	AGS

GINT_LIBRARY_V10_01.GLB LibVersion: v8_07_001 PrjVersion: v8_07 | Log CABLE PERCUSSION LOG - A4P | 52511 GRAVESHAM LEISURE.GPJ - v10_01. | 23/05/23 - 16:37 | BD2 |

PRELIMINARY

WINDOW SAMPLE LOG

Contract:	Client:	Window Sample:
Gravesham Leisure Centre	**Furness Partnership**	**WS1**

Contract Ref:	Start:	Ground Level:	National Grid Co-ordinate:	Sheet:
52511	**16.03.23** End: **16.03.23**	**65.08**	**E:567056.6 N:171710.6**	**1** of **1**

Progress	Samples / Tests				Water	Backfill & Instrumentation	Description of Strata	Reduced Level	Depth (Thickness)	Material Graphic Legend
Window Run	Depth	No	Type	Results						
	0.00-0.30	1	ES	1xT+1xJ+1xV			Grass over firm dark brown gravelly sandy silty CLAY with rootlets. Sand is fine to medium. Gravel is subangular to surrounded fine to medium chalk and flint. (TOPSOIL)		(0.30)	
	0.00		PID	0.0ppm				64.78	0.30	
							Light brown gravelly silty clayey fine to medium SAND with rootlets. Gravel is subangular to subrounded flint and chalk. (REWORKED GROUND)		(0.50)	
	0.80-1.10	2	D					64.28	0.80	
							Firm light brown gravelly sandy silty CLAY with rootlets. Sand is fine to medium. Gravel is angular to rounded fine to coarse flint and chalk. (REWORKED GROUND)		(0.40)	
	1.00-1.45	1	SPT	N=25				63.88	1.20	
							Creamy light brown gravelly sandy SILT. Sand is fine to medium. Gravel is subangular fine chalk. (REWORKED GROUND)	63.78	1.30	
	1.30-1.60	3	D						(0.30)	
							Light brown gravelly fine to medium SAND. Gravel is angular to subangular fine to coarse flint. (REWORKED GROUND)	63.48	1.60	
							Structureless CHALK composed of cream, gravelly SILT. Gravel is weak medium density white with black specks and subrounded. (Grade Dm) (WHITE CHALK SUBGROUP)			
	2.00-2.45	2	SPT	N=13						
	2.50-2.80	4	D							
	3.00-3.45	3	SPT	N=19			. . . Flint band at 3.00m to 3.10m depth.		(2.85)	
	3.20-3.50	5	D							
	4.00-4.45	4	SPT	N=14				60.63	4.45	
							Window sample borehole terminated at 4.45m depth.			

Drilling Progress and Water Observations

Date	Time	Borehole Depth (m)	Casing Depth (m)	Borehole Diameter (mm)	Water Depth (m)

General Remarks

1. Position checked with Ground Penetrating Radar, CAT and Genny prior to excavation.
2. Inspection pit hand dug to 1.20m depth.
3. Down borehole checks for buried ferrous objects carried out during drilling by specialist unexploded ordnance (UXO) officer using magnetometer at regular intervals.
4. No groundwater encountered.
5. 33mm diameter standpipe piezometer (complete with flush protective cover) installed to 4.00m depth on completion. Response zone 1.00m to 4.00m depth.

All dimensions in metres | Scale: **1:28**

Method Used:	Plant Used:	Drilled By:	Logged By:	Checked By:
Inspection pit + Tracked window	**Premier 110**	**PJ Drilling**	**JCurnow**	AGS

GINT_LIBRARY_V10_01.GLB LibVersion: v8_07_001 PrjVersion: v8_07 | Log WINDOW SAMPLE LOG - A4P | 52511 GRAVESHAM LEISURE.GPJ - v10_01. | 23/05/23 - 16:36 | JC12 |

PRELIMINARY

WINDOW SAMPLE LOG

Contract:	Client:	Window Sample:
Gravesham Leisure Centre	**Furness Partnership**	**WS2**

Contract Ref:	Start:	Ground Level:	National Grid Co-ordinate:	Sheet:
52511	**16.03.23** End: **16.03.23**	**65.83**	**E:567119.2 N:171686.2**	**1** of **1**

Progress	Samples / Tests				Water	Backfill & Instrumentation	Description of Strata	Reduced Level	Depth (Thickness)	Material Graphic Legend
Window Run	Depth	No	Type	Results						
	0.00-0.30 0.00	1	ES PID	1xT+1xJ+1xV 0.0ppm			Grass over: firm dark brown gravelly sandy silty CLAY with rootlets. Gravel is subangular fine chalk. Sand is fine to medium. (TOPSOIL)	65.53	(0.30) 0.30	
							Firm light brown gravelly sandy silty CLAY with rootlets. Sand is fine to medium. Gravel is subangular to surrounded fine to coarse flint and chalk. (REWORKED GROUND)	65.33	0.50	
	0.70-1.00	2	D				Orangish brown gravelly silty fine to medium SAND. Gravel is rounded to subangular medium flint. (REWORKED GROUND)	65.13	0.70	
	1.00-1.45	1	SPT	N=10			Structureless CHALK composed of cream, gravelly SILT. Gravel is weak medium density white with black specks and subrounded. (Grade Dm) (WHITE CHALK SUBGROUP)	64.83	(0.30) 1.00	
	1.70-2.00	3	D				Structureless CHALK composed of cream, gravelly SILT. Gravel is weak medium density white with black specks and subrounded. (Grade Dm) (WHITE CHALK SUBGROUP)			
	2.00-2.45	2	SPT	N=16						
	2.70-3.00	4	D						(3.45)	
	3.00-3.45	3	SPT	N=17						
	3.70-4.00	5	D							
	4.00-4.45	4	SPT	N=24						
							Window sample borehole terminated at 4.45m depth.	61.38	4.45	

Drilling Progress and Water Observations

Date	Time	Borehole Depth (m)	Casing Depth (m)	Borehole Diameter (mm)	Water Depth (m)

General Remarks

1. Position checked with Ground Penetrating Radar, CAT and Genny prior to excavation.
2. Inspection pit hand dug to 1.20m depth.
3. Down borehole checks for buried ferrous objects carried out during drilling by specialist unexploded ordnance (UXO) officer using magnetometer at regular intervals.
4. No groundwater encountered.
5. 33mm diameter standpipe piezometer (complete with flush protective cover) installed to 4.00m depth on completion. Response zone 1.00m to 4.00m depth.

All dimensions in metres | Scale: **1:28**

Method Used:	Plant Used:	Drilled By:	Logged By:	Checked By:
Inspection pit + Tracked window	**Premier 110**	**PJ Drilling**	**JCurnow**	AGS

GINT_LIBRARY_V10_01.GLB LibVersion: v8_07_001 PrjVersion: v8_07 | Log WINDOW SAMPLE LOG - A4P | 52511 GRAVESHAM LEISURE.GPJ - v10_01. | 23/05/23 - 16:37 | JC12 |

PRELIMINARY

WINDOW SAMPLE LOG

Contract:	Client:	Window Sample:
Gravesham Leisure Centre	**Furness Partnership**	**WS3**

Contract Ref:	Start:	Ground Level:	National Grid Co-ordinate:	Sheet:
52511	**16.03.23** End: **16.03.23**	**66.87**	**E:567138.0 N:171650.0**	**1** of **1**

Progress	Samples / Tests				Water	Backfill & Instrumentation	Description of Strata	Reduced Level	Depth (Thickness)	Material Graphic Legend
Window Run	Depth	No	Type	Results						
	0.00-0.30 0.00	1	ES PID	1xT+1xJ+1xV 0.0ppm			Grass over dark brown gravelly silty clayey fine to medium SAND with rootlets. Gravel is rounded to subangular fine to medium flint, chalk and brick. (TOPSOIL)	66.37	(0.50) 0.50	
	0.70-1.00	2	D				Light brown gravelly sandy SILT. Gravel is subangular to surrounded fine to medium flint and chalk. (REWORKED GROUND)	65.97	(0.40) 0.90	
	1.00-1.45	1	SPT	N=23			Structureless CHALK composed of cream, gravelly SILT. Gravel is weak medium density white with black specks and subrounded. (Grade Dm) (WHITE CHALK SUBGROUP)	65.07	(0.90) 1.80	
	1.80-2.00	3	D				Structureless CHALK composed of cream, gravelly SILT. Gravel is weak medium density white with black specks and subrounded. (Grade Dm) (WHITE CHALK SUBGROUP)	64.67	(0.40) 2.20	
	2.00-2.45	2	SPT	N=18			Structureless CHALK composed of silty subangular GRAVEL. Clasts are weak, medium denisty white with black specks. Matrix is creamy white. (Grade Dc) (WHITE CHALK SUBGROUP) . . . Flint band.	63.87	(0.80) 3.00	
	3.00-3.45	3	SPT	N=22			Structureless CHALK composed of cream, gravelly SILT. Gravel is weak medium density white with black specks and subrounded. (Grade Dm) (WHITE CHALK SUBGROUP)			
	3.50-3.80	4	D						(1.45)	
	4.00-4.45	4	SPT	N=39				62.42	4.45	
							Window sample borehole terminated at 4.45m depth.			

Drilling Progress and Water Observations

Date	Time	Borehole Depth (m)	Casing Depth (m)	Borehole Diameter (mm)	Water Depth (m)

General Remarks

1. Position checked with Ground Penetrating Radar, CAT and Genny prior to excavation.
2. Inspection pit hand dug to 1.20m depth.
3. Down borehole checks for buried ferrous objects carried out during drilling by specialist unexploded ordnance (UXO) officer using magnetometer at regular intervals.
4. No groundwater encountered.
5. 33mm diameter standpipe piezometer (complete with flush protective cover) installed to 3.92m depth on completion. Response zone 0.92m to 3.92m depth.

All dimensions in metres | Scale: **1:28**

Method Used:	Plant Used:	Drilled By:	Logged By:	Checked By:
Inspection pit + Tracked window	**Premier 110**	**PJ Drilling**	**JCurnow**	AGS

GINT_LIBRARY_V10_01.GLB LibVersion: v8_07_001 PrjVersion: v8_07 | Log WINDOW SAMPLE LOG - A4P | 52511 GRAVESHAM LEISURE.GPJ - v10_01. | 23/05/23 - 16:37 | JC12 |

PRELIMINARY

WINDOW SAMPLE LOG

Contract:	Client:	Window Sample:
Gravesham Leisure Centre	**Furness Partnership**	**WS4**

Contract Ref:	Start:	Ground Level:	National Grid Co-ordinate:	Sheet:
52511	**16.03.23** End: **16.03.23**	**67.27**	**E:567047.3 N:171597.0**	**1** of **1**

Progress	Samples / Tests				Water	Backfill & Instrumentation	Description of Strata	Reduced Level	Depth (Thickness)	Material Graphic Legend
Window Run	Depth	No	Type	Results						
	0.00-0.30 0.00	1	ES PID	1xT+1xJ+1xV 0.0ppm			Grass ove: dark brown silty clayey fine to medium SAND with rootlets. (TOPSOIL)	66.97	(0.30) 0.30	
	0.70-1.00	2	D				Firm light brown sandy silty CLAY. (REWORKED GROUND)	66.37	(0.60) 0.90	
	1.00-1.45	1	SPT	N=38			Structureless CHALK composed of cream, gravelly SILT. Gravel is weak medium density white with black specks and subrounded. (Grade Dm) (WHITE CHALK SUBGROUP)	66.17	1.10	
	1.70-2.00	3	D				Structureless CHALK composed of silty subangular GRAVEL. Clasts are weak, medium denisty white with black specks. Matrix is creamy white. (Grade Dc) (WHITE CHALK SUBGROUP) . . . Flint band at 1.10m depth.		(2.05)	
	2.00-2.45	2	SPT	N=33						
	2.40-3.00	4	D							
	2.70-3.15	3	SPT	N=45						
							Window sample borehole terminated at 2.7m depth due to refusal on flint.	64.12	3.15	

Drilling Progress and Water Observations

Date	Time	Borehole Depth (m)	Casing Depth (m)	Borehole Diameter (mm)	Water Depth (m)

General Remarks

1. Position checked with Ground Penetrating Radar, CAT and Genny prior to excavation.
2. Inspection pit hand dug to 1.20m depth.
3. Down borehole checks for buried ferrous objects carried out during drilling by specialist unexploded ordnance (UXO) officer using magnetometer at regular intervals.
4. No groundwater encountered.
5. 33mm diameter standpipe piezometer (complete with flush protective cover) installed to 2.91m depth on completion. Response zone 0.91m to 2.91m depth.

All dimensions in metres | Scale: **1:28**

Method Used:	Plant Used:	Drilled By:	Logged By:	Checked By:
Inspection pit + Tracked window	**Premier 110**	**PJ Drilling**	**JCurnow**	AGS

GINT_LIBRARY_V10_01.GLB LibVersion: v8_07_001 PrjVersion: v8_07 | Log WINDOW SAMPLE LOG - A4P | 52511 GRAVESHAM LEISURE.GPJ - v10_01. | 23/05/23 - 16:37 | JC12 |

PRELIMINARY

WINDOW SAMPLE LOG

Contract:	Client:	Window Sample:
Gravesham Leisure Centre	**Furness Partnership**	**WS5**

Contract Ref:	Start:	Ground Level:	National Grid Co-ordinate:	Sheet:
52511	**16.03.23** End: **16.03.23**	**66.49**	**E:566961.6 N:171662.6**	**1** of **1**

Progress	Samples / Tests				Water	Backfill & Instrumentation	Description of Strata	Reduced Level	Depth (Thickness)	Material Graphic Legend
Window Run	Depth	No	Type	Results						
	0.00		PID	0.0ppm			Grass over dark brown silty fine to medium SAND with rootlets. (TOPSOIL)	66.39	0.10	
	0.10-0.40	1	ES	1xT+1xJ+1xV					(0.30)	
							Dark brown sandy silty CLAY with frequent brick and concrete. Sand is fine to coarse. (MADE GROUND)	66.09	0.40	
	0.60-0.90	2	D				Dark greyish brown to dark greenish brown clayey medium SAND with rootlets. (REWORKED GROUND)		(0.50)	
								65.59	0.90	
	1.00-1.45	1	SPT	N=27			Orangish brown to dark brown gravelly sandy silty CLAY. Gravel is angular to subrounded fine to coarse flint. (REWORKED GROUND)		(0.50)	
	1.00-1.30	3	D					65.09	1.40	
							Structureless CHALK composed of cream, gravelly SILT. Gravel is weak medium density white with black specks and subrounded. (Grade Dm) (WHITE CHALK SUBGROUP)		(0.60)	
								64.49	2.00	
	2.00-2.45	2	SPT	N=41			Structureless CHALK composed of silty subangular GRAVEL. Clasts are weak, medium denisty white with black specks. Matrix is creamy white. (Grade Dc) (WHITE CHALK SUBGROUP)			
	2.40-2.70	4	D						(1.15)	
	2.70-3.15	3	SPT	N=44						
								63.34	3.15	
							Window sample borehole terminated at 2.7m depth due to refusal on flint.			

Drilling Progress and Water Observations

Date	Time	Borehole Depth (m)	Casing Depth (m)	Borehole Diameter (mm)	Water Depth (m)

General Remarks

1. Position checked with Ground Penetrating Radar, CAT and Genny prior to excavation.
2. Inspection pit hand dug to 1.20m depth.
3. Down borehole checks for buried ferrous objects carried out during drilling by specialist unexploded ordnance (UXO) officer using magnetometer at regular intervals.
4. No groundwater encountered.
5. 33mm diameter standpipe piezometer (complete with flush protective cover) installed to 2.90m depth on completion. Response zone 0.90m to 2.90m depth.

All dimensions in metres | Scale: **1:28**

Method Used:	Plant Used:	Drilled By:	Logged By:	Checked By:
Inspection pit + Tracked window	**Premier 110**	**PJ Drilling**	**JCurnow**	

AGS

GINT_LIBRARY_V10_01.GLB LibVersion: v8_07_001 PrjVersion: v8_07 | Log WINDOW SAMPLE LOG - A4P | 52511 GRAVESHAM LEISURE.GPJ - v10_01. | 23/05/23 - 16:37 | JC12 |

PRELIMINARY

WINDOW SAMPLE LOG

Contract:	Client:	Window Sample:
Gravesham Leisure Centre	**Furness Partnership**	**WS6**

Contract Ref:	Start:	Ground Level:	National Grid Co-ordinate:	Sheet:
52511	**16.03.23** End: **16.03.23**	**65.94**	**E:567013.1 N:171694.6**	**1** of **1**

Progress	Samples / Tests				Water	Backfill & Instrumentation	Description of Strata	Reduced Level	Depth (Thickness)	Material Graphic Legend
Window Run	Depth	No	Type	Results						
	0.00-0.30 0.00	1	ES PID	1xT+1xJ+1xV 0.0ppm			Grass over dark brown gravelly silty fine to medium SAND with rootlets. Gravel is subangular fine to medium flint and chalk (TOPSOIL)	65.54	(0.40) 0.40	
	0.70-1.00	2	D				Dark brown gravelly silty clayey fine to medium SAND with rootlets. Gravel is subangular to surrounded fine to medium flint and chalk. (REWORKED GROUND)	64.94	(0.60) 1.00	
	1.00-1.45	1	SPT	N=21			Stiff orangish brown silty CLAY. (REWORKED GROUND) . . . Chalk gravel at 1.3m	64.34	(0.60) 1.60	
	1.70-2.00	3	D				Structureless CHALK composed of cream, gravelly SILT. Gravel is weak medium density white with black specks and subrounded. (Grade Dm) (WHITE CHALK SUBGROUP)	63.84	(0.50) 2.10	
	2.00-2.45	2	SPT	N=19						
	2.70-3.00	4	D				Structureless CHALK composed of cream, gravelly SILT. Gravel is weak medium density white with black specks and subrounded. (Grade Dm) (WHITE CHALK SUBGROUP)		(2.35)	
	3.00-3.45	3	SPT	N=12						
	3.70-4.00	5	D							
	4.00-4.45	4	SPT	N=14				61.49	4.45	
							Window sample borehole terminated at 4.45m depth.			

Drilling Progress and Water Observations

Date	Time	Borehole Depth (m)	Casing Depth (m)	Borehole Diameter (mm)	Water Depth (m)

General Remarks

1. Position checked with Ground Penetrating Radar, CAT and Genny prior to excavation.
2. Inspection pit hand dug to 1.20m depth.
3. Down borehole checks for buried ferrous objects carried out during drilling by specialist unexploded ordnance (UXO) officer using magnetometer at regular intervals.
4. No groundwater encountered.
5. 33mm diameter standpipe piezometer (complete with flush protective cover) installed to 4.03m depth on completion. Response zone 1.03m to 4.03m depth.

All dimensions in metres | Scale: **1:28**

Method Used:	Plant Used:	Drilled By:	Logged By:	Checked By:
Inspection pit + Tracked window	**Premier 110**	**PJ Drilling**	**JCurnow**	AGS

GINT_LIBRARY_V10_01.GLB LibVersion: v8_07_001 PrjVersion: v8_07 | Log WINDOW SAMPLE LOG - A4P | 52511 GRAVESHAM LEISURE.GPJ - v10_01. | 23/05/23 - 16:37 | JC12 |

PRELIMINARY

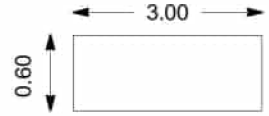
TRIAL PIT LOG

Contract:	Client:	Trial Pit:
Gravesham Leisure Centre	Furness Partnership	SA1

Contract Ref:	Start: 20.03.23	Ground Level:	National Grid Co-ordinate:	Sheet:
52511	End: 20.03.23	62.58	E:566971.6 N:171797.2	1 of 1

Samples and In-situ Tests				Water	Backfill	Description of Strata	Reduced Level	Depth (Thickness)	Material Graphic Legend
Depth	No	Type	Results						
0.00-0.20	1	ES	1xT+1xJ+1xV			Bituminous bound layer.	62.53	0.05	
0.00		PID	0.0ppm			(MADE GROUND)	62.38	0.20	
						Black gravelly coarse SAND with frequent brick and scalpings (MADE GROUND)			
0.40-0.80	2	D				Firm light brown gravelly sandy silty CLAY with rootlets and occasional brick. Gravel is subangular fine to medium flint and chalk. Sand is fine to medium. (MADE GROUND)		(0.80)	
0.40		V	c_u=39				61.58	1.00	
						Structureless CHALK composed of cream, gravelly SILT. Gravel is weak medium density white with black specks and subrounded. (Grade Dm) (WHITE CHALK SUBGROUP)			
1.40-1.80	3	D						(2.00)	
						. . . At 2.2m depth band of subangular cobble size flints.			
2.40-2.80	4	D							
						. . . From 2.8m yellow staining.	59.58	3.00	
						Trial pit terminated at 3.00m depth.			

Plan (Not to Scale)



General Remarks

1. Position checked with Ground Penetrating Radar, CAT and Genny prior to excavation.
2. Checks for buried ferrous objects carried out during excavation by specialist unexploded ordnance (UXO) officer using magnetometer.
3. Trial pit remained dry and stable during excavation.
4. Trial pit backfilled with arisings upon completion.

All dimensions in metres | Scale: 1:28

Method Used:	Plant Used:	Logged By:	Checked By:
Machine dug	13 Ton Tracked Excavator	JCurnow	

GINT_LIBRARY_V10_01.GLB LibVersion: v8_07_001 PrjVersion: v8_07 | Log TRIAL PIT LOG - A4P | 52511 GRAVESHAM LEISURE.GPJ - v10_01. | 23/05/23 - 16:38 | JC12 |

RSK GEOSCIENCES

PRELIMINARY

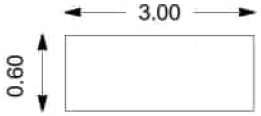
TRIAL PIT LOG

Contract:	Client:	Trial Pit:
Gravesham Leisure Centre	Furness Partnership	SA2

Contract Ref:	Start: 20.03.23	Ground Level:	National Grid Co-ordinate:	Sheet:
52511	End: 20.03.23	62.99	E:566991.5 N:171748.7	1 of 1

Samples and In-situ Tests				Water	Backfill	Description of Strata	Reduced Level	Depth (Thickness)	Material Graphic Legend
Depth	No	Type	Results						
0.00-0.20	1	ES	1xT+1xJ+1xV			Bituminous bound layer	62.94	0.05	
0.00		PID	0.0ppm			(MADE GROUND)	62.79	0.20	
0.20-0.40	2	ES	1xT+1xJ+1xV			Black gravelly fine to coarse SAND with frequent scalpings and ash. (MADE GROUND)	62.59	0.40	
0.60-1.00	3	D				Dark brown gravelly fine to coarse SAND with frequent brick and scalpings and rare metal. (MADE GROUND)	62.39	0.60	
						Creamy light brown gravelly sandy SILT. Gravel is subangular to surrounded fine to coarse white chalk with black specks. (WHITE CHALK SUBGROUP)			
1.60-2.00	4	D				Structureless CHALK composed of cream, gravelly SILT. Gravel is weak medium density white with black specks and subrounded. (Grade Dm) (WHITE CHALK SUBGROUP)		(2.40)	
2.60-3.00	5	D							
							59.99	3.00	
						Trial pit terminated at 3.00m depth.			

Plan (Not to Scale)



General Remarks

1. Position checked with Ground Penetrating Radar, CAT and Genny prior to excavation.
2. Checks for buried ferrous objects carried out during excavation by specialist unexploded ordnance (UXO) officer using magnetometer.
3. Trial pit remained dry and stable during excavation.
4. Trial pit backfilled with arisings upon completion.

All dimensions in metres | Scale: 1:28

Method Used:	Plant Used:	Logged By:	Checked By:
Machine dug	13 Ton Tracked Excavator	JCurnow	

AGS

GINT_LIBRARY_V10_01.GLB LibVersion: v8_07_001 PrjVersion: v8_07 | Log TRIAL PIT LOG - A4P | 52511 GRAVESHAM LEISURE.GPJ - v10_01. | 23/05/23 - 16:38 | JC12 |

RSK GEOSCIENCES

PRELIMINARY

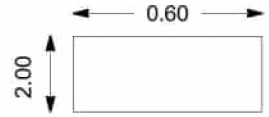
TRIAL PIT LOG

Contract:	Client:	Trial Pit:
Gravesham Leisure Centre	Furness Partnership	SA3

Contract Ref:	Start: 21.03.23	Ground Level:	National Grid Co-ordinate:	Sheet:
52511	End: ???	65.38	E:566928.9 N:171729.6	1 of 1

Samples and In-situ Tests				Water	Backfill	Description of Strata	Reduced Level	Depth (Thickness)	Material Graphic Legend
Depth	No	Type	Results						
0.00-0.10 0.00-0.30 0.00	1 2	ES ES PID	0.0ppm			Grass over: dark brown slightly sandy clayey SILT with roots and rootlets. Sand is fine to coarse. (TOPSOIL)	64.98	(0.40) 0.40	
0.40-0.80	3	D				Firm dark brown gravelly silty CLAY. Gravel is subangular to subrounded medium to coarse flint and chalk (REWORKED GROUND). . . . greenish grey mottled brown pockest of silty SAND.	64.48	(0.50) 0.90	
						Brown mottled white slighly sandy slighly gravelly clayey SILT. Gravel is subangular to subrounded fine to coarse chalk (REWORKED GROUND).	63.98	(0.50) 1.40	
1.80-2.10	4	D				Structureless CHALK composed of cream, gravelly SILT. Gravel is weak medium density white with black specks and subrounded. (Grade Dm) (WHITE CHALK SUBGROUP) . . . Cobbles and coarse gravels of flint observed	62.58	(1.40) 2.80	
						Trial pit terminated at 2.80m depth.			

Plan (Not to Scale)



General Remarks

1. Position checked with Ground Penetrating Radar, CAT and Genny prior to excavation.
2. Checks for buried ferrous objects carried out during excavation by specialist unexploded ordnance (UXO) officer using magnetometer.
3. Trial pit remained dry and stable during excavation.
4. Trial pit backfilled with arisings upon completion.

All dimensions in metres | Scale: 1:28

Method Used:	Plant Used:	Logged By:	Checked By:
Machine dug	13 Ton Tracked Excavator	SGurung	

AGS

GINT_LIBRARY_V10_01.GLB LibVersion: v8_07_001 PrjVersion: v8_07 | Log TRIAL PIT LOG - A4P | 52511 GRAVESHAM LEISURE.GPJ - v10_01. | 23/05/23 - 16:38 | JC12 |

RSK GEOSCIENCES

PRELIMINARY

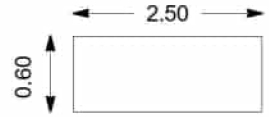
TRIAL PIT LOG

Contract:	Client:	Trial Pit:
Gravesham Leisure Centre	**Furness Partnership**	**TP1**

Contract Ref:	Start:	Ground Level:	National Grid Co-ordinate:	Sheet:
52511	**21.03.23** End: **21.03.23**	**68.00**	**E:567026.5 N:171559.5**	**1** of **1**

Samples and In-situ Tests				Water	Backfill	Description of Strata	Reduced Level	Depth (Thickness)	Material Graphic Legend
Depth	No	Type	Results						
0.00-0.30	1	ES	1xT+1xJ+1xV			Grass over dark brown silty clayey SAND with rootlets. (TOPSOIL)		(0.30)	
0.00		PID	0.0ppm				67.70	0.30	
0.30-0.60	2	D				Firm orangish brown sandy silty CLAY. (REWORKED GROUND)		(0.40)	
0.50		V	c_u=55				67.30	0.70	
0.70-1.00	3	D				Structureless CHALK composed of cream, gravelly SILT. Gravel is weak medium density white with black specks and subrounded with flint cobbles. (Grade Dm) (WHITE CHALK SUBGROUP)		(0.50)	
							66.80	1.20	
						Structureless CHALK composed of cream, gravelly SILT. Gravel is weak medium density white with black specks and subrounded with flint cobbles. (Grade Dm) (WHITE CHALK SUBGROUP)			
						. . . From 1.9m yellowish light brown staining.		(1.80)	
2.60-3.00	4	D							
							65.00	3.00	
						Trial pit terminated at 3.00m depth.			

Plan (Not to Scale)



General Remarks

1. Position checked with Ground Penetrating Radar, CAT and Genny prior to excavation.
2. Checks for buried ferrous objects carried out during excavation by specialist unexploded ordnance (UXO) officer using magnetometer.
3. Trial pit remained dry and stable during excavation.
4. Trial pit backfilled with arisings upon completion.

All dimensions in metres | Scale: **1:28**

Method Used:	Plant Used:	Logged By:	Checked By:
Machine dug	**13 Ton Tracked Excavator**	**JCurnow**	

AGS

GINT_LIBRARY_V10_01.GLB LibVersion: v8_07_001 PrjVersion: v8_07 | Log TRIAL PIT LOG - A4P | 52511 GRAVESHAM LEISURE.GPJ - v10_01. | 23/05/23 - 16:38 | JC12 |

PRELIMINARY

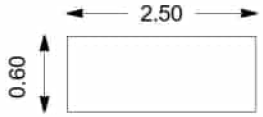
TRIAL PIT LOG

Contract:	Client:	Trial Pit:
Gravesham Leisure Centre	**Furness Partnership**	**TP2**

Contract Ref:	Start:	Ground Level:	National Grid Co-ordinate:	Sheet:
52511	**21.03.23** End: **21.03.23**	**65.70**	**E:567068.2 N:171689.8**	**1** of **1**

Samples and In-situ Tests				Water	Backfill	Description of Strata	Reduced Level	Depth (Thickness)	Material Graphic Legend
Depth	No	Type	Results						
0.00-0.10	1	ES	1xT+1xJ+1xV			Grass over dark brown silty SAND with rootlets. (TOPSOIL)	65.60	0.10	
0.00		PID	0.0ppm			Orange to light brown fine to coarse SAND with plastic bag. (MADE GROUND)	65.30	(0.30) 0.40	
						Firm dark brown gravelly sandy silty CLAY with rootlets. Gravel is angular to surrounded fine to coarse flint and chalk. Sand is fine to medium. (REWORKED GROUND)	65.10	0.60	
0.60-1.00	2	D				Firm orangish brown gravelly sandy silty CLAY with rootlets. Gravel is subangular to surrounded fine to medium chalk. Sand is fine to medium. (REWORKED GROUND)	64.70	(0.40) 1.00	
1.00-1.40	3	D				Structureless CHALK composed of cream, gravelly SILT. Gravel is weak medium density white with black specks and subrounded with flint cobbles. (Grade Dm) (WHITE CHALK SUBGROUP)	64.30	(0.40) 1.40	
						Structureless CHALK composed of cream, gravelly SILT. Gravel is weak medium density white with black specks and subrounded with flint cobbles. (Grade Dm) (WHITE CHALK SUBGROUP) . . . High flint content.		(1.60)	
2.60-3.00	4	D				. . . From 2.4m yellowish staining.	62.70	3.00	
						Trial pit terminated at 3.00m depth.			

Plan (Not to Scale)



General Remarks

1. Position checked with Ground Penetrating Radar, CAT and Genny prior to excavation.
2. Checks for buried ferrous objects carried out during excavation by specialist unexploded ordnance (UXO) officer using magnetometer.
3. Trial pit remained dry and stable during excavation.
4. Trial pit backfilled with arisings upon completion.

All dimensions in metres | Scale: **1:28**

Method Used:	Plant Used:	Logged By:	Checked By:
Machine dug	**13 Ton Tracked Excavator**	**JCurnow**	

AGS

GINT_LIBRARY_V10_01.GLB LibVersion: v8_07_001 PrjVersion: v8_07 | Log TRIAL PIT LOG - A4P | 52511 GRAVESHAM LEISURE.GPJ - v10_01. | 23/05/23 - 16:38 | JC12 |

RSK GEOSCIENCES

PRELIMINARY

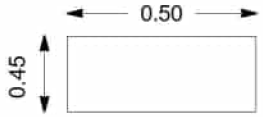
TRIAL PIT LOG

Contract:	Client:	Trial Pit:
Gravesham Leisure Centre	Furness Partnership	HP1

Contract Ref:	Start: 24.03.23	Ground Level:	National Grid Co-ordinate:	Sheet:
52511	End: 24.03.23	62.88	E:567038.0 N:171764.0	1 of 1

Samples and In-situ Tests				Water	Backfill	Description of Strata	Reduced Level	Depth (Thickness)	Material Graphic Legend
Depth	No	Type	Results						
0.00-0.30 0.00	1	ES PID	1xT+1xJ+1xV 0.0ppm			Dark brown gravelly clayey fine to coarse SAND with brick tarmac and plastic. (MADE GROUND)	62.48	(0.40) 0.40	
						Concrete. (MADE GROUND)	62.23	0.65	
						Structureless CHALK composed of cream, gravelly SILT. Gravel is weak medium density white with black specks and subrounded. (Grade Dm) (WHITE CHALK SUBGROUP)	62.18	0.70	
						Trial pit terminated at 0.70m depth.			

Plan (Not to Scale)



General Remarks

1. Position checked with Ground Penetrating Radar, CAT and Genny prior to excavation.
2. Checks for buried ferrous objects carried out during excavation by specialist unexploded ordnance (UXO) officer using magnetometer.
3. Trial pit remained dry and stable during excavation.
4. Trial pit backfilled with arisings upon completion.

All dimensions in metres | Scale: 1:28

Method Used:	Plant Used:	Logged By:	Checked By:
Hand dug	Hand tools	JCurnow	

AGS

GINT_LIBRARY_V10_01.GLB LibVersion: v8_07_001 PrjVersion: v8_07 | Log TRIAL PIT LOG - A4P | 52511 GRAVESHAM LEISURE.GPJ - v10_01. | 23/05/23 - 16:38 | JC12 |

RSK GEOSCIENCES

PRELIMINARY

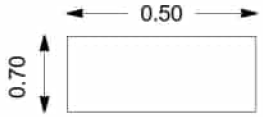
TRIAL PIT LOG

Contract:	Client:	Trial Pit:
Gravesham Leisure Centre	**Furness Partnership**	**HP2**

Contract Ref:	Start:	Ground Level:	National Grid Co-ordinate:	Sheet:
52511	**24.03.23** End: **24.03.23**	**64.60**	**E:567069.0 N:171758.0**	**1** of **1**

Samples and In-situ Tests				Water	Backfill	Description of Strata	Reduced Level	Depth (Thickness)	Material Graphic Legend
Depth	No	Type	Results						
0.00-0.30 0.00	1	ES PID	1xT+1xJ+1xV 0.0ppm			Grass over: dark brown silty fine to coarse SAND with bricks and concrete. (MADE GROUND) . . . Blue insulation foam observed at 0.90m depth.	63.20	(1.40) 1.40	
						Trial pit terminated at 1.40m depth due to collapse.			

Plan (Not to Scale)



General Remarks

1. Position checked with Ground Penetrating Radar, CAT and Genny prior to excavation.
2. Checks for buried ferrous objects carried out during excavation by specialist unexploded ordnance (UXO) officer using magnetometer.
3. Trial pit was unstable below 0.50m depth.
4. Trial pit remained dry during excavation.
5. Trial pit backfilled with arisings upon completion.

All dimensions in metres | Scale: **1:28**

Method Used:	Plant Used:	Logged By:	Checked By:
Hand dug	**Hand tools**	**JCurnow**	

AGS

GINT_LIBRARY_V10_01.GLB LibVersion: v8_07_001 PrjVersion: v8_07 | Log TRIAL PIT LOG - A4P | 52511 GRAVESHAM LEISURE.GPJ - v10_01. | 23/05/23 - 16:39 | JC12 |

RSK GEOSCIENCES

PRELIMINARY

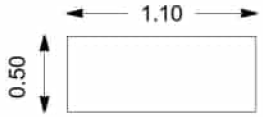
TRIAL PIT LOG

Contract:	Client:	Trial Pit:
Gravesham Leisure Centre	Furness Partnership	HP3

Contract Ref:	Start:	Ground Level:	National Grid Co-ordinate:	Sheet:
52511	23.03.23 End: 23.03.23	64.59	E:567125.0 N:171747.0	1 of 1

Samples and In-situ Tests				Water	Backfill	Description of Strata	Reduced Level	Depth (Thickness)	Material Graphic Legend
Depth	No	Type	Results						
0.00		PID	0.0ppm			Grass over: dark brown gravelly silty fine to medium SAND. Gravel is subangular to subrounded fine to medium flint. (TOPSOIL)	64.39	0.20	
0.20-0.40	1	ES	1xT+1xJ+1xV			Light brown gravelly coarse SAND with brick and concrete. (MADE GROUND)	64.19	0.40	
						Concrete. (MADE GROUND)	63.94	0.65	
						Light brown gravelly sandy SILT with concrete. Gravel is subangular medium chalk. Sand is fine to medium. (MADE GROUND) Trial pit terminated at 0.65m depth.			

Plan (Not to Scale)



General Remarks

1. Position checked with Ground Penetrating Radar, CAT and Genny prior to excavation.
2. Checks for buried ferrous objects carried out during excavation by specialist unexploded ordnance (UXO) officer using magnetometer.
3. Trial pit remained dry and stable during excavation.
4. Trial pit backfilled with arisings upon completion.

All dimensions in metres | Scale: 1:28

Method Used:	Plant Used:	Logged By:	Checked By:
Hand dug	Hand tools	JCurnow	

AGS

GINT_LIBRARY_V10_01.GLB LibVersion: v8_07_001 PrjVersion: v8_07 | Log TRIAL PIT LOG - A4P | 52511 GRAVESHAM LEISURE.GPJ - v10_01. | 23/05/23 - 16:39 | JC12 |

RSK GEOSCIENCES

PRELIMINARY

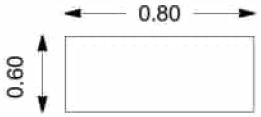
TRIAL PIT LOG

Contract:	Client:	Trial Pit:
Gravesham Leisure Centre	**Furness Partnership**	**HP4**

Contract Ref:	Start:	Ground Level:	National Grid Co-ordinate:	Sheet:
52511	**23.03.23** End: **23.03.23**	**64.83**	**E:567087.2 N:171717.4**	**1** of **1**

Samples and In-situ Tests				Water	Backfill	Description of Strata	Reduced Level	Depth (Thickness)	Material Graphic Legend
Depth	No	Type	Results						
0.00-0.30 0.00	1	ES PID	1xT+1xJ+1xV 0.0ppm			Grass over: light brown gravelly fine to medium SAND with frequent bricks. Gravel is subangular fine to coarse flint. (MADE GROUND)	64.58	0.25	
						Concrete. (MADE GROUND)	64.33	0.50	
						Creamy light brown gravelly SILT. Gravel is subangular fine to medium chalk (REWORKED GROUND).	64.18	0.65	
						Trial pit terminated at 0.65m depth.			

Plan (Not to Scale)



General Remarks

1. Position checked with Ground Penetrating Radar, CAT and Genny prior to excavation.
2. Checks for buried ferrous objects carried out during excavation by specialist unexploded ordnance (UXO) officer using magnetometer.
3. Trial pit remained dry and stable during excavation.
4. Trial pit backfilled with arisings upon completion.

All dimensions in metres | Scale: **1:28**

Method Used:	Plant Used:	Logged By:	Checked By:
Hand dug	**Hand tools**	**JCurnow**	

AGS

GINT_LIBRARY_V10_01.GLB LibVersion: v8_07_001 PrjVersion: v8_07 | Log TRIAL PIT LOG - A4P | 52511 GRAVESHAM LEISURE.GPJ - v10_01. | 23/05/23 - 16:39 | JC12 |

RSK GEOSCIENCES

PRELIMINARY

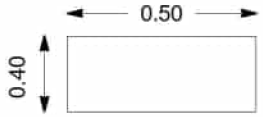
TRIAL PIT LOG

Contract:	Client:	Trial Pit:
Gravesham Leisure Centre	**Furness Partnership**	**HP5**

Contract Ref:	Start:	Ground Level:	National Grid Co-ordinate:	Sheet:
52511	**23.03.23** End: **23.03.23**	**63.70**	**E:567028.1 N:171735.7**	**1** of **1**

Samples and In-situ Tests				Water	Backfill	Description of Strata	Reduced Level	Depth (Thickness)	Material Graphic Legend
Depth	No	Type	Results						
0.00-0.30 0.00	es	ES PID	1xT+1xJ+1xV 0.0ppm			Grass over: dark brown gravelly silty clayey fine to medium SAND with rootlets and concrete. Gravel is subangular fine to medium chalk. (MADE GROUND)	63.30	(0.40) 0.40	
						Brick and concrete fill. (MADE GROUND)	62.90	(0.40) 0.80	
						Concrete. (MADE GROUND)	62.85	0.85	
						Trial pit terminated at 0.85m depth.			

Plan (Not to Scale)



General Remarks

1. Position checked with Ground Penetrating Radar, CAT and Genny prior to excavation.
2. Checks for buried ferrous objects carried out during excavation by specialist unexploded ordnance (UXO) officer using magnetometer.
3. Trial pit remained dry and stable during excavation.
4. Trial pit backfilled with arisings upon completion.

All dimensions in metres | Scale: **1:28**

Method Used:	Plant Used:	Logged By:	Checked By:
Hand dug	**Hand tools**	**JCurnow**	

AGS

GINT_LIBRARY_V10_01.GLB LibVersion: v8_07_001 PrjVersion: v8_07 | Log TRIAL PIT LOG - A4P | 52511 GRAVESHAM LEISURE.GPJ - v10_01. | 23/05/23 - 16:39 | JC12 |

RSK GEOSCIENCES

PRELIMINARY

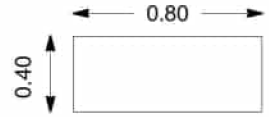
TRIAL PIT LOG

Contract:	Client:	Trial Pit:
Gravesham Leisure Centre	Furness Partnership	HP6

Contract Ref:	Start: 24.03.23	Ground Level:	National Grid Co-ordinate:	Sheet:
52511	End: 24.03.23	63.26	E:567072.9 N:171776.7	1 of 1

Samples and In-situ Tests				Water	Backfill	Description of Strata	Reduced Level	Depth (Thickness)	Material Graphic Legend
Depth	No	Type	Results						
						Grass over: light brown gravelly silty fine to medium SAND with rare metal and wood. Gravel is subangular fine to coarse chalk. (MADE GROUND)	62.96	(0.30) 0.30	
						Creamy light brown gravelly SILT. Gravel is subangular to subrounded fine to coarse chalk and flint cobbles (REWORKED GROUND).	62.06	(0.90) 1.20	
						Concrete. (MADE GROUND) Trial pit terminated at 1.20m depth due to collapse.			

Plan (Not to Scale)



General Remarks

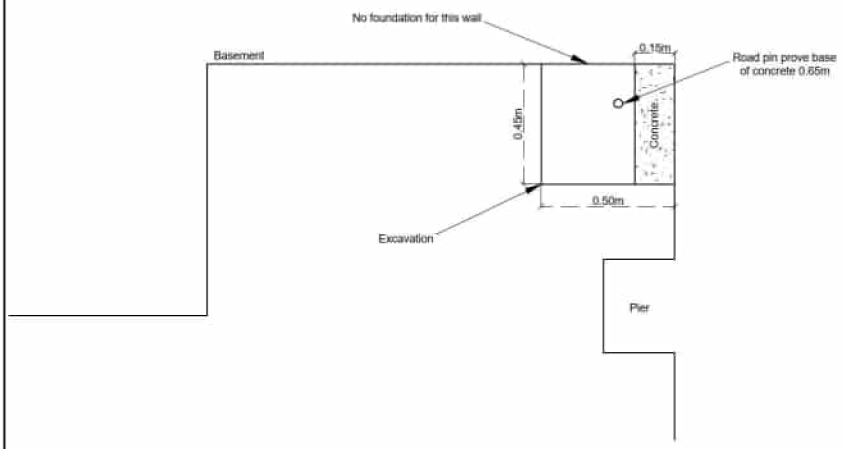
1. Position checked with Ground Penetrating Radar, CAT and Genny prior to excavation.
2. Checks for buried ferrous objects carried out during excavation by specialist unexploded ordnance (UXO) officer using magnetometer.
3. Trial pit was unstable below 0.50m depth.
4. Trial pit remained dry during excavation.
5. Trial pit backfilled with arisings upon completion.

All dimensions in metres | Scale: 1:28

Method Used:	Plant Used:	Logged By:	Checked By:
Hand dug	Hand tools	JCurnow	

GINT_LIBRARY_V10_01.GLB LibVersion: v8_07_001 PrjVersion: v8_07 | Log TRIAL PIT LOG - A4P | 52511 GRAVESHAM LEISURE.GPJ - v10_01. | 23/05/23 - 16:39 | JC12 |

HP1 - Plan View



HP1 - Side View



LEGEND

Brick

Concrete

Chalk

Rev	Date	Amendment	Drawn	Chkd	Appd
C01	05.04.23	First issue	LS	JC	JC

RSK GEOSCIENCES
Aylerley Court
Half Moon Lane
Tonbridge, Kent
TN11 9HU
Tel: +44(0)1332 542740
Email: info@rsk.co.uk
Web: www.rsk.co.uk

Client
Furness Partnership

Project Name
Gravesham Leisure Centre

Description
HP1 Foundation Inspection Pit Diagram

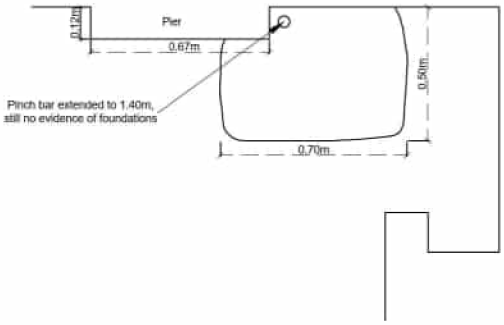
Project ID	Drawing no.	Revision
52511	51201	C01

File name
52511-TO-512-SS-D-C-51201-C01

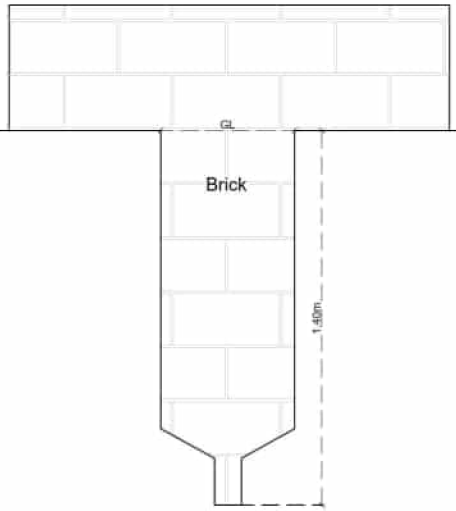
Dimensions	Scale	Size
m	1:20	A4

0 2 4 6 8 10m

HP2 - Plan View



HP2 - Side View



LEGEND

Brick

Rev	Date	Amendment	Drawn	Chkd	Appd
C01	05.04.23	First Issue	LS	JC	JC

RSK GEOSCIENCES
Aylerley Court
Half Moon Lane
Tonbridge, Kent
TN11 8HU
Tel: +44(0)1332 542740
Email: info@rsk.co.uk
Web: www.rsk.co.uk

Client
Furness Partnership

Project Name
Gravesham Leisure Centre

Description
HP2 Foundation Inspection Pit Diagram

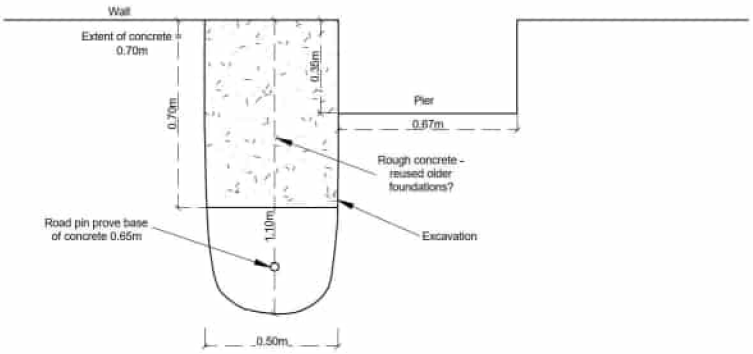
Project ID	Drawing no.	Revision
52511	51202	C01

File name
52511-TO-512-SS-D-C-51202-C01

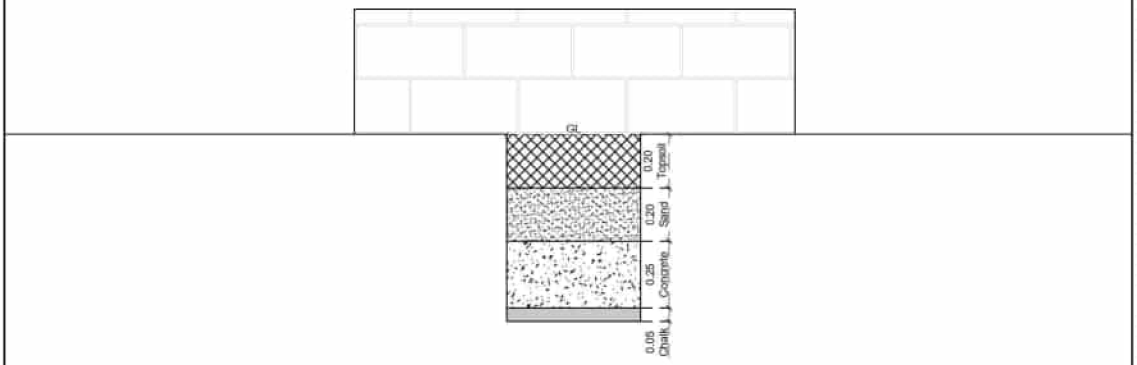
Dimensions	Scale	Size
m	1:20	A4

0 2 4 6 8 10m

HP3 - Plan View



HP3 - Side View



LEGEND

Brick

Concrete

Chalk

Rev	Date	Amendment	Drawn	Chkd	Appd
C01	05.04.23	First issue	LS	JC	JC

RSK GEOSCIENCES
Aylerley Court
Half Moon Lane
Tonbridge, Kent
TN11 9HU
Tel: +44(0)1332 542740
Email: info@rsk.co.uk
Web: www.rsk.co.uk

Client
Furness Partnership

Project Name
Gravesham Leisure Centre

Description
HP3 Foundation Inspection Pit Diagram

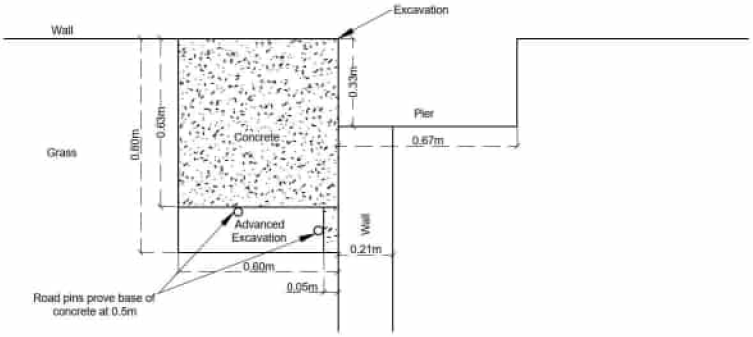
Project ID	Drawing no.	Revision
52511	51203	C01

File name
52511-TO-512-SS-D-C-51203-C01

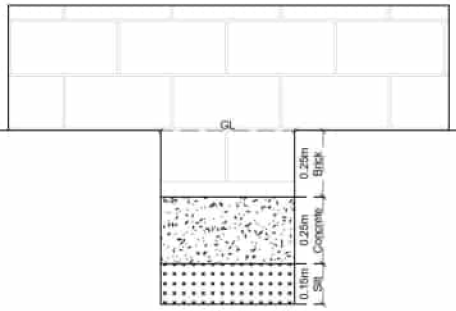
Dimensions	Scale	Size
m	1:20	A4

0 2 4 6 8 10m

HP4 - Plan View



HP4 - Side View



LEGEND

Brick

Concrete

Silt

Rev	Date	Amendment	Drawn	Chkd	Appd
C01	05.04.23	First Issue	LS	JC	JC

RSK GEOSCIENCES

Aylerley Court
Half Moon Lane
Tonbridge, Kent
TN11 9HJ

Tel: +44(0)1332 542740
Email: info@rsk.co.uk
Web: www.rsk.co.uk

Client
Furness Partnership

Project Name
Gravesham Leisure Centre

Description
HP4 Foundation Inspection Pit Diagram

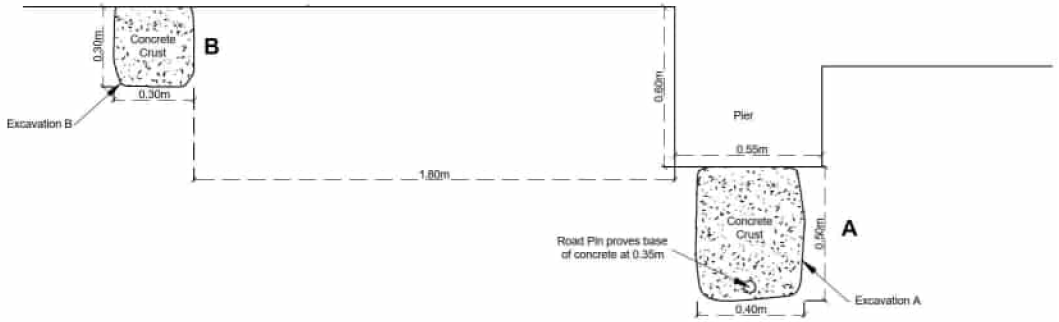
Project ID	Drawing no.	Revision
52511	51204	C01

File name
52511-TO-512-SS-D-C-51204-C01

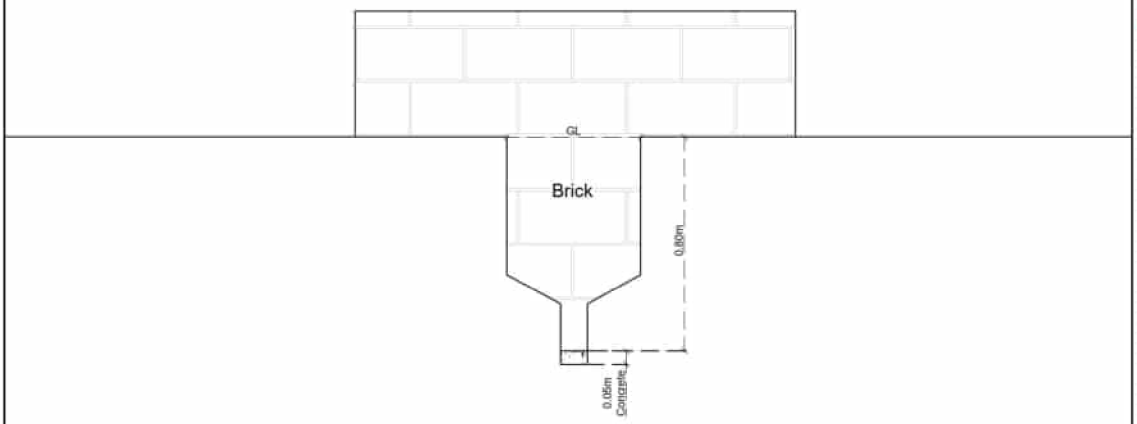
Dimensions	Scale	Size
m	1:20	A4

0 2 4 6 8 10m

HP5 - Plan View



HP5 - Side View



LEGEND

Brick

Rev	Date	Amendment	Drawn	Chkd	Appd
C01	05.04.23	First Issue	LS	JC	JC

RSK GEOSCIENCES
Aylerley Court
Half Moon Lane
Tonbridge, Kent
TN11 9HJ
Tel: +44(0)1332 542740
Email: info@rsk.co.uk
Web: www.rsk.co.uk

Client: Furness Partnership

Project Name: Gravesham Leisure Centre

Description: HP5 Foundation Inspection Pit Diagram

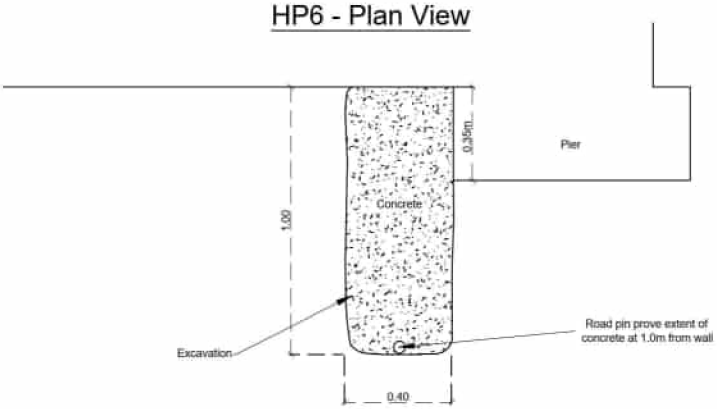
Project ID	Drawing no.	Revision
52511	51205	C01

File name: 52511-TO-512-SS-D-C-51205-C01

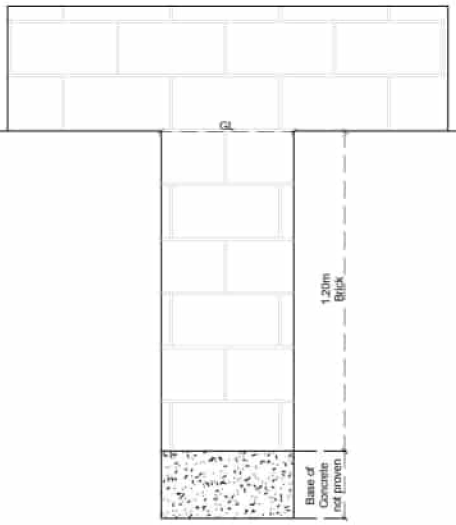
Dimensions	Scale	Size
m	1:20	A4

0 2 4 6 8 10m

HP6 - Plan View



HP6 - Side View



LEGEND

Rev	Date	Amendment	Drawn	Chkd	Appd
C01	05.04.23	First issue	LS	JC	JC

RSK GEOSCIENCES
Aylesley Court
Hall Moon Lane
Tonbridge, Kent
TN11 8HU
Tel: +44(0)1332 542740
Email: info@rsk.co.uk
Web: www.rsk.co.uk

Client: Furness Partnership

Project Name: Gravesham Leisure Centre

Description: HP6 Foundation Inspection Pit Diagram

Project ID	Drawing no.	Revision
52511	51206	C01

File name: 52511-TO-512-SS-D-C-51206-C01

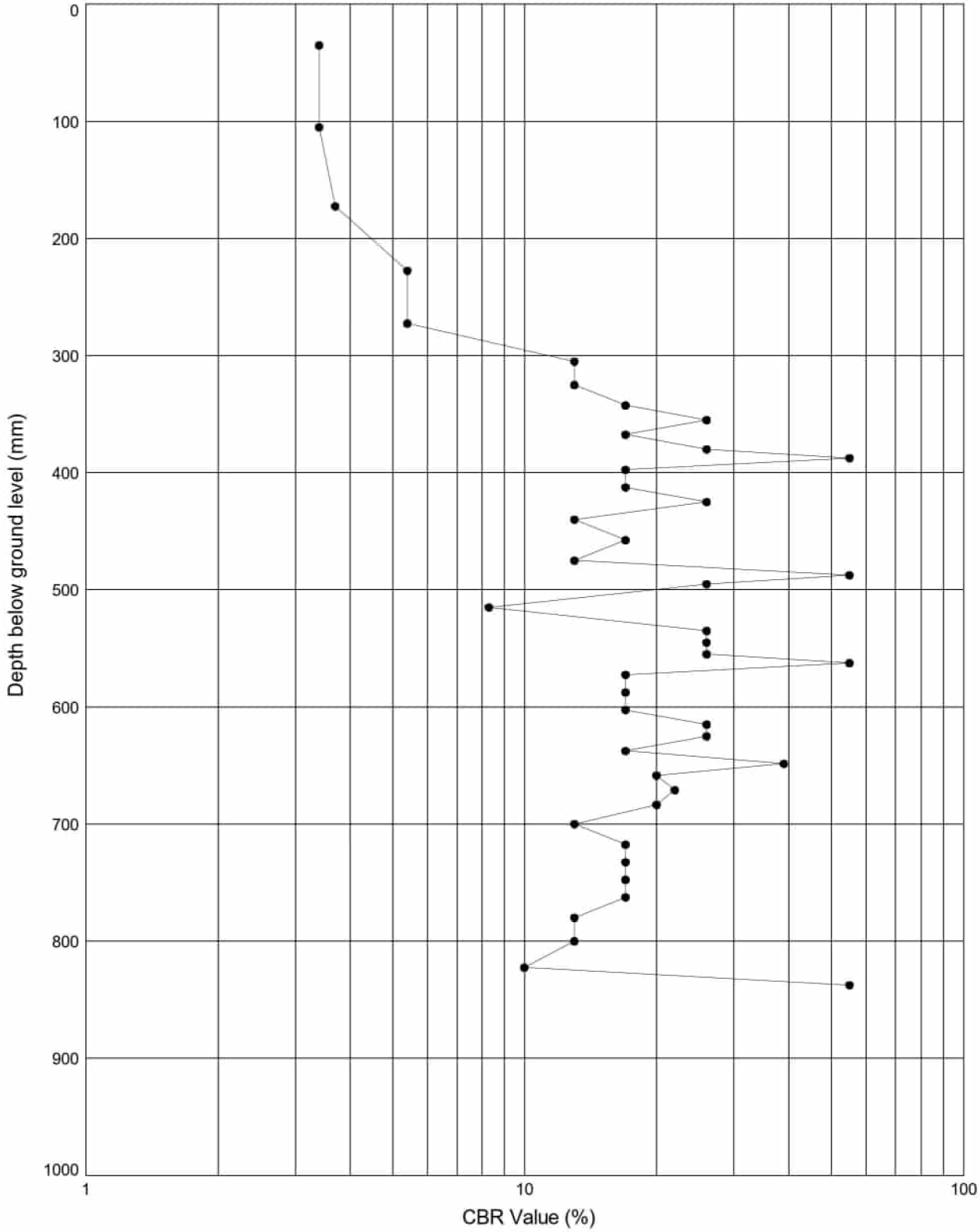
Dimensions	Scale	Size
m	1:20	A4

0 2 4 6 8 10m

DCP TEST RESULTS - DEPTH vs CBR VALUE

Position Ref : **BH3** Test Date : **27.03.23** Test Number : **1**

Ground Level: **66.92** National Grid Co-ordinates: **E:567107.6 N:171632.8**



Notes: **CBR values calculated after TRRL Road Note 8 method. Values over 100% are plotted on the 100% line.**

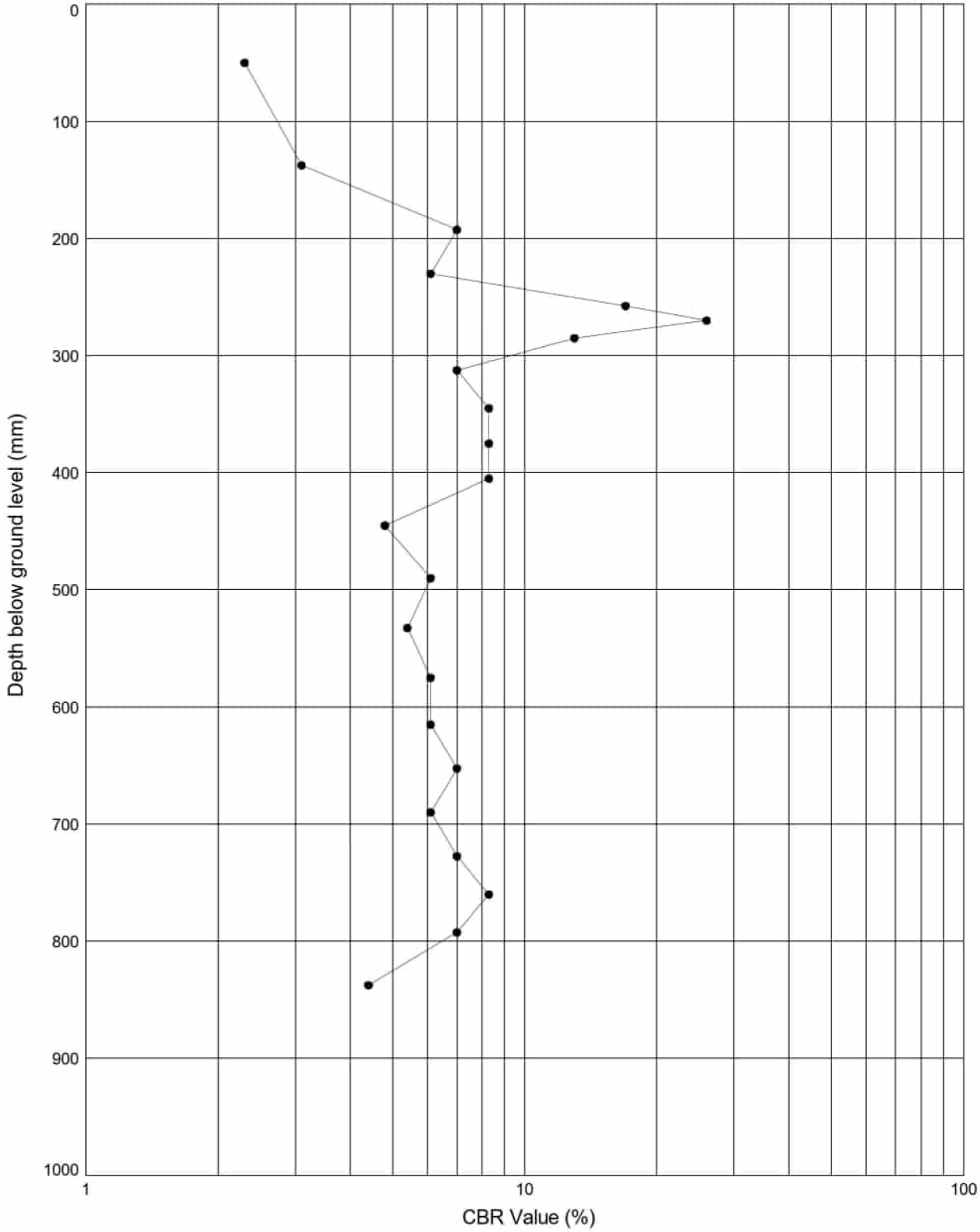
Anerley Court Half Moon Lane Hildenborough Tonbridge Kent, TN11 9HU	Compiled By [redacted]	Date 29/03/23	Checked By	Date
	Contract **Gravesham Leisure Centre**		Contract Ref: **52511**	

GINT_LIBRARY_V10_01.GLB LibVersion: v8_07_001 PrjVersion: v8_07 | Graph I - DCP - 2 - CBR VALUE VS DEPTH - A4P | 52511 GRAVESHAM LEISURE.GPJ - v10_01. | 29/03/23 - 09:26 | KT3 |

DCP TEST RESULTS - DEPTH vs CBR VALUE

Position Ref : **SA3** Test Date : **27.03.23** Test Number : **1**

Ground Level: **65.38** National Grid Co-ordinates: **E:566928.9 N:171729.6**



Notes: **CBR values calculated after TRRL Road Note 8 method. Values over 100% are plotted on the 100% line.**

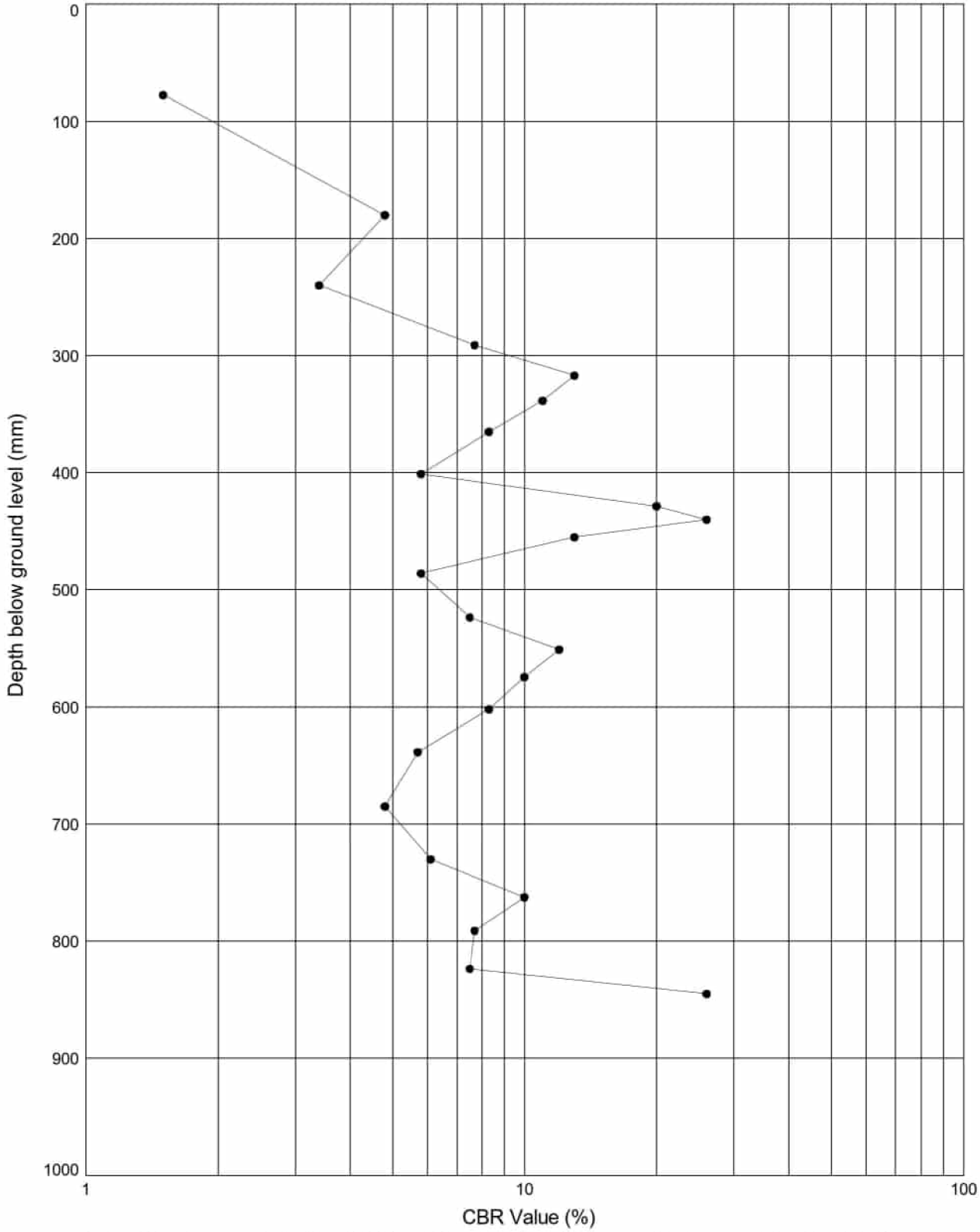
Anerley Court Half Moon Lane Hildenborough Tonbridge Kent, TN11 9HU	Compiled By [redacted]	Date 29/03/23	Checked By	Date
	Contract **Gravesham Leisure Centre**		Contract Ref: **52511**	

GINT_LIBRARY_V10_01.GLB LibVersion: v8_07_001 PrjVersion: v8_07 | Graph I - DCP - 2 - CBR VALUE VS DEPTH - A4P | 52511 GRAVESHAM LEISURE.GPJ - v10_01. | 29/03/23 - 09:26 | KT3 |

DCP TEST RESULTS - DEPTH vs CBR VALUE

Position Ref : **TP1** Test Date : **27.03.23** Test Number : **1**

Ground Level: **68.00** National Grid Co-ordinates: **E:567026.5 N:171559.5**



Notes: **CBR values calculated after TRRL Road Note 8 method. Values over 100% are plotted on the 100% line.**

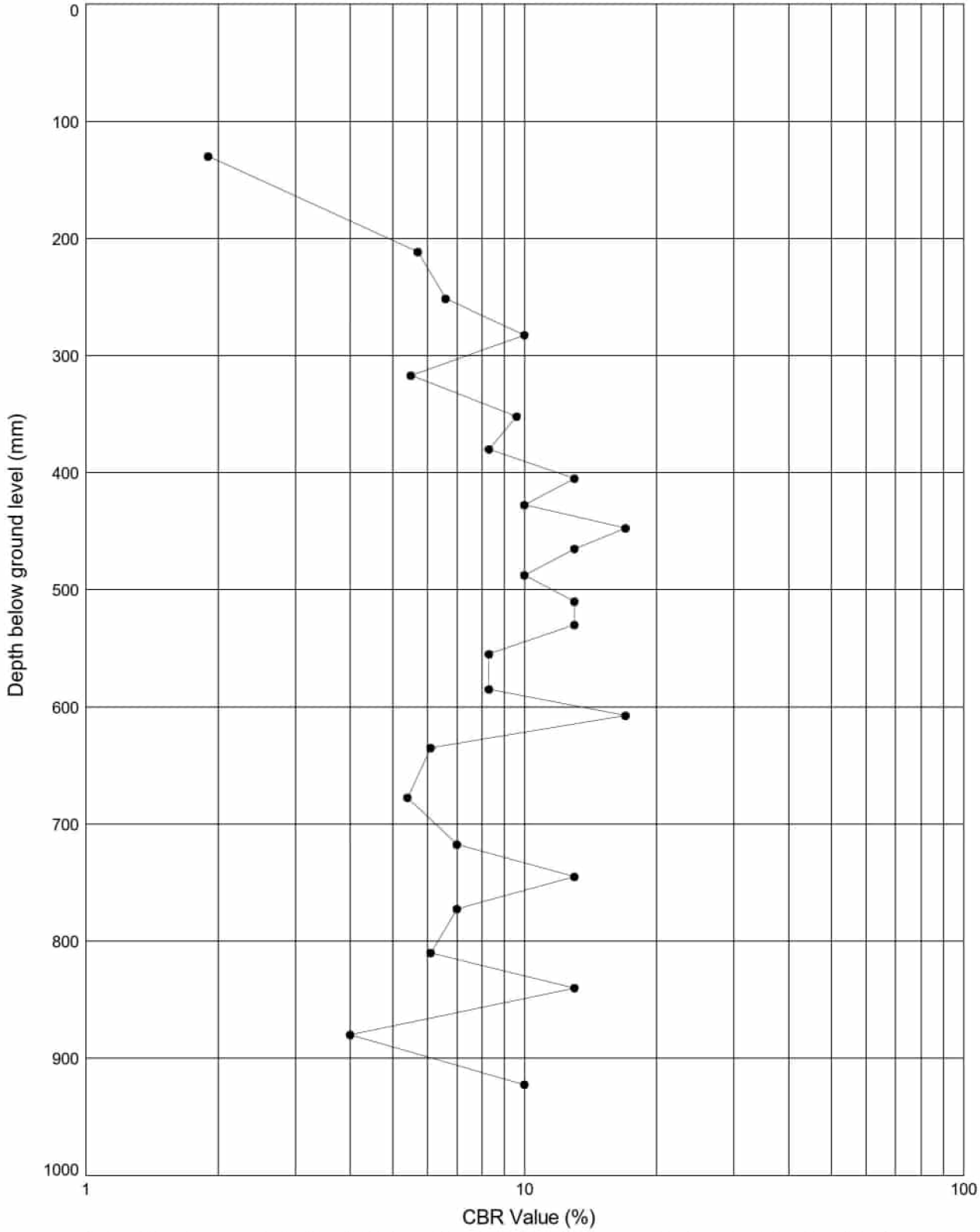
	Compiled By	Date	Checked By	Date
Anerley Court Half Moon Lane Hildenborough Tonbridge Kent, TN11 9HU	[redacted]	29/03/23		
	Contract **Gravesham Leisure Centre**		Contract Ref: **52511**	

GINT_LIBRARY_V10_01.GLB LibVersion: v8_07_001 PrjVersion: v8_07 | Graph I - DCP - 2 - CBR VALUE VS DEPTH - A4P | 52511 GRAVESHAM LEISURE.GPJ - v10_01. | 29/03/23 - 09:26 | KT3 |

DCP TEST RESULTS - DEPTH vs CBR VALUE

Position Ref : **TP2** Test Date : **27.03.23** Test Number : **1**

Ground Level: **65.70** National Grid Co-ordinates: **E:567068.2 N:171689.8**



Notes: **CBR values calculated after TRRL Road Note 8 method. Values over 100% are plotted on the 100% line.**

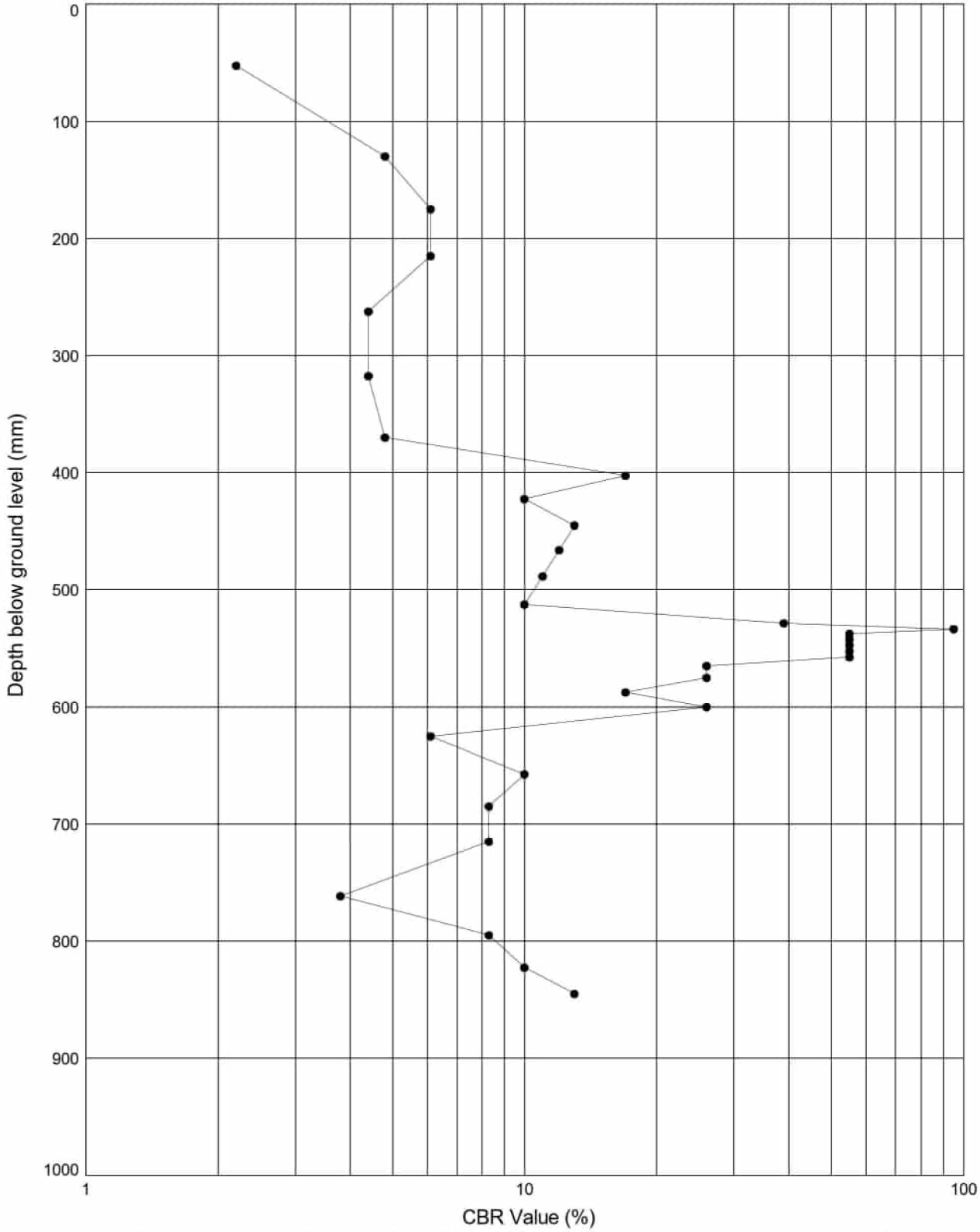
Anerley Court Half Moon Lane Hildenborough Tonbridge Kent, TN11 9HU	Compiled By [redacted]	Date 29/03/23	Checked By	Date
	Contract **Gravesham Leisure Centre**		Contract Ref: **52511**	

GINT_LIBRARY_V10_01.GLB LibVersion: v8_07_001 PrjVersion: v8_07 | Graph I - DCP - 2 - CBR VALUE VS DEPTH - A4P | 52511 GRAVESHAM LEISURE.GPJ - v10_01. | 29/03/23 - 09:26 | KT3 |

DCP TEST RESULTS - DEPTH vs CBR VALUE

Position Ref : **WS1** Test Date : **27.03.23** Test Number : **1**

Ground Level: **65.08** National Grid Co-ordinates: **E:567056.6 N:171710.6**



Notes: **CBR values calculated after TRRL Road Note 8 method. Values over 100% are plotted on the 100% line.**

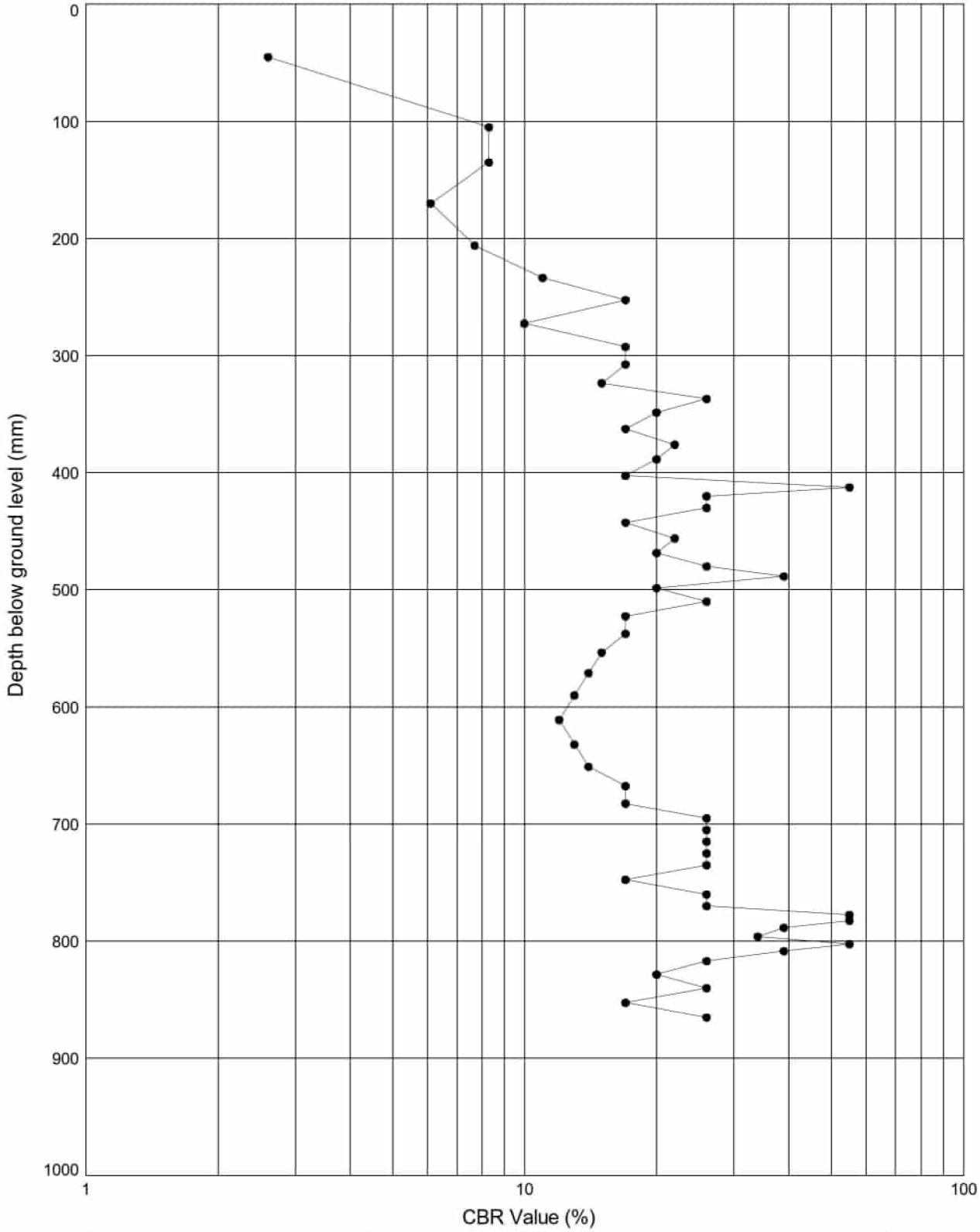
Anerley Court Half Moon Lane Hildenborough Tonbridge Kent, TN11 9HU	Compiled By [redacted]	Date 29/03/23	Checked By	Date
	Contract **Gravesham Leisure Centre**		Contract Ref: **52511**	

GINT_LIBRARY_V10_01.GLB LibVersion: v8_07_001 PrjVersion: v8_07 | Graph I - DCP - 2 - CBR VALUE VS DEPTH - A4P | 52511 GRAVESHAM LEISURE.GPJ - v10_01. | 29/03/23 - 09:26 | KT3 |

DCP TEST RESULTS - DEPTH vs CBR VALUE

Position Ref : **WS2** Test Date : **27.03.23** Test Number : **1**

Ground Level: **65.83** National Grid Co-ordinates: **E:567119.2 N:171686.2**



Notes: **CBR values calculated after TRRL Road Note 8 method. Values over 100% are plotted on the 100% line.**

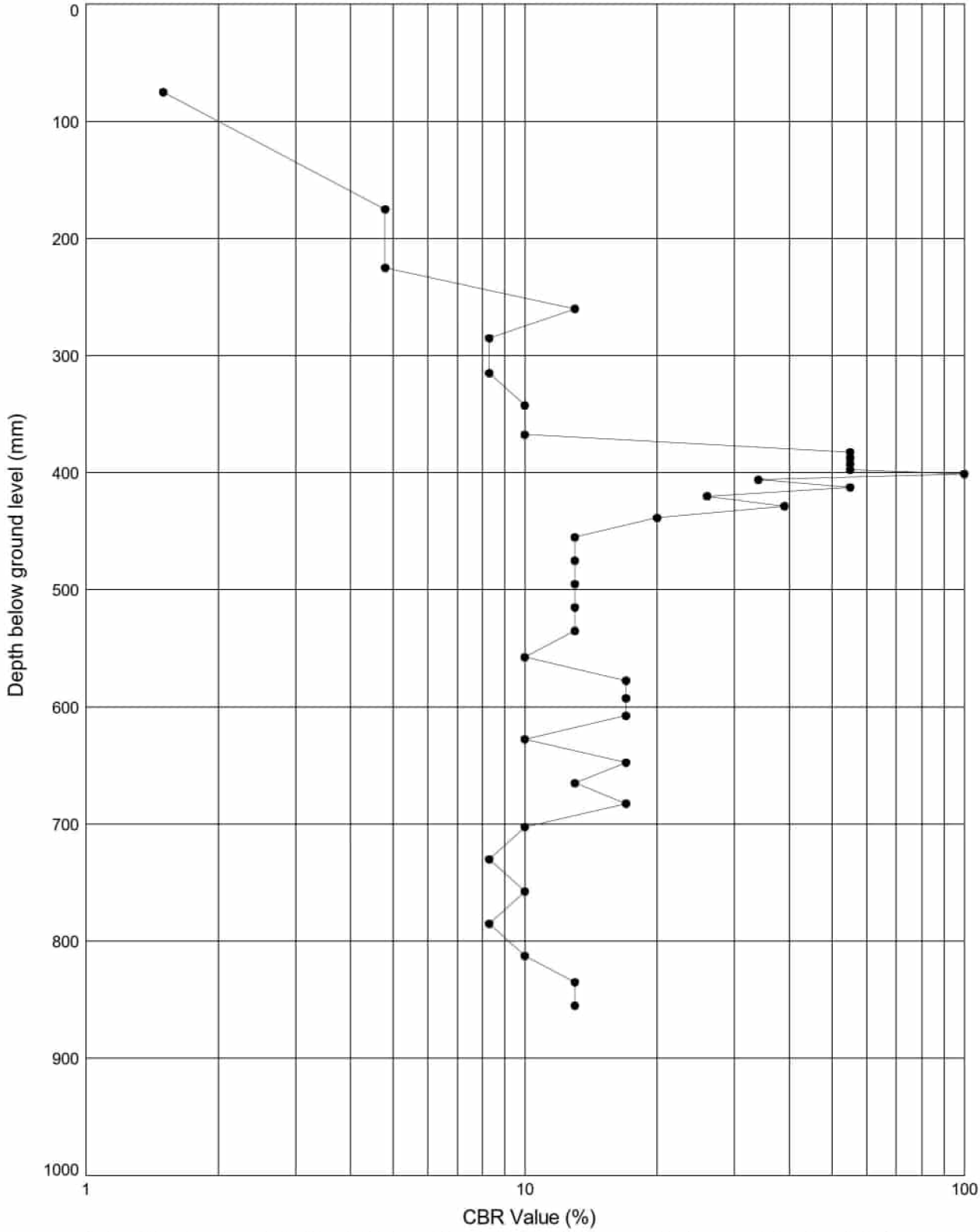
Anerley Court Half Moon Lane Hildenborough Tonbridge Kent, TN11 9HU	[redacted]	Date 29/03/23	Checked By	Date
	Contract **Gravesham Leisure Centre**		Contract Ref: **52511**	

GINT_LIBRARY_V10_01.GLB LibVersion: v8_07_001 PrjVersion: v8_07 | Graph I - DCP - 2 - CBR VALUE VS DEPTH - A4P | 52511 GRAVESHAM LEISURE.GPJ - v10_01. | 29/03/23 - 09:26 | KT3 |

DCP TEST RESULTS - DEPTH vs CBR VALUE

Position Ref : **WS3** Test Date : **27.03.23** Test Number : **1**

Ground Level: **66.87** National Grid Co-ordinates: **E:567138.0 N:171650.0**



Notes: **CBR values calculated after TRRL Road Note 8 method. Values over 100% are plotted on the 100% line.**

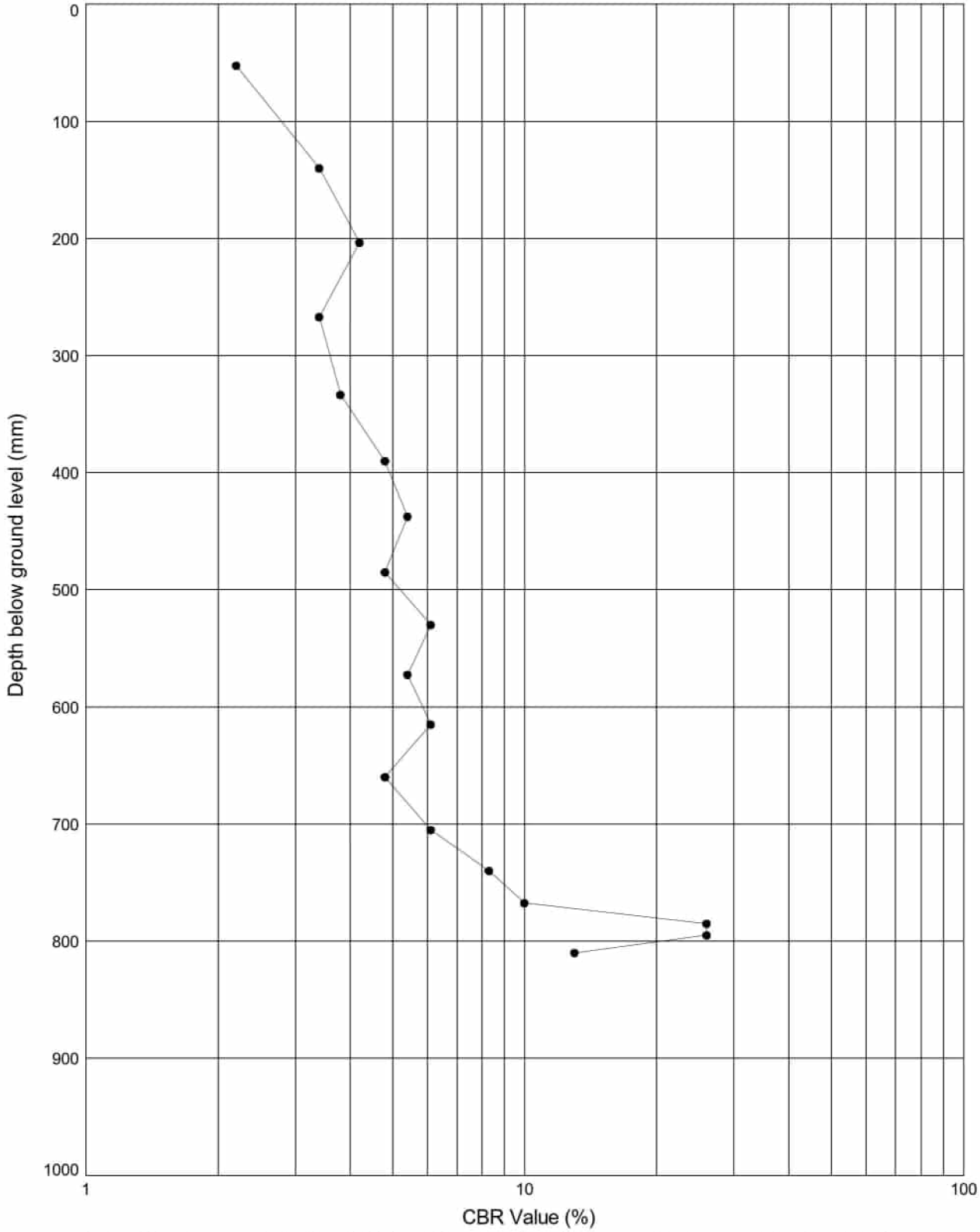
Anerley Court Half Moon Lane Hildenborough Tonbridge Kent, TN11 9HU	Compiled By [redacted]	Date 29/03/23	Checked By	Date
	Contract **Gravesham Leisure Centre**		Contract Ref: **52511**	

GINT_LIBRARY_V10_01.GLB LibVersion: v8_07_001 PrjVersion: v8_07 | Graph I - DCP - 2 - CBR VALUE VS DEPTH - A4P | 52511 GRAVESHAM LEISURE.GPJ - v10_01. | 29/03/23 - 09:26 | KT3 |

DCP TEST RESULTS - DEPTH vs CBR VALUE

Position Ref : **WS4** Test Date : **27.03.23** Test Number : **1**

Ground Level: **67.27** National Grid Co-ordinates: **E:567047.3 N:171597.0**



Notes: **CBR values calculated after TRRL Road Note 8 method. Values over 100% are plotted on the 100% line.**

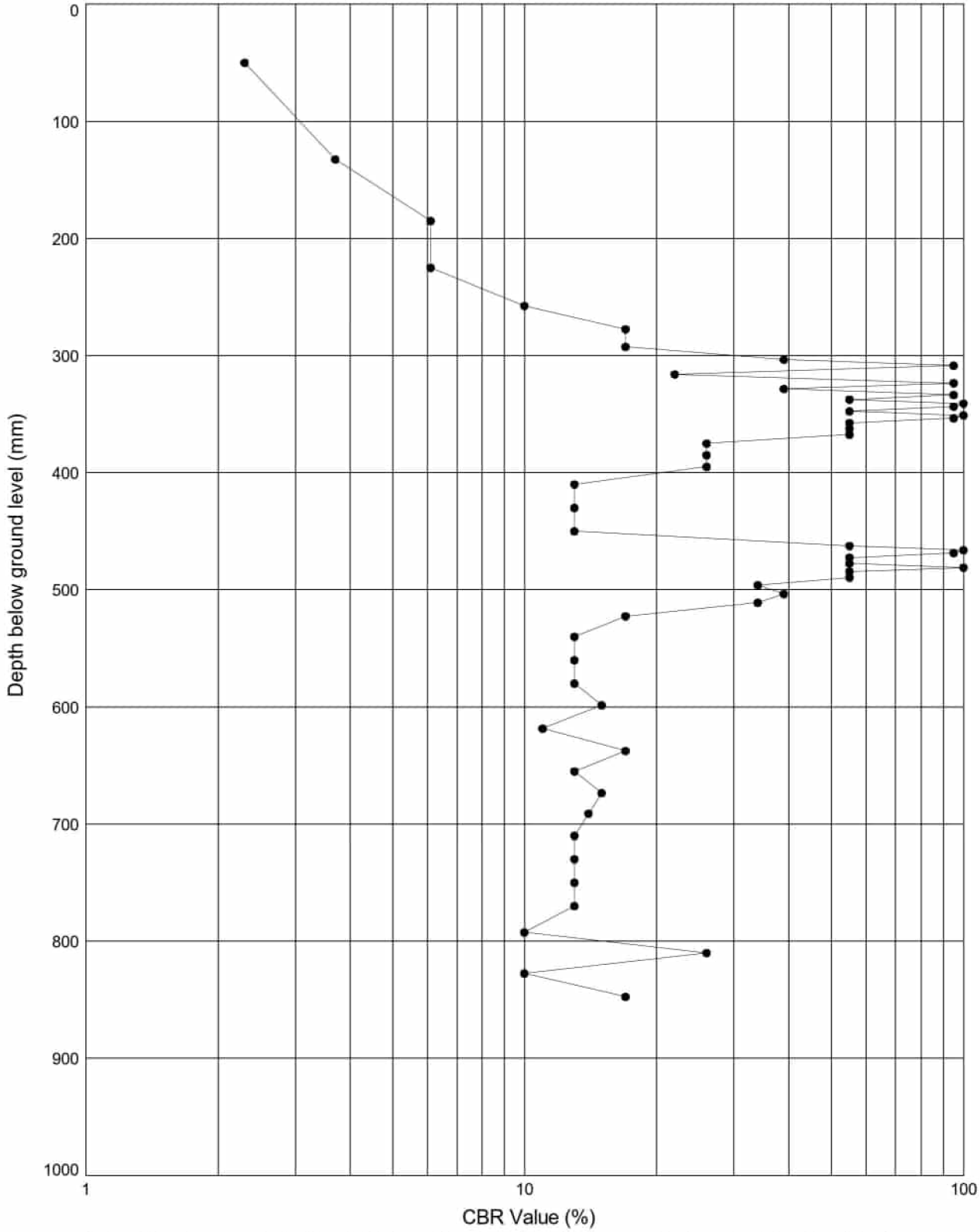
Anerley Court Half Moon Lane Hildenborough Tonbridge Kent, TN11 9HU	Compiled By [redacted]	Date 29/03/23	Checked By	Date
	Contract **Gravesham Leisure Centre**		Contract Ref: **52511**	

GINT_LIBRARY_V10_01.GLB LibVersion: v8_07_001 PrjVersion: v8_07 | Graph I - DCP - 2 - CBR VALUE VS DEPTH - A4P | 52511 GRAVESHAM LEISURE.GPJ - v10_01. | 29/03/23 - 09:26 | KT3 |

DCP TEST RESULTS - DEPTH vs CBR VALUE

Position Ref : **WS5** Test Date : **27.03.23** Test Number : **1**

Ground Level: **66.49** National Grid Co-ordinates: **E:566961.6 N:171662.6**



Notes: **CBR values calculated after TRRL Road Note 8 method. Values over 100% are plotted on the 100% line.**

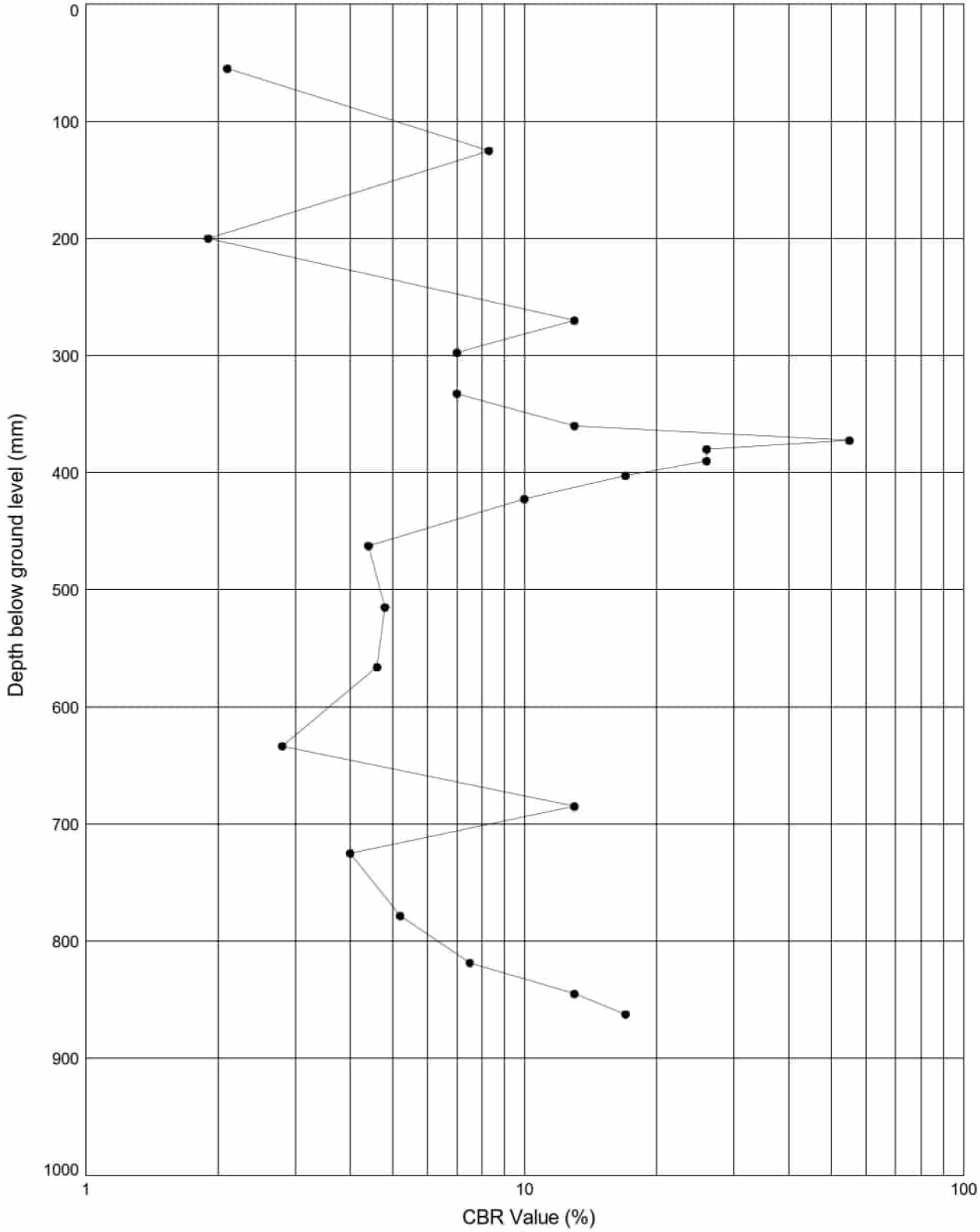
Anerley Court Half Moon Lane Hildenborough Tonbridge Kent, TN11 9HU	Compiled By [redacted]	Date 29/03/23	Checked By	Date
	Contract **Gravesham Leisure Centre**		Contract Ref: **52511**	

GINT_LIBRARY_V10_01.GLB LibVersion: v8_07_001 PrjVersion: v8_07 | Graph I - DCP - 2 - CBR VALUE VS DEPTH - A4P | 52511 GRAVESHAM LEISURE.GPJ - v10_01. | 29/03/23 - 09:26 | KT3 |

DCP TEST RESULTS - DEPTH vs CBR VALUE

Position Ref : **WS6** Test Date : **27.03.23** Test Number : **1**

Ground Level: **65.94** National Grid Co-ordinates: **E:567013.1 N:171694.6**



Notes: **CBR values calculated after TRRL Road Note 8 method. Values over 100% are plotted on the 100% line.**

Anerley Court Half Moon Lane Hildenborough Tonbridge Kent, TN11 9HU	Compiled By [redacted]	Date 29/03/23	Checked By	Date
	Contract **Gravesham Leisure Centre**		Contract Ref: **52511**	

GINT_LIBRARY_V10_01.GLB LibVersion: v8_07_001 PrjVersion: v8_07 | Graph I - DCP - 2 - CBR VALUE VS DEPTH - A4P | 52511 GRAVESHAM LEISURE.GPJ - v10_01. | 29/03/23 - 09:26 | KT3 |

FULL SCALE SOAKAWAY TEST

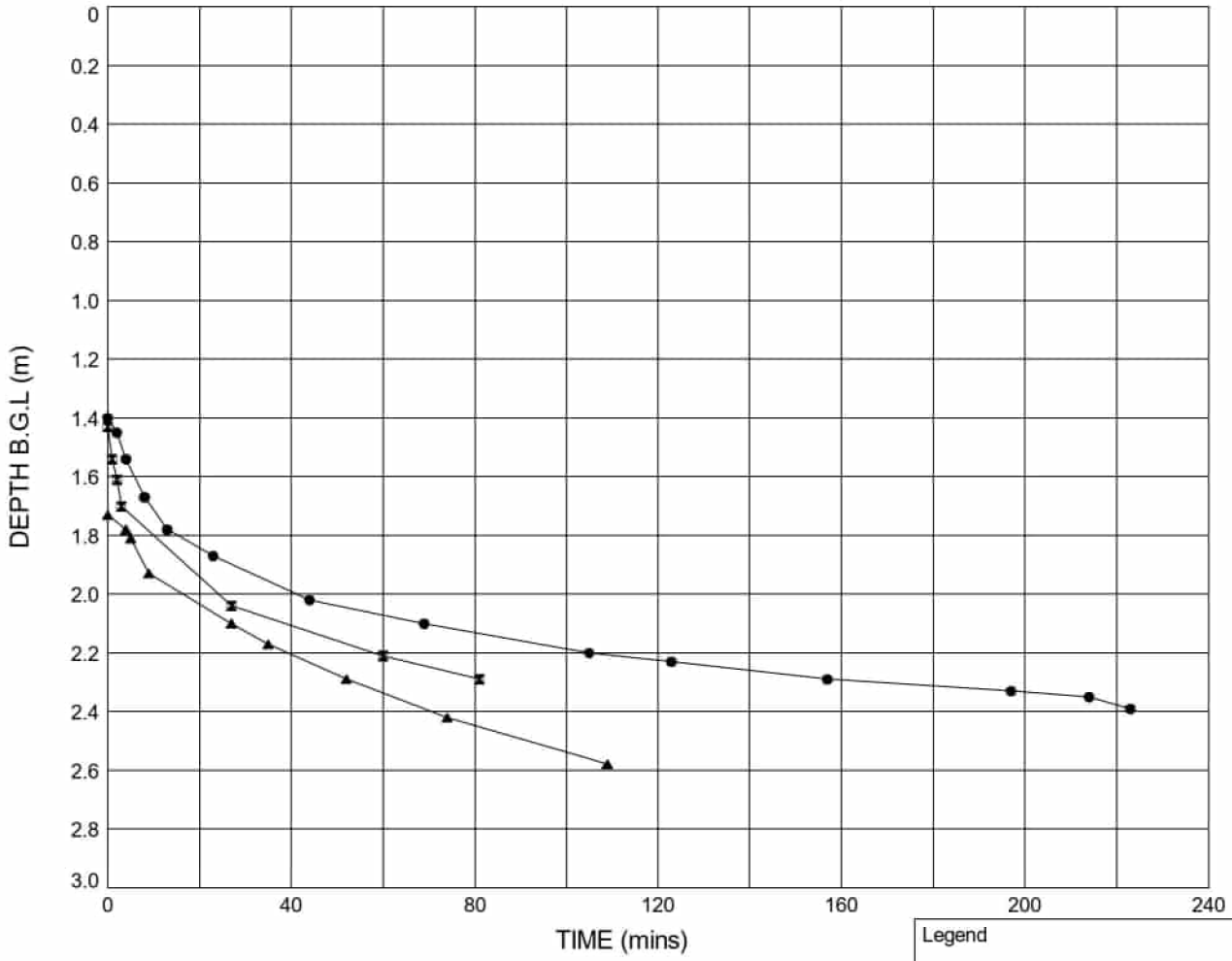
In accordance with BRE Digest 365

Soakaway Test - Position ID : **SA1**

Ground Level: **62.58**

National Grid Co-ordinates: **E:566971.6 N:171797.2**

PLOT OF DEPTH OF WATER BELOW GROUND LEVEL AGAINST TIME



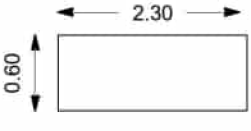
		Test 1	Test 2	Test 3	
Pit start depth:	=	*3.00*	*3.00*	**3.00**	m
Pit final depth:	=	*3.00*	*3.00*	**2.58**	m
Effective depth, De	=	*1.60*	*1.57*	**1.27**	m
Effective storage volume, V_{p75-25}	=	*1.1040*	*1.0833*	**0.8763**	m^3
Surface area, a_{s50}	=	*6.0200*	*5.9330*	**5.0630**	m^2
Time, t_{p75-25}	=	*15302.0*	*9162.0*	**6599.0**	secs
Infiltration rate, f	=	*$1.20x10^{-5}$*	*$1.99x10^{-5}$*	**$2.62x10^{-5}$**	m/s

Please note test data was extrapolated to obtain tp75-tp25.

Legend

- Test 1 (20.03.23)
- Test 2 (20.03.23)
- Test 3 (21.03.23)

Plan (Not to scale)



No Bearing Taken

Compiled By	Date	Checked By	Date
[redacted]	06/04/23		

Contract: **Gravesham Leisure Centre**

Contract Ref: **52511**

GINT_LIBRARY_V10_01.GLB LibVersion: v8_07_001 PrjVersion: v8_07 | Graph I - TP SOAKAWAY - 2 - FINAL REPORT - A4P | 52511 GRAVESHAM LEISURE.GPJ - v10_01. | 06/04/23 - 09:54 | EOR1 |

FULL SCALE SOAKAWAY TEST

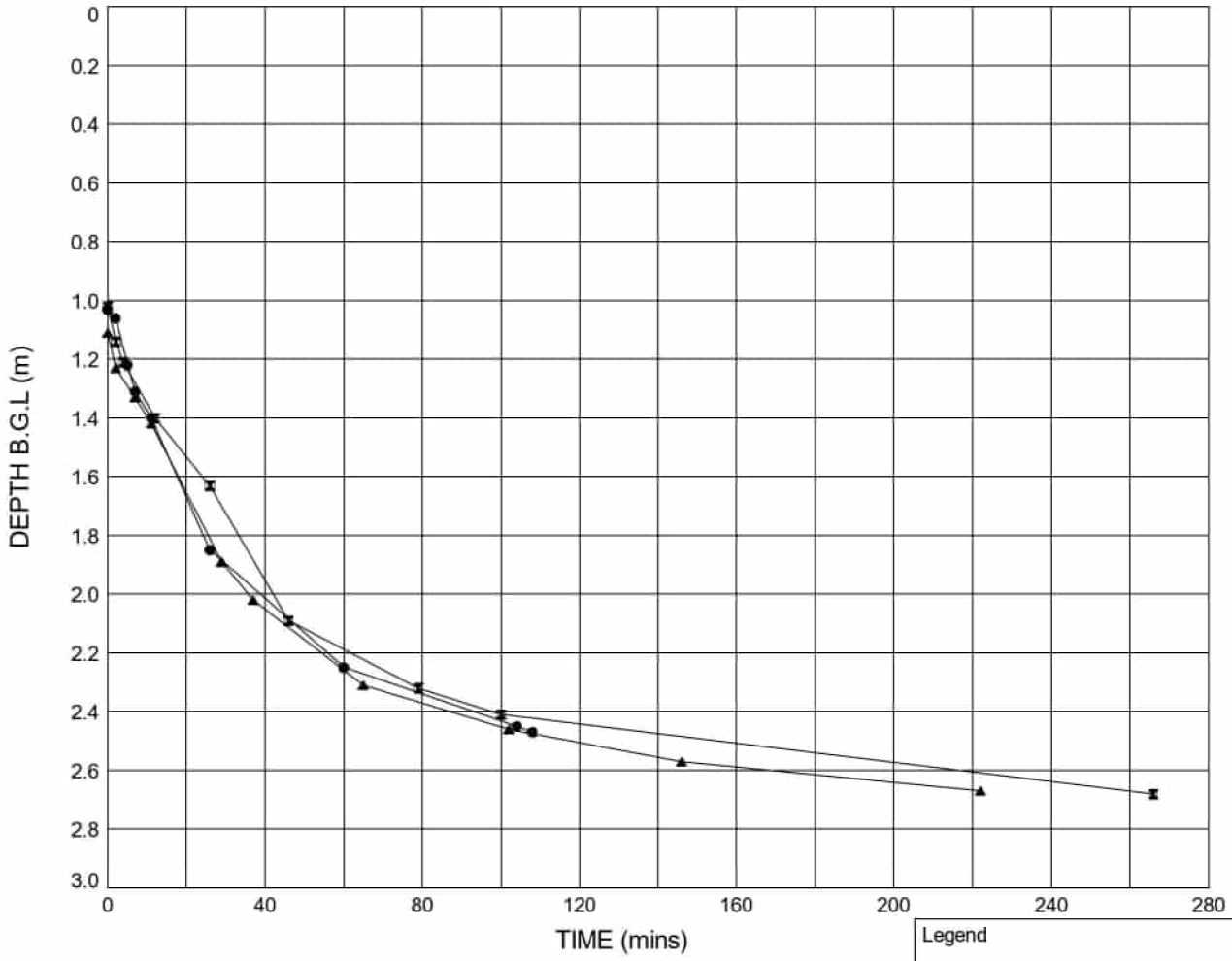
In accordance with BRE Digest 365

Soakaway Test - Position ID : **SA2**

Ground Level: **62.99**

National Grid Co-ordinates: **E:566991.5 N:171748.7**

PLOT OF DEPTH OF WATER BELOW GROUND LEVEL AGAINST TIME



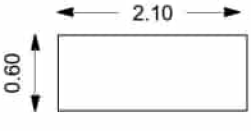
		Test 1	Test 2	Test 3	
Pit start depth:	=	**3.00**	*3.00*	*3.00*	m
Pit final depth:	=	**3.00**	*3.00*	*2.67*	m
Effective depth, De	=	**1.97**	*1.98*	*1.89*	m
Effective storage volume, V_{p75-25}	=	**1.2411**	*1.2474*	*1.1907*	m^3
Surface area, a_{s50}	=	**6.5790**	*6.6060*	*6.3630*	m^2
Time, t_{p75-25}	=	**6025.0**	*8364.0*	*6707.0*	secs
Infiltration rate, f	=	**$3.13x10^{-5}$**	*$2.26x10^{-5}$*	*$2.79x10^{-5}$*	m/s

Please note test data was extrapolated to obtain tp75-tp25.

Legend

- Test 1 (20.03.23)
- Test 2 (20.03.23)
- Test 3 (21.03.23)

Plan (Not to scale)



No Bearing Taken

Compiled By	Date	Checked By	Date
[redacted]	**06/04/23**		

Contract: **Gravesham Leisure Centre**

Contract Ref: **52511**

GINT_LIBRARY_V10_01.GLB LibVersion: v8_07_001 PrjVersion: v8_07 | Graph I - TP SOAKAWAY - 2 - FINAL REPORT - A4P | 52511 GRAVESHAM LEISURE.GPJ - v10_01. | 06/04/23 - 09:58 | EOR1 |

FULL SCALE SOAKAWAY TEST

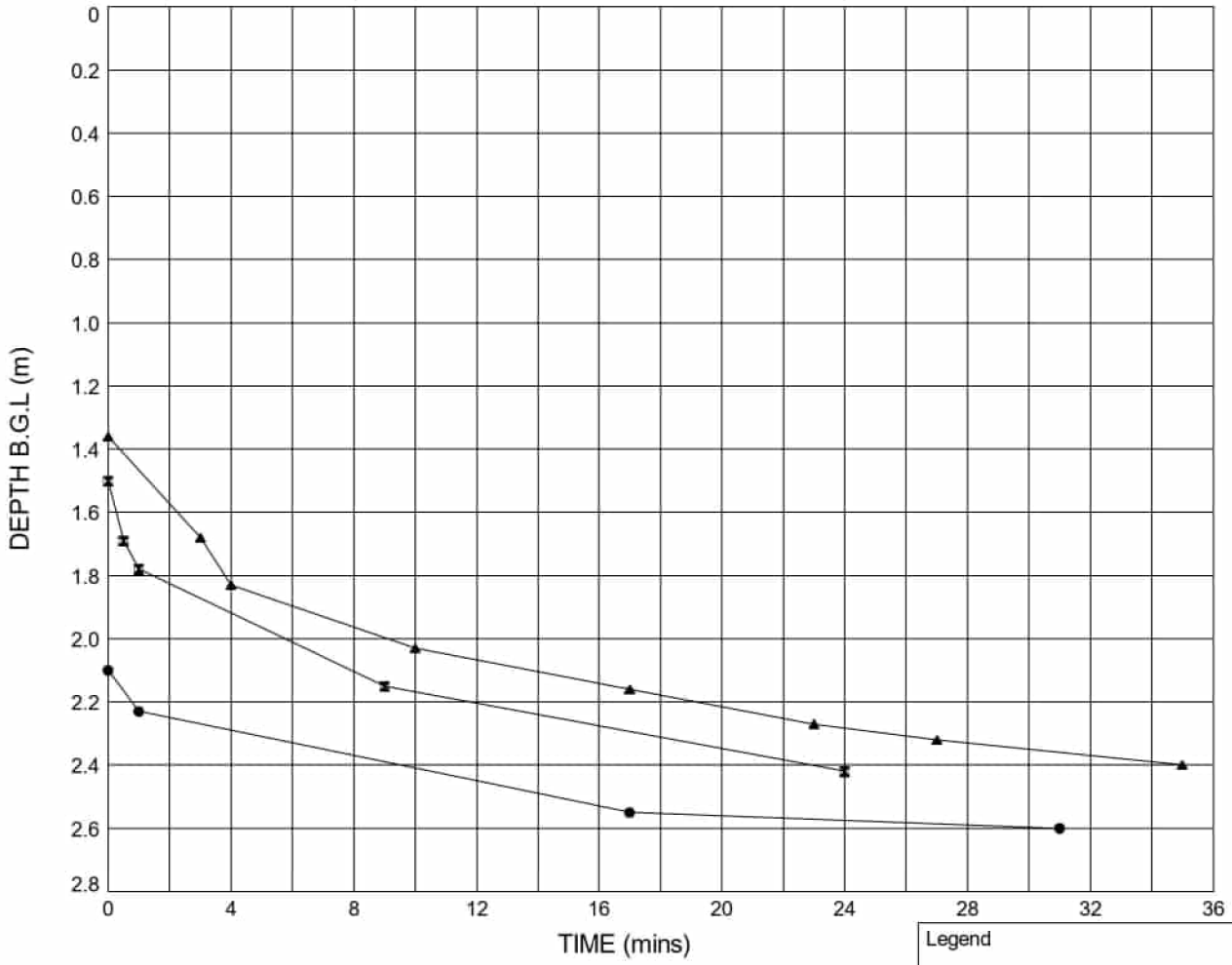
In accordance with BRE Digest 365

Soakaway Test - Position ID : **SA3**

Ground Level: **65.38**

National Grid Co-ordinates: **E:566928.9 N:171729.6**

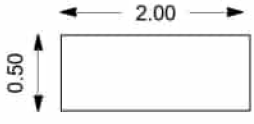
PLOT OF DEPTH OF WATER BELOW GROUND LEVEL AGAINST TIME



Legend

- Test 1 (21.03.23)
- Test 2 (21.03.23)
- Test 3 (21.03.23)

Plan (Not to scale)



No Bearing Taken

		Test 1	Test 2	Test 3	
Pit start depth:	=	*2.80*	**2.70**	*2.70*	m
Pit final depth:	=	*2.60*	**2.70**	*2.70*	m
Effective depth, De	=	*0.70*	**1.20**	*1.34*	m
Effective storage volume, V_{p75-25}	=	*0.3500*	**0.6000**	*0.6700*	m^3
Surface area, a_{s50}	=	*2.7500*	**4.0000**	*4.3500*	m^2
Time, t_{p75-25}	=	*2085.0*	**1287.0**	*1704.0*	secs
Infiltration rate, f	=	*$6.10x10^{-5}$*	**$1.17x10^{-4}$**	*$9.04x10^{-5}$*	m/s

Please note test data was extrapolated to obtain tp75-tp25.

Compiled By	Date	Checked By	Date
[redacted]	06/04/23		

Contract: **Gravesham Leisure Centre**

Contract Ref: **52511**

GINT_LIBRARY_V10_01.GLB LibVersion: v8_07_001 PrjVersion: v8_07 | Graph I - TP SOAKAWAY - 2 - FINAL REPORT - A4P | 52511 GRAVESHAM LEISURE.GPJ - v10_01. | 06/04/23 - 09:55 | EOR1 |

Appendix G
GROUND GAS MONITORING DATA AND SITE CONDITIONS

GAS MONITORING FIELD SHEET

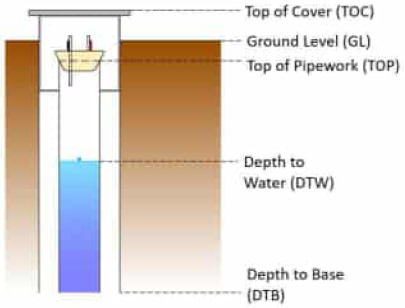
Monitoring Date:	14/04/2023	Measurement datum: TOC / GL / TOP / Other	GL	Offset to GL (m):		0
Pre-Testing Remarks:		Air Temperature: °C	12	Device:		GA5000
		Weather:	Overcast	Serial Number:		
		Ground Conditions:	Wet	Daily Check:		
		Wind: NONE / LIGHT / MEDIUM / STRONG		Light		
		Tidal State: (if applicable) High / Low / Rising / Falling		N/A		
Exploratory Position ID:	WS6	Monitoring Round Number:	3	Test Number:		
Install Type: SINGLE / DOUBLE		Pipe Ref: 1) Shallow 2) Deep		Pipe Diameter: 19mm/ 40mm / 50mm / Other (mm)		

Time of Monitoring (hh:mm)	Flow readings	Gas readings	Atmospheric Pressure (mb)	Differential Pressure (mb)	Gas tap: SINGLE / DOUBLE	
Time Start (hh:mm)	11:36	11;33	998	0.02	Observations (e.g. on-site activities):	
Time End (hh:mm)						

Stage 1 Flow Readings	**Stage 1** Flow Readings	**Stage 2** Gas Monitoring:	Methane (%/vol)	Carbon Dioxide (%/vol)	Oxygen (%/vol)	Carbon monoxide (ppm)	Hydrogen sulphide (ppm)	LEL (%)	PID (ppm)
Time of flow monitoring (sec)	Flow Reading (l/hr)	Time of gas monitoring (sec)							
0	0	0	0	0.1	21.5	0	0		0.8
5	0	15	0	1	20.3	0	0		0.2
10	0	30	0	1.1	19.9	0	0		0.1
15	0	60	0	1.2	19.7	0	0		
20	0	90	0	1.3	19.5	0	0		
25	0.1	120	0	1.5	19.3	0	0		
30	0.1	180	0	1.4	19.5	0	0		
40	0.1	240							
50	0.1	300							
60	0.1	360							
90		420							
120		480							
150		540							
180		600							

Stage 1 gas flow - Peak (l/h)		**Note:** Flow should be recorded at 5 second intervals up to 30 seconds, 10 second intervals to 2 minutes and 30 second intervals up to 3 minutes or until steady-state readings are obtained. Typically, steady state conditions occur within 30 seconds to a minute. The differential pressure reading (in Pa) should also be recorded during this period.
Stage 1 gas flow - Steady State (l/h)		

STAGE 3 WATER LEVEL OBSERVATION						
	Depth (from datum) to water (DTW): (m)	dry	Time:		LNAPL Top (from datum) (m):	
	Depth (from datum) to well base (DTB): (m)	4.04	Purge Start:		DNAPL Top (from datum) (m):	
	Hole Purged: Yes / No		Purge End:		Water Observations:	
	Purge Volume: (ltrs)		Post-Purge (DTW) (m)			



Post testing remarks:	Samples Taken: Yes / No	
	Sample Media: Gas/Water	
	Gas Cannister Start (mb)	
	Gas Cannister End (mb)	
	Gas Cannister Duration (mins)	

Depth (from datum)	Sample Ref	Type (EW / G)	Container

RSK	Contract Name:	Gravesham Leisure Centre	Data Collected By:	JC
	Project Manager / Engineer:	JC	Checked:	
	Contract Ref:	52511	Page number:	

GAS MONITORING FIELD SHEET

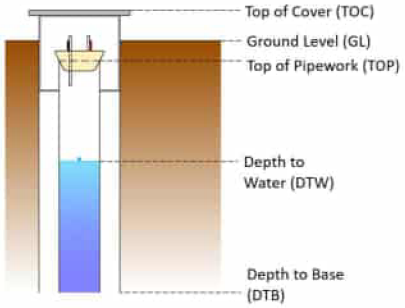
Monitoring Date:	06/04/2023	Measurement datum: TOC / GL / TOP / Other	GL	Offset to GL (m):		0
Pre-Testing Remarks:		Air Temperature: °C	10	Device:		GA5000
		Weather:	Overcast	Serial Number:		
		Ground Conditions:	Wet	Daily Check:		
		Wind: NONE / LIGHT / MEDIUM / STRONG		Light		
		Tidal State: (if applicable) High / Low / Rising / Falling		N/A		
Exploratory Position ID:	WS6	Monitoring Round Number:	2	Test Number:		
Install Type: SINGLE / DOUBLE		Pipe Ref: 1) Shallow 2) Deep		Pipe Diameter: 19mm/ 40mm / 50mm / Other (mm)		

Time of Monitoring (hh:mm)	Flow readings	Gas readings	Atmospheric Pressure (mb)	Differential Pressure (mb)	Gas tap: SINGLE / DOUBLE	
Time Start (hh:mm)	11:54	11:49	1006	0.02	Observations (e.g. on-site activities):	
Time End (hh:mm)						

Stage 1 Flow Readings	**Stage 1** Flow Readings	**Stage 2** Gas Monitoring:	Methane (%/vol)	Carbon Dioxide (%/vol)	Oxygen (%/vol)	Carbon monoxide (ppm)	Hydrogen sulphide (ppm)	LEL (%)	PID (ppm)
Time of flow monitoring (sec)	Flow Reading (l/hr)	Time of gas monitoring (sec)							
0	0	0	0	0.2	21.2	0	0		0.7
5	0.1	15	0	2.2	19.6	0	0		0.2
10	0.1	30	0	2.3	19	0	0		0.2
15	0.1	60	0	2.2	19.2	0	0		
20	0.1	90	0	2	19.6	0	0		
25	0.1	120	0	1.8	20.1	0	0		
30	0.1	180	0	1.7	20.4	0	0		
40	0.1	240	0	1.5	20.6	0	0		
50	0.1	300							
60	0.1	360							
90		420							
120		480							
150		540							
180		600							

Stage 1 gas flow - Peak (l/h)	0.1	**Note:** Flow should be recorded at 5 second intervals up to 30 seconds, 10 second intervals to 2 minutes and 30 second intervals up to 3 minutes or until steady-state readings are obtained. Typically, steady state conditions occur within 30 seconds to a minute. The differential pressure reading (in Pa) should also be recorded during this period.
Stage 1 gas flow - Steady State (l/h)	0.1	

STAGE 3 WATER LEVEL OBSERVATION						
	Depth (from datum) to water (DTW): (m)	Dry	Time:		LNAPL Top (from datum) (m):	
	Depth (from datum) to well base (DTB): (m)	4.03	Purge Start:		DNAPL Top (from datum) (m):	
	Hole Purged: Yes / No		Purge End:		Water Observations:	
	Purge Volume: (ltrs)		Post-Purge (DTW) (m)			



Post testing remarks:		
	Samples Taken: Yes / No	
	Sample Media: Gas/Water	
	Gas Cannister Start (mb)	
	Gas Cannister End (mb)	
	Gas Cannister Duration (mins)	

Depth (from datum)	Sample Ref	Type (EW / G)	Container

RSK	Contract Name:	Gravesham Leisure Centre	Data Collected By:	JC
	Project Manager / Engineer:	JC	Checked:	
	Contract Ref:	52511	Page number:	

GAS MONITORING FIELD SHEET

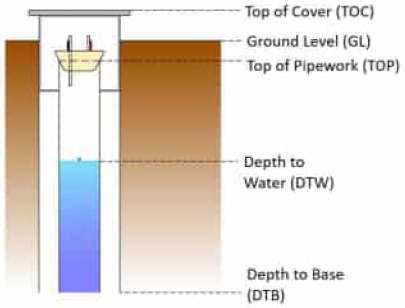
Monitoring Date:	31/03/2023	Measurement datum: TOC / GL / TOP / Other	GL	Offset to GL (m):		0
Pre-Testing Remarks:		Air Temperature: °C	12	Device:		GA5000
		Weather:	Rain	Serial Number:		
		Ground Conditions:	Wet	Daily Check:		
		Wind: NONE / LIGHT / MEDIUM / STRONG		Light		
		Tidal State: (if applicable) High / Low / Rising / Falling		N/A		
Exploratory Position ID:	WS6	Monitoring Round Number:	1	Test Number:		
Install Type: SINGLE / DOUBLE		Pipe Ref: 1) Shallow 2) Deep		Pipe Diameter: 19mm/ 40mm / 50mm / Other (mm)		

Time of Monitoring (hh:mm)	Flow readings	Gas readings	Atmospheric Pressure (mb)	Differential Pressure (mb)	Gas tap: SINGLE / DOUBLE	
Time Start (hh:mm)	12:40	12:36	979	0.11	Observations (e.g. on-site activities):	
Time End (hh:mm)						

Stage 1 Flow Readings	**Stage 1** Flow Readings	**Stage 2** Gas Monitoring:	Methane (%/vol)	Carbon Dioxide (%/vol)	Oxygen (%/vol)	Carbon monoxide (ppm)	Hydrogen sulphide (ppm)	LEL (%)	PID (ppm)
Time of flow monitoring (sec)	Flow Reading (l/hr)	Time of gas monitoring (sec)							
0	0	0	0	0.2	21.7	0	0		1
5	0.1	15	0	2	19.9	0	0		0.3
10	0.1	30	0	2	19.5	0	0		0.2
15	0.1	60	0	2.1	19.5	0	0		
20	0.1	90	0	2.1	19.7	0	0		
25	0.1	120	0	2	20	0	0		
30	0.1	180	0	1.9	20.1	0	0		
40	0.1	240							
50	0.1	300							
60	0.1	360							
90		420							
120		480							
150		540							
180		600							

Stage 1 gas flow - Peak (l/h)	0.1	**Note:** Flow should be recorded at 5 second intervals up to 30 seconds, 10 second intervals to 2 minutes and 30 second intervals up to 3 minutes or until steady-state readings are obtained. Typically, steady state conditions occur within 30 seconds to a minute. The differential pressure reading (in Pa) should also be recorded during this period.
Stage 1 gas flow - Steady State (l/h)	0.1	

STAGE 3 WATER LEVEL OBSERVATION					
	Depth (from datum) to water (DTW): (m)	Dry	Time:		LNAPL Top (from datum) (m):
	Depth (from datum) to well base (DTB): (m)	4.03	Purge Start:		DNAPL Top (from datum) (m):
	Hole Purged: Yes / No		Purge End:		Water Observations:
	Purge Volume: (ltrs)		Post-Purge (DTW) (m)		



Post testing remarks:		
	Samples Taken: Yes / No	
	Sample Media: Gas/Water	
	Gas Cannister Start (mb)	
	Gas Cannister End (mb)	
	Gas Cannister Duration (mins)	

Depth (from datum)	Sample Ref	Type (EW / G)	Container

RSK	Contract Name:	Gravesham Leisure Centre	Data Collected By:	JC
	Project Manager / Engineer:	JC	Checked:	
	Contract Ref:	52511	Page number:	

Appendix H
LABORATORY CERTIFICATES FOR SOIL ANALYSIS

envirolab
Units 7 & 8, Sandpits Business Park
Mottram Road, Hyde, Cheshire, SK14 3AR

Final Test Report

Envirolab Job Number:	23/02978
Issue Number:	1 Date: 12-Apr-23
Client:	RSK Environment Ltd Tonbridge Anerley Court, Half Moon Lane, Hildenborough Tonbridge Kent TN11 9HU Surrey, RH4 3HW
Project Manager:	Josh Curnow/Niki Dubber
Project Name:	Gravesham Leisure Centre
Project Ref:	52511
Order No:	N/A
Date Samples Received:	23-Mar-23
Date Instructions Received:	29-Mar-23
Date Analysis Completed:	12-Apr-23

Notes - Soil analysis

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

For samples with Matrix Codes 1 - 6 natural stones >10mm are removed or excluded from the sample prior to analysis and reported results corrected to a whole sample basis.

For samples with Matrix Code 7 the whole sample is dried and crushed prior to analysis.

Notes - General

This report shall not be reproduced, except in full, without written approval from Envirolab.

Subscript "A" indicates analysis performed on the sample as received. "D" indicates analysis performed on the dried sample, crushed to pass a 2mm sieve, unless asbestos is found to be present in which case all analysis is performed on the sample as received.

All analysis is performed on the dried and crushed sample for samples with Matrix Code 7 and this supercedes any "A" subscripts.

All analysis is performed on the sample as received for soil samples from outside the European Union and this supercedes any "D" subscripts

For complex, multi-compound analysis, quality control results do not always fall within chart limits for every compound and we have criteria for reporting in these situations.

If results are in italic font they are associated with such quality control failures and may be unreliable.

A deviating samples report is appended and will indicate if samples or tests have been found to be deviating. Any test results affected may not be an accurate record of the concentration at the time of sampling and, as a result, may be invalid

Predominant Matrix Codes: 1 = SAND, 2 = LOAM, 3 = CLAY, 4 = LOAM/SAND, 5 = SAND/CLAY, 6 = CLAY/LOAM, 7 = OTHER, 8 = Asbestos bulk ID sample

Secondary Matrix Codes: A = contains stones, B = contains construction rubble, C = contains visible hydrocarbons, D = contains glass/metal, E = contains roots/twigs.

IS indicates Insufficient sample for analysis, NDP indicates No Determination Possible and NAD indicates No Asbestos Detected.

Analytical results reflect the quality of the sample at the time of analysis only. Opinions and interpretations expressed are outside the scope of our accreditation.

Please contact us if you need any further information.

HWOL TPH Code: EH_CU_1D_AL: Extractable hydrocarbons - i.e. everything extracted by the solvent(s), Clean-up - e.g. by florisil, silica gel, GC - Single coil gas chromatography, Aliphatics only

Approved by:

[redacted]

Deputy Client Services Supervisor

envirolab

Landfill WAC analysis must not be used for hazardous waste classification purposes. This analysis is only applicable for landfill acceptance and does not give any indication as to whether a waste may be hazardous or non-hazardous.

Sample Details						Landfill Waste Acceptance Criteria Limits		
Lab Sample ID	Method	ISO17025	MCERTS	23/02978/8				
Client Sample Number						Inert Waste Landfill	Stable Non-reactive Hazardous Waste in Non-Hazardous Landfill	Hazardous Waste Landfill
Client Sample ID				SA1				
Depth to Top				0				
Depth to Bottom				0.20				
Date Sampled				20/03/2023				
Sample Type				Soil - ES				
Sample Matrix Code				4ABE				
Solid Waste Analysis								
pH (pH Units)$_D$	A-T-031	N	N	**8.64**		-	>6	-
ANC to pH 4 (mol/kg)$_D$	A-T-ANC	N	N	**0.67**		-	to be evaluated	to be evaluated
ANC to pH 6 (mol/kg)$_D$	A-T-ANC	N	N	**0.19**		-	to be evaluated	to be evaluated
Loss on Ignition (%)$_D$	A-T-030	N	N	**9.9**		-	-	10
Total Organic Carbon (%)$_D$	A-T-032	N	N	**11.4**		3	5	6
PAH Sum of 17 (mg/kg) $_A$	A-T-019	N	N	**40.2**		100	-	-
Mineral Oil (mg/kg)$_{A\ EH\_CU\_1D\_AL}$	A-T-007	N	N	**64**		500	-	-
Sum of 7 PCBs (mg/kg)$_A$	A-T-004	N	N	**0.036**		1	-	-
Sum of BTEX (mg/kg)$_A$	A-T-022	N	N	**<0.01**		6	-	-
Eluate Analysis				**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	A-T-025	N	N	0.002	**0.020**	0.5	2	25
Barium	A-T-025	N	N	0.108	**1.080**	20	100	300
Cadmium	A-T-025	N	N	<0.001	**<0.01**	0.04	1	5
Chromium	A-T-025	N	N	0.002	**0.020**	0.5	10	70
Copper	A-T-025	N	N	0.006	**0.060**	2	50	100
Mercury	A-T-025	N	N	<0.0005	**<0.005**	0.01	0.2	2
Molybdenum	A-T-025	N	N	0.002	**0.020**	0.5	10	30
Nickel	A-T-025	N	N	<0.002	**<0.02**	0.4	10	40
Lead	A-T-025	N	N	0.005	**0.050**	0.5	10	50
Antimony	A-T-025	N	N	<0.001	**<0.01**	0.06	0.7	5
Selenium	A-T-025	N	N	<0.001	**<0.01**	0.1	0.5	7
Zinc	A-T-025	N	N	0.009	**0.090**	4	50	200
Chloride	A-T-026	N	N	7	**65**	800	15000	25000
Fluoride	A-T-026	N	N	0.1	**1.0**	10	150	500
Sulphate as SO_4	A-T-026	N	N	8	**77**	1000	20000	50000
Total Dissolved Solids	A-T-035	N	N	62	**620**	4000	60000	100000
Phenol Index	A-T-050	N	N	0.01	**0.10**	1	-	-
Dissolved Organic Carbon	A-T-032	N	N	<2.0	**<200**	500	800	1000
Leach Test Information								
pH (pH Units)	A-T-031	N	N	8.0				
Conductivity (µS/cm)	A-T-037	N	N	125				
Mass Sample (kg)				0.201				
Dry Matter (%)	A-T-044	N	N	86.9				

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

envirolab

Landfill WAC analysis must not be used for hazardous waste classification purposes. This analysis is only applicable for landfill acceptance and does not give any indication as to whether a waste may be hazardous or non-hazardous.

Sample Details						Landfill Waste Acceptance Criteria Limits		
Lab Sample ID	Method	ISO17025	MCERTS	23/02978/10				
Client Sample Number						Inert Waste Landfill	Stable Non-reactive Hazardous Waste in Non-Hazardous Landfill	Hazardous Waste Landfill
Client Sample ID				SA2				
Depth to Top				0.2				
Depth to Bottom				0.40				
Date Sampled				20/03/2023				
Sample Type				Soil - ES				
Sample Matrix Code				4ABE				
Solid Waste Analysis								
pH (pH Units)$_D$	A-T-031	N	N	**8.59**		-	>6	-
ANC to pH 4 (mol/kg)$_D$	A-T-ANC	N	N	**0.55**		-	to be evaluated	to be evaluated
ANC to pH 6 (mol/kg)$_D$	A-T-ANC	N	N	**0.19**		-	to be evaluated	to be evaluated
Loss on Ignition (%)$_D$	A-T-030	N	N	**5.7**		-	-	10
Total Organic Carbon (%)$_D$	A-T-032	N	N	**3.68**		3	5	6
PAH Sum of 17 (mg/kg)$_A$	A-T-019	N	N	**124**		100	-	-
Mineral Oil (mg/kg)$_{A\ EH\_CU\_1D\_AL}$	A-T-007	N	N	**268**		500	-	-
Sum of 7 PCBs (mg/kg)$_A$	A-T-004	N	N	**<0.007**		1	-	-
Sum of BTEX (mg/kg)$_A$	A-T-022	N	N	**<0.01**		6	-	-
Eluate Analysis				**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	A-T-025	N	N	0.006	**0.060**	0.5	2	25
Barium	A-T-025	N	N	0.098	**0.980**	20	100	300
Cadmium	A-T-025	N	N	<0.001	**<0.01**	0.04	1	5
Chromium	A-T-025	N	N	0.009	**0.090**	0.5	10	70
Copper	A-T-025	N	N	0.009	**0.090**	2	50	100
Mercury	A-T-025	N	N	<0.0005	**<0.005**	0.01	0.2	2
Molybdenum	A-T-025	N	N	0.002	**0.020**	0.5	10	30
Nickel	A-T-025	N	N	<0.002	**<0.02**	0.4	10	40
Lead	A-T-025	N	N	0.019	**0.190**	0.5	10	50
Antimony	A-T-025	N	N	0.002	**0.020**	0.06	0.7	5
Selenium	A-T-025	N	N	<0.001	**<0.01**	0.1	0.5	7
Zinc	A-T-025	N	N	0.014	**0.140**	4	50	200
Chloride	A-T-026	N	N	<1.00	**<10**	800	15000	25000
Fluoride	A-T-026	N	N	0.3	**3.0**	10	150	500
Sulphate as SO_4	A-T-026	N	N	<1.00	**<10**	1000	20000	50000
Total Dissolved Solids	A-T-035	N	N	46	**460**	4000	60000	100000
Phenol Index	A-T-050	N	N	<0.01	**<0.1**	1	-	-
Dissolved Organic Carbon	A-T-032	N	N	<2.0	**<200**	500	800	1000
Leach Test Information								
pH (pH Units)	A-T-031	N	N	8.0				
Conductivity (µS/cm)	A-T-037	N	N	92				
Mass Sample (kg)				0.197				
Dry Matter (%)	A-T-044	N	N	89				

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

envirolab
Units 7 & 8 Sandpits Business Park
Mottram Road, Hyde, Cheshire, SK14 3AR

FINAL ANALYTICAL TEST REPORT

Envirolab Job Number: 23/02978
Issue Number: 1 **Date:** 12 April, 2023

Client: RSK Environment Ltd Tonbridge
Anerley Court, Half Moon Lane, Hildenborough
Tonbridge
Kent
TN11 9HU

Project Manager: Josh Curnow/Niki Dubber
Project Name: Gravesham Leisure Centre
Project Ref: 52511
Order No: N/A
Date Samples Received: 23/03/23
Date Instructions Received: 29/03/23
Date Analysis Completed: 12/04/23

Approved by:

[redacted]

Danielle Brierley
Deputy Client Services Supervisor

Envirolab Job Number: 23/02978

Client Project Name: Gravesham Leisure Centre

Client Project Ref: 52511

Lab Sample ID	23/02978/1	23/02978/2	23/02978/3	23/02978/4	23/02978/5	23/02978/6	23/02978/7	Units	Limit of Detection	Method ref
Client Sample No										
Client Sample ID	BH1	WS1	WS2	WS3	WS4	WS5	WS6			
Depth to Top	0.05	0.00	0.00	0.00	0.00	0.10	0.00			
Depth To Bottom		0.30	0.30	0.30	0.30	0.40	0.30			
Date Sampled	17-Mar-23	16-Mar-23	16-Feb-23	16-Mar-24	16-Feb-24	16-Mar-25	16-Feb-25			
Sample Type	Soil - ES	Soil - ES	Soil - ES	Soil - ES	Soil - ES	Soil - ES	Soil - ES			
Sample Matrix Code	4AB	4AE	4AE	4AE	4AE	4AE	4AE			
% Stones >10mm$_A$	6.4	<0.1	<0.1	<0.1	<0.1	<0.1	5.6	% w/w	0.1	A-T-044
pH$_D$$^{M\#}$	9.49	8.19	7.86	8.09	6.07	8.02	8.10	pH	0.01	A-T-031s
Sulphate (water sol 2:1)$_D$$^{M\#}$	0.06	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	g/l	0.01	A-T-026s
Sulphate (acid soluble)$_D$$^{M\#}$	<1000	490	850	370	620	310	650	mg/kg	200	A-T-028s
Total Organic Carbon$_D$$^{M\#}$	-	1.77	-	1.69	-	-	2.92	% w/w	0.03	A-T-032s
Arsenic$_D$$^{M\#}$	<1	9	7	2	5	10	6	mg/kg	1	A-T-024s
Cadmium$_D$$^{M\#}$	0.7	1.7	1.0	0.9	1.1	0.7	13.4	mg/kg	0.5	A-T-024s
Copper$_D$$^{M\#}$	7	40	20	16	17	17	51	mg/kg	1	A-T-024s
Chromium$_D$$^{M\#}$	10	26	32	34	35	19	41	mg/kg	1	A-T-024s
Chromium (hexavalent)$_D$	<1	-	-	-	-	<1	-	mg/kg	1	A-T-040s
Lead$_D$$^{M\#}$	3	34	60	48	39	47	48	mg/kg	1	A-T-024s
Mercury$_D$	1.75	<0.17	<0.17	<0.17	<0.17	<0.17	0.67	mg/kg	0.17	A-T-024s
Nickel$_D$$^{M\#}$	4	28	21	17	25	11	33	mg/kg	1	A-T-024s
Selenium$_D$$^{M\#}$	<1	<1	<1	<1	<1	<1	<1	mg/kg	1	A-T-024s
Zinc$_D$$^{M\#}$	36	76	88	97	93	71	146	mg/kg	5	A-T-024s

Envirolab Job Number: 23/02978

Client Project Name: Gravesham Leisure Centre

Client Project Ref: 52511

Lab Sample ID	23/02978/1	23/02978/2	23/02978/3	23/02978/4	23/02978/5	23/02978/6	23/02978/7	Units	Limit of Detection	Method ref
Client Sample No										
Client Sample ID	BH1	WS1	WS2	WS3	WS4	WS5	WS6			
Depth to Top	0.05	0.00	0.00	0.00	0.00	0.10	0.00			
Depth To Bottom		0.30	0.30	0.30	0.30	0.40	0.30			
Date Sampled	17-Mar-23	16-Mar-23	16-Feb-23	16-Mar-24	16-Feb-24	16-Mar-25	16-Feb-25			
Sample Type	Soil - ES	Soil - ES	Soil - ES	Soil - ES	Soil - ES	Soil - ES	Soil - ES			
Sample Matrix Code	4AB	4AE	4AE	4AE	4AE	4AE	4AE			
Asbestos in Soil (inc. matrix) ^										
Asbestos in soil$_D$#	NAD	NAD	NAD	NAD	NAD	NAD	NAD			A-T-045
Asbestos Matrix (visual)$_D$	-	-	-	-	-	-	-			A-T-045
Asbestos Matrix (microscope)$_D$	-	-	-	-	-	-	-			A-T-045
Asbestos ACM - Suitable for Water Absorption Test?$_D$	N/A	N/A	N/A	N/A	N/A	N/A	N/A			A-T-045

Envirolab Job Number: 23/02978

Client Project Name: Gravesham Leisure Centre

Client Project Ref: 52511

Lab Sample ID	23/02978/1	23/02978/2	23/02978/3	23/02978/4	23/02978/5	23/02978/6	23/02978/7	Units	Limit of Detection	Method ref
Client Sample No										
Client Sample ID	BH1	WS1	WS2	WS3	WS4	WS5	WS6			
Depth to Top	0.05	0.00	0.00	0.00	0.00	0.10	0.00			
Depth To Bottom		0.30	0.30	0.30	0.30	0.40	0.30			
Date Sampled	17-Mar-23	16-Mar-23	16-Feb-23	16-Mar-24	16-Feb-24	16-Mar-25	16-Feb-25			
Sample Type	Soil - ES	Soil - ES	Soil - ES	Soil - ES	Soil - ES	Soil - ES	Soil - ES			
Sample Matrix Code	4AB	4AE	4AE	4AE	4AE	4AE	4AE			
PAH-16MS										
Acenaphthene$_A^{M\#}$	<0.01	<0.01	<0.01	<0.01	<0.01	0.01	0.02	mg/kg	0.01	A-T-019s
Acenaphthylene$_A^{M\#}$	<0.01	0.01	<0.01	<0.01	<0.01	0.04	<0.01	mg/kg	0.01	A-T-019s
Anthracene$_A^{M\#}$	<0.02	<0.02	<0.02	<0.02	<0.02	0.06	0.04	mg/kg	0.02	A-T-019s
Benzo(a)anthracene$_A^{M\#}$	<0.04	0.14	0.12	0.11	0.05	0.39	0.25	mg/kg	0.04	A-T-019s
Benzo(a)pyrene$_A^{M\#}$	<0.04	0.18	0.14	0.12	0.06	0.39	0.24	mg/kg	0.04	A-T-019s
Benzo(b)fluoranthene$_A^{M\#}$	<0.05	0.23	0.19	0.17	0.09	0.51	0.36	mg/kg	0.05	A-T-019s
Benzo(ghi)perylene$_A^{M\#}$	0.06	0.16	0.10	0.09	<0.05	0.24	0.14	mg/kg	0.05	A-T-019s
Benzo(k)fluoranthene$_A^{M\#}$	<0.07	<0.07	<0.07	<0.07	<0.07	0.19	0.12	mg/kg	0.07	A-T-019s
Chrysene$_A^{M\#}$	<0.06	0.17	0.16	0.15	0.08	0.46	0.36	mg/kg	0.06	A-T-019s
Dibenzo(ah)anthracene$_A^{M\#}$	<0.04	<0.04	<0.04	<0.04	<0.04	0.05	<0.04	mg/kg	0.04	A-T-019s
Fluoranthene$_A^{M\#}$	<0.08	0.26	0.30	0.26	0.14	0.89	0.78	mg/kg	0.08	A-T-019s
Fluorene$_A^{M\#}$	<0.01	<0.01	<0.01	<0.01	<0.01	0.01	0.01	mg/kg	0.01	A-T-019s
Indeno(123-cd)pyrene$_A^{M\#}$	<0.03	0.16	0.10	0.10	0.04	0.26	0.14	mg/kg	0.03	A-T-019s
Naphthalene $_A^{M\#}$	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	mg/kg	0.03	A-T-019s
Phenanthrene$_A^{M\#}$	<0.03	0.07	0.11	0.09	0.05	0.32	0.39	mg/kg	0.03	A-T-019s
Pyrene$_A^{M\#}$	<0.07	0.25	0.26	0.22	0.13	0.76	0.66	mg/kg	0.07	A-T-019s
Total PAH-16MS$_A^{M\#}$	<0.08	1.63	1.48	1.31	0.64	4.58	3.51	mg/kg	0.01	A-T-019s

Envirolab Job Number: 23/02978

Client Project Name: Gravesham Leisure Centre

Client Project Ref: 52511

Lab Sample ID	23/02978/1	23/02978/2	23/02978/3	23/02978/4	23/02978/5	23/02978/6	23/02978/7	Units	Limit of Detection	Method ref
Client Sample No										
Client Sample ID	BH1	WS1	WS2	WS3	WS4	WS5	WS6			
Depth to Top	0.05	0.00	0.00	0.00	0.00	0.10	0.00			
Depth To Bottom		0.30	0.30	0.30	0.30	0.40	0.30			
Date Sampled	17-Mar-23	16-Mar-23	16-Feb-23	16-Mar-24	16-Feb-24	16-Mar-25	16-Feb-25			
Sample Type	Soil - ES	Soil - ES	Soil - ES	Soil - ES	Soil - ES	Soil - ES	Soil - ES			
Sample Matrix Code	4AB	4AE	4AE	4AE	4AE	4AE	4AE			
VOC										
Dichlorodifluoromethane$_A$	<1	-	-	-	-	-	-	µg/kg	1	A-T-006s
Chloromethane$_A$	<10	-	-	-	-	-	-	µg/kg	10	A-T-006s
Vinyl Chloride (Chloroethene)$_A^\#$	<1	-	-	-	-	-	-	µg/kg	1	A-T-006s
Bromomethane$_A^\#$	<1	-	-	-	-	-	-	µg/kg	1	A-T-006s
Chloroethane$_A^\#$	<1	-	-	-	-	-	-	µg/kg	1	A-T-006s
Trichlorofluoromethane$_A^\#$	<1	-	-	-	-	-	-	µg/kg	1	A-T-006s
1,1-Dichloroethene$_A^\#$	<1	-	-	-	-	-	-	µg/kg	1	A-T-006s
Carbon Disulphide$_A^\#$	<1	-	-	-	-	-	-	µg/kg	1	A-T-006s
Dichloromethane$_A$	<5	-	-	-	-	-	-	µg/kg	5	A-T-006s
trans 1,2-Dichloroethene$_A^\#$	<1	-	-	-	-	-	-	µg/kg	1	A-T-006s
1,1-Dichloroethane$_A^\#$	<1	-	-	-	-	-	-	µg/kg	1	A-T-006s
cis 1,2-Dichloroethene$_A^\#$	<1	-	-	-	-	-	-	µg/kg	1	A-T-006s
2,2-Dichloropropane$_A^\#$	<1	-	-	-	-	-	-	µg/kg	1	A-T-006s
Bromochloromethane$_A^\#$	<5	-	-	-	-	-	-	µg/kg	5	A-T-006s
Chloroform$_A^\#$	<1	-	-	-	-	-	-	µg/kg	1	A-T-006s
1,1,1-Trichloroethane$_A^\#$	<1	-	-	-	-	-	-	µg/kg	1	A-T-006s
1,1-Dichloropropene$_A^\#$	<1	-	-	-	-	-	-	µg/kg	1	A-T-006s
Carbon Tetrachloride$_A^\#$	<1	-	-	-	-	-	-	µg/kg	1	A-T-006s
1,2-Dichloroethane$_A^\#$	<2	-	-	-	-	-	-	µg/kg	2	A-T-006s
Benzene$_A^\#$	<1	-	-	-	-	-	-	µg/kg	1	A-T-006s
Trichloroethene$_A^\#$	<1	-	-	-	-	-	-	µg/kg	1	A-T-006s
1,2-Dichloropropane$_A^\#$	<1	-	-	-	-	-	-	µg/kg	1	A-T-006s
Dibromomethane$_A^\#$	<1	-	-	-	-	-	-	µg/kg	1	A-T-006s
Bromodichloromethane$_A^\#$	<10	-	-	-	-	-	-	µg/kg	10	A-T-006s
cis 1,3-Dichloropropene$_A^\#$	<1	-	-	-	-	-	-	µg/kg	1	A-T-006s
Toluene$_A^\#$	<1	-	-	-	-	-	-	µg/kg	1	A-T-006s
trans 1,3-Dichloropropene$_A^\#$	<1	-	-	-	-	-	-	µg/kg	1	A-T-006s
1,1,2-Trichloroethane$_A^\#$	<1	-	-	-	-	-	-	µg/kg	1	A-T-006s
1,3-Dichloropropane$_A^\#$	<1	-	-	-	-	-	-	µg/kg	1	A-T-006s
Tetrachloroethene$_A^\#$	<1	-	-	-	-	-	-	µg/kg	1	A-T-006s
Dibromochloromethane$_A^\#$	<3	-	-	-	-	-	-	µg/kg	3	A-T-006s
1,2-Dibromoethane$_A^\#$	<1	-	-	-	-	-	-	µg/kg	1	A-T-006s

Envirolab Job Number: 23/02978

Client Project Name: Gravesham Leisure Centre

Client Project Ref: 52511

Lab Sample ID	23/02978/1	23/02978/2	23/02978/3	23/02978/4	23/02978/5	23/02978/6	23/02978/7	Units	Limit of Detection	Method ref
Client Sample No										
Client Sample ID	BH1	WS1	WS2	WS3	WS4	WS5	WS6			
Depth to Top	0.05	0.00	0.00	0.00	0.00	0.10	0.00			
Depth To Bottom		0.30	0.30	0.30	0.30	0.40	0.30			
Date Sampled	17-Mar-23	16-Mar-23	16-Feb-23	16-Mar-24	16-Feb-24	16-Mar-25	16-Feb-25			
Sample Type	Soil - ES	Soil - ES	Soil - ES	Soil - ES	Soil - ES	Soil - ES	Soil - ES			
Sample Matrix Code	4AB	4AE	4AE	4AE	4AE	4AE	4AE			
Chlorobenzene$_A^\#$	<1	-	-	-	-	-	-	µg/kg	1	A-T-006s
1,1,1,2-Tetrachloroethane$_A$	<1	-	-	-	-	-	-	µg/kg	1	A-T-006s
Ethylbenzene$_A^\#$	<1	-	-	-	-	-	-	µg/kg	1	A-T-006s
m & p Xylene$_A^\#$	<1	-	-	-	-	-	-	µg/kg	1	A-T-006s
o-Xylene$_A^\#$	<1	-	-	-	-	-	-	µg/kg	1	A-T-006s
Styrene$_A^\#$	<1	-	-	-	-	-	-	µg/kg	1	A-T-006s
Bromoform$_A^\#$	<1	-	-	-	-	-	-	µg/kg	1	A-T-006s
Isopropylbenzene$_A^\#$	<1	-	-	-	-	-	-	µg/kg	1	A-T-006s
1,1,2,2-Tetrachloroethane$_A$	<1	-	-	-	-	-	-	µg/kg	1	A-T-006s
1,2,3-Trichloropropane$_A^\#$	<1	-	-	-	-	-	-	µg/kg	1	A-T-006s
Bromobenzene$_A^\#$	<1	-	-	-	-	-	-	µg/kg	1	A-T-006s
n-Propylbenzene$_A^\#$	<1	-	-	-	-	-	-	µg/kg	1	A-T-006s
2-Chlorotoluene$_A^\#$	<1	-	-	-	-	-	-	µg/kg	1	A-T-006s
1,3,5-Trimethylbenzene$_A^\#$	<1	-	-	-	-	-	-	µg/kg	1	A-T-006s
4-Chlorotoluene$_A^\#$	<1	-	-	-	-	-	-	µg/kg	1	A-T-006s
tert-Butylbenzene$_A^\#$	<2	-	-	-	-	-	-	µg/kg	2	A-T-006s
1,2,4-Trimethylbenzene$_A^\#$	<1	-	-	-	-	-	-	µg/kg	1	A-T-006s
sec-Butylbenzene$_A^\#$	<1	-	-	-	-	-	-	µg/kg	1	A-T-006s
4-Isopropyltoluene$_A^\#$	<1	-	-	-	-	-	-	µg/kg	1	A-T-006s
1,3-Dichlorobenzene$_A$	<1	-	-	-	-	-	-	µg/kg	1	A-T-006s
1,4-Dichlorobenzene$_A^\#$	<1	-	-	-	-	-	-	µg/kg	1	A-T-006s
n-Butylbenzene$_A^\#$	<1	-	-	-	-	-	-	µg/kg	1	A-T-006s
1,2-Dichlorobenzene$_A^\#$	<1	-	-	-	-	-	-	µg/kg	1	A-T-006s
1,2-Dibromo-3-chloropropane (DCBP)$_A$	<2	-	-	-	-	-	-	µg/kg	2	A-T-006s
1,2,4-Trichlorobenzene$_A$	<3	-	-	-	-	-	-	µg/kg	3	A-T-006s
Hexachlorobutadiene$_A^\#$	<1	-	-	-	-	-	-	µg/kg	1	A-T-006s
1,2,3-Trichlorobenzene$_A$	<3	-	-	-	-	-	-	µg/kg	3	A-T-006s

Envirolab Job Number: 23/02978

Client Project Name: Gravesham Leisure Centre

Client Project Ref: 52511

Lab Sample ID	23/02978/1	23/02978/2	23/02978/3	23/02978/4	23/02978/5	23/02978/6	23/02978/7	Units	Limit of Detection	Method ref
Client Sample No										
Client Sample ID	BH1	WS1	WS2	WS3	WS4	WS5	WS6			
Depth to Top	0.05	0.00	0.00	0.00	0.00	0.10	0.00			
Depth To Bottom		0.30	0.30	0.30	0.30	0.40	0.30			
Date Sampled	17-Mar-23	16-Mar-23	16-Feb-23	16-Mar-24	16-Feb-24	16-Mar-25	16-Feb-25			
Sample Type	Soil - ES	Soil - ES	Soil - ES	Soil - ES	Soil - ES	Soil - ES	Soil - ES			
Sample Matrix Code	4AB	4AE	4AE	4AE	4AE	4AE	4AE			
TPH CWG with Clean Up										
Ali >C5-C6$_A^{\#}$	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	mg/kg	0.01	A-T-022s
Ali >C6-C8$_A^{\#}$	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	mg/kg	0.01	A-T-022s
Ali >C8-C10$_A$	<10	<1	<1	<1	<1	<1	<1	mg/kg	1	A-T-055s
Ali >C10-C12$_A^{M\#}$	<10	<1	<1	<1	<1	<1	<1	mg/kg	1	A-T-055s
Ali >C12-C16$_A^{M\#}$	<10	<1	<1	<1	<1	<1	<1	mg/kg	1	A-T-055s
Ali >C16-C21$_A^{M\#}$	<10	<1	<1	<1	<1	<1	1	mg/kg	1	A-T-055s
Ali >C21-C35$_A^{M\#}$	84	14	10	9	6	7	59	mg/kg	1	A-T-055s
Total Aliphatics$_A$	84	14	10	9	6	7	60	mg/kg	1	Calc-As Recd
Aro >C5-C7$_A^{\#}$	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	mg/kg	0.01	A-T-022s
Aro >C7-C8$_A^{\#}$	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	mg/kg	0.01	A-T-022s
Aro >C8-C10$_A$	<10	<1	<1	<1	<1	<1	<1	mg/kg	1	A-T-055s
Aro >C10-C12$_A$	<10	<1	<1	<1	<1	<1	<1	mg/kg	1	A-T-055s
Aro >C12-C16$_A$	<10	<1	1	<1	<1	2	4	mg/kg	1	A-T-055s
Aro >C16-C21$_A^{M\#}$	<10	2	4	4	1	18	20	mg/kg	1	A-T-055s
Aro >C21-C35$_A^{M\#}$	53	11	17	16	8	61	57	mg/kg	1	A-T-055s
Total Aromatics$_A$	53	13	22	20	9	81	81	mg/kg	1	Calc-As Recd
TPH (Ali & Aro >C5-C35)$_A$	137	27	32	28	16	88	141	mg/kg	1	Calc-As Recd
BTEX - Benzene$_A^{\#}$	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	mg/kg	0.01	A-T-022s
BTEX - Toluene$_A^{\#}$	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	mg/kg	0.01	A-T-022s
BTEX - Ethyl Benzene$_A^{\#}$	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	mg/kg	0.01	A-T-022s
BTEX - m & p Xylene$_A^{\#}$	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	mg/kg	0.01	A-T-022s
BTEX - o Xylene$_A^{\#}$	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	mg/kg	0.01	A-T-022s
MTBE$_A^{\#}$	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	mg/kg	0.01	A-T-022s

Envirolab Job Number: 23/02978

Client Project Name: Gravesham Leisure Centre

Client Project Ref: 52511

Lab Sample ID	23/02978/8	23/02978/9	23/02978/10	23/02978/11	23/02978/12	23/02978/13	23/02978/14	Units	Limit of Detection	Method ref
Client Sample No										
Client Sample ID	SA1	SA2	SA2	SA3	TP1	TP2	HP1			
Depth to Top	0.00	0.00	0.20	0.00	0.00	0.00	0.00			
Depth To Bottom	0.20	0.20	0.40	0.30	0.30	0.10	0.30			
Date Sampled	20-Mar-23	20-Mar-23	20-Mar-23	21-Mar-23	21-Mar-23	21-Mar-23	24-Mar-23			
Sample Type	Soil - ES	Solid	Soil - ES	Soil - ES	Soil - ES	Soil - ES	Soil - ES			
Sample Matrix Code	4ABE	7	4ABE	4AE	4AE	4AE	4ABE			
% Moisture at <40C$_A$	13.1	7.4	11.0	-	-	-	-	% w/w	0.1	A-T-044
% Stones >10mm$_A$	3.1	<0.1	15.5	<0.1	2.3	<0.1	<0.1	% w/w	0.1	A-T-044
pH$_D$ M#	8.64	8.91	8.59	7.98	6.90	7.24	8.14	pH	0.01	A-T-031s
Sulphate (water sol 2:1)$_D$ M#	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.02	g/l	0.01	A-T-026s
Sulphate (acid soluble)$_D$ M#	580	360	1300	510	520	580	570	mg/kg	200	A-T-028s
Total Organic Carbon$_D$ M#	11.4	-	3.68	1.80	-	2.90	-	% w/w	0.03	A-T-032s
Arsenic$_D$ M#	10	<1	3	8	8	6	7	mg/kg	1	A-T-024s
Cadmium$_D$ M#	2.4	0.6	1.5	0.7	1.2	1.0	2.7	mg/kg	0.5	A-T-024s
Copper$_D$ M#	84	63	36	16	15	17	115	mg/kg	1	A-T-024s
Chromium$_D$ M#	28	20	41	23	36	23	36	mg/kg	1	A-T-024s
Chromium (hexavalent)$_D$	<1	<1	<1	-	-	-	-	mg/kg	1	A-T-040s
Lead$_D$ M#	114	15	90	43	35	26	229	mg/kg	1	A-T-024s
Mercury$_D$	2.17	1.45	1.85	<0.17	<0.17	<0.17	1.99	mg/kg	0.17	A-T-024s
Nickel$_D$ M#	35	36	29	15	26	18	29	mg/kg	1	A-T-024s
Selenium$_D$ M#	<1	<1	<1	<1	<1	<1	<1	mg/kg	1	A-T-024s
Zinc$_D$ M#	157	35	94	77	100	69	464	mg/kg	5	A-T-024s

Envirolab Job Number: 23/02978

Client Project Name: Gravesham Leisure Centre

Client Project Ref: 52511

Lab Sample ID	23/02978/8	23/02978/9	23/02978/10	23/02978/11	23/02978/12	23/02978/13	23/02978/14	Units	Limit of Detection	Method ref
Client Sample No										
Client Sample ID	SA1	SA2	SA2	SA3	TP1	TP2	HP1			
Depth to Top	0.00	0.00	0.20	0.00	0.00	0.00	0.00			
Depth To Bottom	0.20	0.20	0.40	0.30	0.30	0.10	0.30			
Date Sampled	20-Mar-23	20-Mar-23	20-Mar-23	21-Mar-23	21-Mar-23	21-Mar-23	24-Mar-23			
Sample Type	Soil - ES	Solid	Soil - ES	Soil - ES	Soil - ES	Soil - ES	Soil - ES			
Sample Matrix Code	4ABE	7	4ABE	4AE	4AE	4AE	4ABE			
Asbestos in Soil (inc. matrix) ^										
Asbestos in soil$_D$#	NAD	NAD	NAD	NAD	NAD	NAD	NAD			A-T-045
Asbestos Matrix (visual)$_D$	-	-	-	-	-	-	-			A-T-045
Asbestos Matrix (microscope)$_D$	-	-	-	-	-	-	-			A-T-045
Asbestos ACM - Suitable for Water Absorption Test?$_D$	N/A	N/A	N/A	N/A	N/A	N/A	N/A			A-T-045

Envirolab Job Number: 23/02978

Client Project Name: Gravesham Leisure Centre

Client Project Ref: 52511

Lab Sample ID	23/02978/8	23/02978/9	23/02978/10	23/02978/11	23/02978/12	23/02978/13	23/02978/14	Units	Limit of Detection	Method ref
Client Sample No										
Client Sample ID	SA1	SA2	SA2	SA3	TP1	TP2	HP1			
Depth to Top	0.00	0.00	0.20	0.00	0.00	0.00	0.00			
Depth To Bottom	0.20	0.20	0.40	0.30	0.30	0.10	0.30			
Date Sampled	20-Mar-23	20-Mar-23	20-Mar-23	21-Mar-23	21-Mar-23	21-Mar-23	24-Mar-23			
Sample Type	Soil - ES	Solid	Soil - ES	Soil - ES	Soil - ES	Soil - ES	Soil - ES			
Sample Matrix Code	4ABE	7	4ABE	4AE	4AE	4AE	4ABE			
PAH-16MS										
Acenaphthene$_A^{M\#}$	0.32	0.42	1.08	<0.01	<0.01	<0.01	0.07	mg/kg	0.01	A-T-019s
Acenaphthylene$_A^{M\#}$	0.14	0.70	0.27	<0.01	<0.01	<0.01	0.04	mg/kg	0.01	A-T-019s
Anthracene$_A^{M\#}$	1.36	2.39	3.71	0.02	<0.02	<0.02	0.30	mg/kg	0.02	A-T-019s
Benzo(a)anthracene$_A^{M\#}$	2.94	6.29	11.1	0.18	0.05	0.06	1.31	mg/kg	0.04	A-T-019s
Benzo(a)pyrene$_A^{M\#}$	2.67	4.19	7.89	0.17	0.05	0.06	1.04	mg/kg	0.04	A-T-019s
Benzo(b)fluoranthene$_A^{M\#}$	3.37	5.43	9.12	0.23	0.07	0.09	1.32	mg/kg	0.05	A-T-019s
Benzo(ghi)perylene$_A^{M\#}$	1.54	2.55	3.85	0.11	<0.05	<0.05	0.57	mg/kg	0.05	A-T-019s
Benzo(k)fluoranthene$_A^{M\#}$	1.09	1.86	3.37	0.08	<0.07	<0.07	0.42	mg/kg	0.07	A-T-019s
Chrysene$_A^{M\#}$	2.95	5.87	10	0.21	<0.06	0.08	1.28	mg/kg	0.06	A-T-019s
Dibenzo(ah)anthracene$_A^{M\#}$	0.31	0.59	0.88	<0.04	<0.04	<0.04	0.12	mg/kg	0.04	A-T-019s
Fluoranthene$_A^{M\#}$	8.15	14.6	27	0.41	0.12	0.13	3.07	mg/kg	0.08	A-T-019s
Fluorene$_A^{M\#}$	0.47	0.51	0.89	<0.01	<0.01	<0.01	0.08	mg/kg	0.01	A-T-019s
Indeno(123-cd)pyrene$_A^{M\#}$	1.73	2.89	4.64	0.11	<0.03	0.05	0.67	mg/kg	0.03	A-T-019s
Naphthalene $_A^{M\#}$	0.03	0.04	0.09	<0.03	<0.03	<0.03	0.14	mg/kg	0.03	A-T-019s
Phenanthrene$_A^{M\#}$	5.93	8.28	16.1	0.13	0.04	0.05	1.46	mg/kg	0.03	A-T-019s
Pyrene$_A^{M\#}$	6.77	13.5	23.3	0.36	0.11	0.11	2.56	mg/kg	0.07	A-T-019s
Total PAH-16MS$_A^{M\#}$	39.8	70.1	123	2.01	0.44	0.63	14.4	mg/kg	0.01	A-T-019s

Envirolab Job Number: 23/02978

Client Project Name: Gravesham Leisure Centre

Client Project Ref: 52511

Lab Sample ID	23/02978/8	23/02978/9	23/02978/10	23/02978/11	23/02978/12	23/02978/13	23/02978/14	Units	Limit of Detection	Method ref
Client Sample No										
Client Sample ID	SA1	SA2	SA2	SA3	TP1	TP2	HP1			
Depth to Top	0.00	0.00	0.20	0.00	0.00	0.00	0.00			
Depth To Bottom	0.20	0.20	0.40	0.30	0.30	0.10	0.30			
Date Sampled	20-Mar-23	20-Mar-23	20-Mar-23	21-Mar-23	21-Mar-23	21-Mar-23	24-Mar-23			
Sample Type	Soil - ES	Solid	Soil - ES	Soil - ES	Soil - ES	Soil - ES	Soil - ES			
Sample Matrix Code	4ABE	7	4ABE	4AE	4AE	4AE	4ABE			
TPH Total with ID + GC Trace										
TPH total (>C6-C40)$_A^{M\#}$	384	1560	1990	-	-	-	-	mg/kg	10	A-T-007s
TPH FID Chromatogram$_A$	Appended	Appended	Appended	-	-	-	-			A-T-007s
TPH ID Interpretation$_A$	C12-C44 with some PAHs and other unknown hydrocarbons	C10-C44 with some PAHs and other unknown hydrocarbons	C10-C44 with some PAHs and other unknown hydrocarbons	-	-	-	-			A-T-007s

Envirolab Job Number: 23/02978

Client Project Name: Gravesham Leisure Centre

Client Project Ref: 52511

Lab Sample ID	23/02978/8	23/02978/9	23/02978/10	23/02978/11	23/02978/12	23/02978/13	23/02978/14	Units	Limit of Detection	Method ref
Client Sample No										
Client Sample ID	SA1	SA2	SA2	SA3	TP1	TP2	HP1			
Depth to Top	0.00	0.00	0.20	0.00	0.00	0.00	0.00			
Depth To Bottom	0.20	0.20	0.40	0.30	0.30	0.10	0.30			
Date Sampled	20-Mar-23	20-Mar-23	20-Mar-23	21-Mar-23	21-Mar-23	21-Mar-23	24-Mar-23			
Sample Type	Soil - ES	Solid	Soil - ES	Soil - ES	Soil - ES	Soil - ES	Soil - ES			
Sample Matrix Code	4ABE	7	4ABE	4AE	4AE	4AE	4ABE			
TPH CWG with Clean Up										
Ali >C5-C6$_A^{\#}$	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	mg/kg	0.01	A-T-022s
Ali >C6-C8$_A^{\#}$	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	mg/kg	0.01	A-T-022s
Ali >C8-C10$_A$	<10	<10	<10	<1	<1	<1	<1	mg/kg	1	A-T-055s
Ali >C10-C12$_A^{M\#}$	<10	<10	<10	<1	<1	<1	<1	mg/kg	1	A-T-055s
Ali >C12-C16$_A^{M\#}$	<10	<10	<10	<1	<1	<1	<1	mg/kg	1	A-T-055s
Ali >C16-C21$_A^{M\#}$	<10	<10	11	1	<1	<1	2	mg/kg	1	A-T-055s
Ali >C21-C35$_A^{M\#}$	103	253	78	12	6	9	200	mg/kg	1	A-T-055s
Total Aliphatics$_A$	103	253	89	13	6	9	203	mg/kg	1	Calc-As Recd
Aro >C5-C7$_A^{\#}$	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	mg/kg	0.01	A-T-022s
Aro >C7-C8$_A^{\#}$	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	mg/kg	0.01	A-T-022s
Aro >C8-C10$_A$	<10	<10	<10	<1	<1	<1	<1	mg/kg	1	A-T-055s
Aro >C10-C12$_A$	<10	<10	<10	<1	<1	<1	<1	mg/kg	1	A-T-055s
Aro >C12-C16$_A$	20	13	108	2	<1	<1	8	mg/kg	1	A-T-055s
Aro >C16-C21$_A^{M\#}$	77	58	801	6	2	3	110	mg/kg	1	A-T-055s
Aro >C21-C35$_A^{M\#}$	282	242	1510	16	11	6	308	mg/kg	1	A-T-055s
Total Aromatics$_A$	379	313	2420	24	13	9	426	mg/kg	1	Calc-As Recd
TPH (Ali & Aro >C5-C35)$_A$	482	566	2510	37	19	18	629	mg/kg	1	Calc-As Recd
BTEX - Benzene$_A^{\#}$	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	mg/kg	0.01	A-T-022s
BTEX - Toluene$_A^{\#}$	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	mg/kg	0.01	A-T-022s
BTEX - Ethyl Benzene$_A^{\#}$	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	mg/kg	0.01	A-T-022s
BTEX - m & p Xylene$_A^{\#}$	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	mg/kg	0.01	A-T-022s
BTEX - o Xylene$_A^{\#}$	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	mg/kg	0.01	A-T-022s
MTBE$_A^{\#}$	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	mg/kg	0.01	A-T-022s

Envirolab Job Number: 23/02978

Client Project Name: Gravesham Leisure Centre

Client Project Ref: 52511

Lab Sample ID	23/02978/15	23/02978/16	23/02978/17	23/02978/18				Units	Limit of Detection	Method ref
Client Sample No										
Client Sample ID	HP2	HP3	HP4	HP5						
Depth to Top	0.00	0.20	0.00	0.00						
Depth To Bottom	0.30	0.40	0.30	0.30						
Date Sampled	24-Mar-23	23-Feb-23	23-Mar-23	23-Mar-23						
Sample Type	Soil - ES	Soil - ES	Soil - ES	Soil - ES						
Sample Matrix Code	4AE	4AE	4ABE	4ABE						
% Stones >10mm$_A$	<0.1	15.1	9.6	10.9				% w/w	0.1	A-T-044
pH$_D$$^{M\#}$	7.70	9.69	8.54	8.39				pH	0.01	A-T-031s
Sulphate (water sol 2:1)$_D$$^{M\#}$	<0.01	<0.01	0.04	0.04				g/l	0.01	A-T-026s
Sulphate (acid soluble)$_D$$^{M\#}$	730	1100	700	540				mg/kg	200	A-T-028s
Arsenic$_D$$^{M\#}$	4	7	5	6				mg/kg	1	A-T-024s
Cadmium$_D$$^{M\#}$	2.6	2.0	1.4	1.9				mg/kg	0.5	A-T-024s
Copper$_D$$^{M\#}$	42	16	76	38				mg/kg	1	A-T-024s
Chromium$_D$$^{M\#}$	29	21	21	117				mg/kg	1	A-T-024s
Lead$_D$$^{M\#}$	67	161	33	108				mg/kg	1	A-T-024s
Mercury$_D$	0.36	1.39	1.15	1.24				mg/kg	0.17	A-T-024s
Nickel$_D$$^{M\#}$	23	16	19	19				mg/kg	1	A-T-024s
Selenium$_D$$^{M\#}$	<1	<1	<1	<1				mg/kg	1	A-T-024s
Zinc$_D$$^{M\#}$	327	182	116	323				mg/kg	5	A-T-024s

Envirolab Job Number: 23/02978

Client Project Name: Gravesham Leisure Centre

Client Project Ref: 52511

Lab Sample ID	23/02978/15	23/02978/16	23/02978/17	23/02978/18				Units	Limit of Detection	Method ref
Client Sample No										
Client Sample ID	HP2	HP3	HP4	HP5						
Depth to Top	0.00	0.20	0.00	0.00						
Depth To Bottom	0.30	0.40	0.30	0.30						
Date Sampled	24-Mar-23	23-Feb-23	23-Mar-23	23-Mar-23						
Sample Type	Soil - ES	Soil - ES	Soil - ES	Soil - ES						
Sample Matrix Code	4AE	4AE	4ABE	4ABE						
Asbestos in Soil (inc. matrix) ^										
Asbestos in soil$_D^{\#}$	NAD	NAD	NAD	NAD						A-T-045
Asbestos Matrix (visual)$_D$	-	-	-	-						A-T-045
Asbestos Matrix (microscope)$_D$	-	-	-	-						A-T-045
Asbestos ACM - Suitable for Water Absorption Test?$_D$	N/A	N/A	N/A	N/A						A-T-045

Envirolab Job Number: 23/02978

Client Project Name: Gravesham Leisure Centre

Client Project Ref: 52511

Lab Sample ID	23/02978/15	23/02978/16	23/02978/17	23/02978/18				Units	Limit of Detection	Method ref
Client Sample No										
Client Sample ID	HP2	HP3	HP4	HP5						
Depth to Top	0.00	0.20	0.00	0.00						
Depth To Bottom	0.30	0.40	0.30	0.30						
Date Sampled	24-Mar-23	23-Feb-23	23-Mar-23	23-Mar-23						
Sample Type	Soil - ES	Soil - ES	Soil - ES	Soil - ES						
Sample Matrix Code	4AE	4AE	4ABE	4ABE						
PAH-16MS										
Acenaphthene$_A^{M\#}$	<0.01	<0.01	0.03	0.04				mg/kg	0.01	A-T-019s
Acenaphthylene$_A^{M\#}$	<0.01	<0.01	<0.01	0.03				mg/kg	0.01	A-T-019s
Anthracene$_A^{M\#}$	<0.02	0.03	0.05	0.11				mg/kg	0.02	A-T-019s
Benzo(a)anthracene$_A^{M\#}$	0.07	0.09	0.18	0.87				mg/kg	0.04	A-T-019s
Benzo(a)pyrene$_A^{M\#}$	0.07	0.11	0.16	1.02				mg/kg	0.04	A-T-019s
Benzo(b)fluoranthene$_A^{M\#}$	0.11	0.14	0.22	1.42				mg/kg	0.05	A-T-019s
Benzo(ghi)perylene$_A^{M\#}$	<0.05	0.10	0.11	0.89				mg/kg	0.05	A-T-019s
Benzo(k)fluoranthene$_A^{M\#}$	<0.07	<0.07	0.08	0.54				mg/kg	0.07	A-T-019s
Chrysene$_A^{M\#}$	0.11	0.10	0.21	1.19				mg/kg	0.06	A-T-019s
Dibenzo(ah)anthracene$_A^{M\#}$	<0.04	<0.04	<0.04	0.13				mg/kg	0.04	A-T-019s
Fluoranthene$_A^{M\#}$	0.21	0.17	0.44	2.48				mg/kg	0.08	A-T-019s
Fluorene$_A^{M\#}$	<0.01	<0.01	0.02	0.02				mg/kg	0.01	A-T-019s
Indeno(123-cd)pyrene$_A^{M\#}$	0.05	0.10	0.12	0.86				mg/kg	0.03	A-T-019s
Naphthalene $_A^{M\#}$	<0.03	<0.03	<0.03	<0.03				mg/kg	0.03	A-T-019s
Phenanthrene$_A^{M\#}$	0.10	0.08	0.27	0.72				mg/kg	0.03	A-T-019s
Pyrene$_A^{M\#}$	0.19	0.15	0.39	2.23				mg/kg	0.07	A-T-019s
Total PAH-16MS$_A^{M\#}$	0.91	1.07	2.28	12.6				mg/kg	0.01	A-T-019s

Envirolab Job Number: 23/02978

Client Project Name: Gravesham Leisure Centre

Client Project Ref: 52511

Lab Sample ID	23/02978/15	23/02978/16	23/02978/17	23/02978/18				Units	Limit of Detection	Method ref
Client Sample No										
Client Sample ID	HP2	HP3	HP4	HP5						
Depth to Top	0.00	0.20	0.00	0.00						
Depth To Bottom	0.30	0.40	0.30	0.30						
Date Sampled	24-Mar-23	23-Feb-23	23-Mar-23	23-Mar-23						
Sample Type	Soil - ES	Soil - ES	Soil - ES	Soil - ES						
Sample Matrix Code	4AE	4AE	4ABE	4ABE						
Speciated PCB-EC7 & WHO12										
PCB BZ 28$_A^{M\#}$	<0.003	-	-	-				mg/kg	0.003	A-T-004s
PCB BZ 52$_A^{M\#}$	<0.002	-	-	-				mg/kg	0.002	A-T-004s
PCB BZ 81$_A^{M\#}$	<0.005	-	-	-				mg/kg	0.005	A-T-004s
PCB BZ 101$_A^{M\#}$	<0.004	-	-	-				mg/kg	0.004	A-T-004s
PCB BZ 105$_A^{M\#}$	<0.005	-	-	-				mg/kg	0.005	A-T-004s
PCB BZ 114$_A^{M\#}$	<0.005	-	-	-				mg/kg	0.005	A-T-004s
PCB BZ 118$_A^{M\#}$	<0.007	-	-	-				mg/kg	0.007	A-T-004s
PCB BZ 123$_A^{M\#}$	<0.005	-	-	-				mg/kg	0.005	A-T-004s
PCB BZ 126$_A^{M\#}$	<0.005	-	-	-				mg/kg	0.005	A-T-004s
PCB BZ 138$_A^{M\#}$	<0.006	-	-	-				mg/kg	0.006	A-T-004s
PCB BZ 153$_A^{M\#}$	<0.004	-	-	-				mg/kg	0.004	A-T-004s
PCB BZ 156$_A^{M\#}$	<0.005	-	-	-				mg/kg	0.005	A-T-004s
PCB BZ 157$_A^{M\#}$	<0.005	-	-	-				mg/kg	0.005	A-T-004s
PCB BZ 167$_A^{M\#}$	<0.005	-	-	-				mg/kg	0.005	A-T-004s
PCB BZ 169$_A^{M\#}$	<0.005	-	-	-				mg/kg	0.005	A-T-004s
PCB BZ 180$_A^{M\#}$	<0.004	-	-	-				mg/kg	0.004	A-T-004s
PCB BZ 189$_A^{M\#}$	<0.005	-	-	-				mg/kg	0.005	A-T-004s
PCB BZ 77$_A^{M\#}$	<0.005	-	-	-				mg/kg	0.005	A-T-004s
Total Speciated PCB-EC7 & WHO12$_A^{M\#}$	<0.007	-	-	-				mg/kg	0.003	A-T-004s

Envirolab Job Number: 23/02978

Client Project Name: Gravesham Leisure Centre

Client Project Ref: 52511

Lab Sample ID	23/02978/15	23/02978/16	23/02978/17	23/02978/18				Units	Limit of Detection	Method ref
Client Sample No										
Client Sample ID	HP2	HP3	HP4	HP5						
Depth to Top	0.00	0.20	0.00	0.00						
Depth To Bottom	0.30	0.40	0.30	0.30						
Date Sampled	24-Mar-23	23-Feb-23	23-Mar-23	23-Mar-23						
Sample Type	Soil - ES	Soil - ES	Soil - ES	Soil - ES						
Sample Matrix Code	4AE	4AE	4ABE	4ABE						
TPH CWG with Clean Up										
Ali >C5-C6$_A^{\#}$	<0.01	<0.01	<0.01	<0.01				mg/kg	0.01	A-T-022s
Ali >C6-C8$_A^{\#}$	<0.01	<0.01	<0.01	<0.01				mg/kg	0.01	A-T-022s
Ali >C8-C10$_A$	<1	<1	<1	<1				mg/kg	1	A-T-055s
Ali >C10-C12$_A^{M\#}$	<1	<1	<1	<1				mg/kg	1	A-T-055s
Ali >C12-C16$_A^{M\#}$	<1	<1	<1	1				mg/kg	1	A-T-055s
Ali >C16-C21$_A^{M\#}$	2	<1	<1	4				mg/kg	1	A-T-055s
Ali >C21-C35$_A^{M\#}$	54	10	11	164				mg/kg	1	A-T-055s
Total Aliphatics$_A$	56	10	11	169				mg/kg	1	Calc-As Recd
Aro >C5-C7$_A^{\#}$	<0.01	<0.01	<0.01	<0.01				mg/kg	0.01	A-T-022s
Aro >C7-C8$_A^{\#}$	<0.01	<0.01	<0.01	<0.01				mg/kg	0.01	A-T-022s
Aro >C8-C10$_A$	<1	<1	<1	2				mg/kg	1	A-T-055s
Aro >C10-C12$_A$	<1	<1	<1	4				mg/kg	1	A-T-055s
Aro >C12-C16$_A$	2	2	3	7				mg/kg	1	A-T-055s
Aro >C16-C21$_A^{M\#}$	5	5	18	56				mg/kg	1	A-T-055s
Aro >C21-C35$_A^{M\#}$	17	17	41	286				mg/kg	1	A-T-055s
Total Aromatics$_A$	25	24	62	355				mg/kg	1	Calc-As Recd
TPH (Ali & Aro >C5-C35)$_A$	81	34	73	524				mg/kg	1	Calc-As Recd
BTEX - Benzene$_A^{\#}$	<0.01	<0.01	<0.01	<0.01				mg/kg	0.01	A-T-022s
BTEX - Toluene$_A^{\#}$	<0.01	<0.01	<0.01	<0.01				mg/kg	0.01	A-T-022s
BTEX - Ethyl Benzene$_A^{\#}$	<0.01	<0.01	<0.01	<0.01				mg/kg	0.01	A-T-022s
BTEX - m & p Xylene$_A^{\#}$	<0.01	<0.01	<0.01	<0.01				mg/kg	0.01	A-T-022s
BTEX - o Xylene$_A^{\#}$	<0.01	<0.01	<0.01	<0.01				mg/kg	0.01	A-T-022s
MTBE$_A^{\#}$	<0.01	<0.01	<0.01	<0.01				mg/kg	0.01	A-T-022s

REPORT NOTES

General

This report shall not be reproduced, except in full, without written approval from Envirolab.
The results reported herein relate only to the material supplied to the laboratory.
The residue of any samples contained within this report, and any received with the same delivery, will be disposed of six weeks after initial scheduling. For samples tested for Asbestos we will retain a portion of the dried sample for a minimum of six months after the initial Asbestos testing is completed.
Analytical results reflect the quality of the sample at the time of analysis only.
Opinions and interpretations expressed are outside the scope of our accreditation.
If results are in italic font they are associated with an AQC failure, these are not accredited and are unreliable.
A deviating samples report is appended and will indicate if samples or tests have been found to be deviating. Any test results affected may not be an accurate record of the concentration at the time of sampling and, as a result, may be invalid.
The Client Sample No, Client Sample ID, Depth to Top, Depth to Bottom and Date Sampled were all provided by the client.

Soil chemical analysis:
All results are reported as dry weight (<40°C).
For samples with Matrix Codes 1 - 6 natural stones, brick and concrete fragments >10mm and any extraneous material (visible glass, metal or twigs) are removed and excluded from the sample prior to analysis and reported results corrected to a whole sample basis. This is reported as '% stones >10mm'.
For samples with Matrix Code 7 the whole sample is dried and crushed prior to analysis and this supersedes any "A" subscripts
All analysis is performed on the sample as received for soil samples which are positive for asbestos or the client has informed asbestos may be present and/or if they are from outside the European Union and this supersedes any "D" subscripts.

TPH analysis of water by method A-T-007:
Free and visible oils are excluded from the sample used for analysis so that the reported result represents the dissolved phase only.

Electrical Conductivity of water by Method A-T-037:
Results greater than 12900µS/cm @ 25°C / 11550µS/cm @ 20°C fall outside the calibration range and as such are unaccredited.

Asbestos:
Asbestos in soil analysis is performed on a dried aliquot of the submitted sample and cannot guarantee to identify asbestos if only present in small numbers as discrete fibres/fragments in the original sample.
Stones etc. are not removed from the sample prior to analysis.
Quantification of asbestos is a 3 stage process including visual identification, hand picking and weighing and fibre counting by sedimentation/phase contrast optical microscopy if required. If asbestos is identified as being present but is not in a form that is suitable for analysis by hand picking and weighing (normally if the asbestos is present as free fibres) quantification by sedimentation is performed. Where ACMs are found a percentage asbestos is assigned to each with reference to 'HSG264, Asbestos: The survey guide' and the calculated asbestos content is expressed as a percentage of the dried soil sample aliquot used.

Predominant Matrix Codes:
1 = SAND, 2 = LOAM, 3 = CLAY, 4 = LOAM/SAND, 5 = SAND/CLAY, 6 = CLAY/LOAM, 7 = OTHER, 8 = Asbestos bulk ID sample, 9 = INCINERATOR ASH.
Samples with Matrix Code 7 & 8 are not predominantly a SAND/LOAM/CLAY mix and are not covered by our BSEN 17025 or MCERTS accreditations, with the exception of bulk asbestos which are BSEN 17025 accredited.
Secondary Matrix Codes:
A = contains stones, B = contains construction rubble, C = contains visible hydrocarbons, D = contains glass/metal,
E = contains roots/twigs.

Key:
IS indicates Insufficient Sample for analysis.
US indicates Unsuitable Sample for analysis.
NDP indicates No Determination Possible.
NAD indicates No Asbestos Detected.
N/A indicates Not Applicable.
Superscript # indicates method accredited to ISO 17025.
Superscript "M" indicates method accredited to MCERTS.
Subscript "A" indicates analysis performed on the sample as received.
Subscript "D" indicates analysis performed on the dried sample, crushed to pass a 2mm sieve
Subscript "^" indicates analysis has dependant options against results. Testing dependant on results appear in the comments area of your sample receipt.
EPH CWG results have humics mathematically subtracted through instrument calculation
TPH results "with Cleanup" indicates results cleaned up with Silica during extraction

EPH CWG GCxGC ID from TPH CWG

Where we have identified humic substances in any ID's from TPH CWG with Clean Up please note that the concentration of these humic substances is not included in the quantified results and are included in the ID for information.

Please contact us if you need any further information.

v2

Envirolab Deviating Samples Report

Units 7&8 Sandpits Business Park, Mottram Road, Hyde, SK14 3AR
Tel. 0161 368 4921 email. ask@envlab.co.uk

Client: RSK Environment Ltd Tonbridge, Anerley Court, Half Moon Lane, Hildenborough, Tonbridge, Kent, TN11 9HU

Project: Gravesham Leisure Centre

Clients Project No: 52511

Project No: 23/02978

Date Received: 29/03/2023 (am)

Cool Box Temperatures (°C): 10.4 & 10.7

Lab Sample ID	23/02978/3	23/02978/16
Client Sample No		
Client Sample ID/Depth	WS2 0.00-0.30m	HP3 0.20-0.40m
Date Sampled	16/02/23	23/02/23
Deviation Code		
F	✓	✓

Key
F *Maximum holding time exceeded between sampling date and analysis for analytes listed below*

HOLDING TIME EXCEEDANCES

Lab Sample ID	23/02978/3	23/02978/16
Client Sample No		
Client Sample ID/Depth	WS2 0.00-0.30m	HP3 0.20-0.40m
Date Sampled	16/02/23	23/02/23
PAH-16MS	✓	✓
Sulphate (acid soluble)	✓	✓
Sulphate (water sol 2:1)	✓	✓
EPHCWG	✓	✓
VPHCWG	✓	✓

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

Envirolab Analysis Dates

Lab Sample ID	23/02978/1	23/02978/2	23/02978/3	23/02978/4	23/02978/5	23/02978/6	23/02978/7	23/02978/8	23/02978/9	23/02978/10	23/02978/11	23/02978/12
Client Sample No												
Client Sample ID/Depth	BH1 0.05m	WS1 0.00-0.30m	WS2 0.00-0.30m	WS3 0.00-0.30m	WS4 0.00-0.30m	WS5 0.10-0.40m	WS6 0.00-0.30m	SA1 0.00-0.20m	SA2 0.00-0.20m	SA2 0.20-0.40m	SA3 0.00-0.30m	TP1 0.00-0.30m
Date Sampled	17/03/23	16/03/23	16/02/23	16/03/24	16/02/24	16/03/25	16/02/25	20/03/23	20/03/23	20/03/23	21/03/23	21/03/23
A-T-004s								03/04/2023		03/04/2023		
A-T-006s	03/04/2023											
A-T-007s								31/03/2023	31/03/2023	31/03/2023		
A-T-019s	06/04/2023	06/04/2023	06/04/2023	06/04/2023	06/04/2023	06/04/2023	06/04/2023	06/04/2023	06/04/2023	06/04/2023	06/04/2023	06/04/2023
A-T-022s	03/04/2023	03/04/2023	03/04/2023	03/04/2023	03/04/2023	03/04/2023	03/04/2023	03/04/2023	03/04/2023	03/04/2023	03/04/2023	03/04/2023
A-T-024s	07/04/2023	07/04/2023	07/04/2023	07/04/2023	07/04/2023	07/04/2023	07/04/2023	07/04/2023	07/04/2023	07/04/2023	07/04/2023	07/04/2023
A-T-025w								11/04/2023		11/04/2023		
A-T-026s	06/04/2023	06/04/2023	06/04/2023	06/04/2023	06/04/2023	06/04/2023	06/04/2023	06/04/2023	06/04/2023	06/04/2023	06/04/2023	06/04/2023
A-T-026w								11/04/2023		11/04/2023		
A-T-026w (F)								11/04/2023		11/04/2023		
A-T-028s	12/04/2023	12/04/2023	12/04/2023	12/04/2023	12/04/2023	12/04/2023	12/04/2023	12/04/2023	12/04/2023	12/04/2023	12/04/2023	12/04/2023
A-T-030s								07/04/2023		06/04/2023		
A-T-031s	11/04/2023	11/04/2023	11/04/2023	11/04/2023	11/04/2023	11/04/2023	11/04/2023	11/04/2023	11/04/2023	11/04/2023	11/04/2023	11/04/2023
A-T-031w								11/04/2023		11/04/2023		
A-T-032s		06/04/2023		06/04/2023			06/04/2023	11/04/2023		06/04/2023	06/04/2023	
A-T-032w								11/04/2023		11/04/2023		
A-T-037w								11/04/2023		11/04/2023		
A-T-040s	06/04/2023					06/04/2023		06/04/2023	06/04/2023	06/04/2023		
A-T-044	11/04/2023	11/04/2023	11/04/2023	11/04/2023	11/04/2023	11/04/2023	11/04/2023	11/04/2023	11/04/2023	11/04/2023	11/04/2023	11/04/2023
A-T-045	03/04/2023	03/04/2023	03/04/2023	03/04/2023	03/04/2023	03/04/2023	03/04/2023	03/04/2023	03/04/2023	03/04/2023	03/04/2023	03/04/2023
A-T-050w								11/04/2023		11/04/2023		
A-T-055s	06/04/2023	06/04/2023	06/04/2023	06/04/2023	06/04/2023	06/04/2023	06/04/2023	06/04/2023	06/04/2023	06/04/2023	06/04/2023	06/04/2023
A-T-ANCs								11/04/2023		11/04/2023		
Calc-As Recd	06/04/2023	06/04/2023	06/04/2023	06/04/2023	06/04/2023	06/04/2023	06/04/2023	06/04/2023	06/04/2023	06/04/2023	06/04/2023	06/04/2023
Calc-no stones								11/04/2023		11/04/2023		
Probe (w)								11/04/2023		11/04/2023		

Lab Sample ID	23/02978/13	23/02978/14	23/02978/15	23/02978/16	23/02978/17	23/02978/18
Client Sample No						
Client Sample ID/Depth	TP2 0.00-0.10m	HP1 0.00-0.30m	HP2 0.00-0.30m	HP3 0.20-0.40m	HP4 0.00-0.30m	HP5 0.00-0.30m
Date Sampled	21/03/23	24/03/23	24/03/23	23/02/23	23/03/23	23/03/23
A-T-004s			03/04/2023			
A-T-006s						
A-T-007s						
A-T-019s	06/04/2023	06/04/2023	06/04/2023	06/04/2023	06/04/2023	06/04/2023
A-T-022s	03/04/2023	03/04/2023	03/04/2023	03/04/2023	03/04/2023	03/04/2023
A-T-024s	07/04/2023	07/04/2023	07/04/2023	07/04/2023	07/04/2023	07/04/2023
A-T-025w						
A-T-026s	06/04/2023	06/04/2023	06/04/2023	06/04/2023	06/04/2023	06/04/2023
A-T-026w						
A-T-026w (F)						
A-T-028s	12/04/2023	12/04/2023	12/04/2023	12/04/2023	12/04/2023	12/04/2023
A-T-030s						
A-T-031s	11/04/2023	11/04/2023	11/04/2023	11/04/2023	11/04/2023	11/04/2023
A-T-031w						
A-T-032s	06/04/2023					
A-T-032w						
A-T-037w						
A-T-040s						
A-T-044	11/04/2023	11/04/2023	11/04/2023	11/04/2023	11/04/2023	11/04/2023
A-T-045	03/04/2023	03/04/2023	03/04/2023	03/04/2023	03/04/2023	03/04/2023
A-T-050w						
A-T-055s	06/04/2023	06/04/2023	06/04/2023	06/04/2023	06/04/2023	06/04/2023
A-T-ANCs						
Calc-As Recd	06/04/2023	06/04/2023	06/04/2023	06/04/2023	06/04/2023	06/04/2023
Calc-no stones						
Probe (w)						

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

End of Report

envirolab
Units 7 & 8 Sandpits Business Park
Mottram Road, Hyde, Cheshire, SK14 3AR

FINAL ANALYTICAL TEST REPORT

Envirolab Job Number: 23/02978
Issue Number: 1 **Date:** 12 April, 2023

Client: RSK Environment Ltd Tonbridge
Anerley Court, Half Moon Lane, Hildenborough
Tonbridge
Kent
TN11 9HU

Project Manager: Josh Curnow/Niki Dubber
Project Name: Gravesham Leisure Centre
Project Ref: 52511
Order No: N/A
Date Samples Received: 23/03/23
Date Instructions Received: 29/03/23
Date Analysis Completed: 12/04/23

Approved by:

[redacted]

Danielle Brierley
Deputy Client Services Supervisor

MCERTS THE ENVIRONMENT AGENCY'S MONITORING CERTIFICATION SCHEME
UKAS TESTING
1247