



Assessment of Decommissioned Tank, Circle Reading Hospital, Reading RG2 0NE

Prepared for Circle Health Group

December 2025

10/2628 Rev. 00

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Document Origin

Revision	Date	Revision Description		Name
00	December 2025	Original	Prepared	Sophie Piercy Geotechnical Engineer sophie.piercy@clancy.co.uk
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Assessment of Decommissioned Tank

Circle Reading Hospital, Reading

Introduction

Clancy Consulting Ltd has been appointed by Circle Health Group to provide environmental support in respect of the decommissioning of an underground fuel tank at Circle Reading Hospital. This letter report details the investigation, sampling and testing undertaken around the decommissioned tank.

Site Location

The site is located at Circle Reading Hospital, Drake Way, Reading, RG2 0NE.

Background

It was proposed to install a new above ground fuel tank and decommission the existing underground tank at the above site.

The existing tank is below ground and located in an access roadway/parking area to the south-east of the current hospital building. It is proposed to decommission this tank, but not remove it, following the installation of a new above ground tank, with associated bunding and pipework, immediately north-west of the current position.

The investigation is required to satisfy Planning Condition 4 which states:

'Within three months of the first use of the relocated fuel tank, a contaminated land investigation shall have been carried out and a report into the findings of the investigation shall have been submitted to and approved in writing by the Local Planning Authority. In the event that the investigation and report identify that land contamination has occurred, a remediation scheme, including a timetable for its implementation and subsequent validation reporting, shall be submitted to the Local Planning Authority within 1 month of the written approval of the report. The remediation scheme shall set out how the contamination will be removed to ensure the site is in a condition suitable for its use and to prevent any contamination spreading beyond the site. Thereafter, the measures in the approved remediation scheme shall be fully implemented in accordance with the approved timetable. A validation report in respect of the implementation of the remediation scheme shall be submitted to the Local Planning Authority for approval in accordance with the approved timetable.'

Recorded Geology

The published geological maps do not record any superficial deposits at the site, although Made Ground is recorded beneath the site and surrounding area noted as 'road, rail, reservoir and screening embankments; made up landscaped ground; spoil and refuse heaps'. The base map to the 1:10,000 map shows the area was a former sewage works with circular filter beds to the east and north, and the subject area being on a raised area, possibly an old reservoir or settlement lagoon.

No superficial deposits are recorded on the site, although alluvium and river terrace deposits are recorded to the west and south-west. The solid strata is recorded as the basal beds of the London Clay, with the boundary with the Lambeth Group shown just to the west. The basal beds of the London Clay are often gravelly sandy clays whilst the top of the Lambeth Group can include clays, silts and sands,

Site Investigation

Clancy Consulting Ltd attended site on 28th October 2025 to carry out four window sample boreholes around the underground tank, and to sample the surrounding soils.

The ground conditions were typically Made Ground over dense brown / orangeish brown fine to medium sand at approx. 2.80m to 3.00m bgl. The Made Ground was typically encountered as three distinct layers underlying the tarmacadam surfacing.

Directly beneath the tarmacadam in WS02, WS03 and WS04 was a layer of grey sandy gravel or gravelly sand. In all boreholes a layer of brown slightly clayey gravelly fine to coarse sand was encountered underlain by loose to medium dense cream medium to coarse gravel of chert. The gravel generally comprised tarmacadam, brick, chert, concrete and plastic with rare pottery.

No visual or olfactory signs of potential contamination were noted within any of the materials encountered.

A plan showing the location of the tank and the locations of the boreholes is included in Appendix I and the exploratory hole logs are presented in Appendix II.

Soil Sampling and Testing

Soil samples were taken throughout the depths of the boreholes and were tested for speciated petroleum hydrocarbons (TPHCWG) and BTEX. Nine samples from varying depths (were submitted for analysis to the UKAS and MCerts accredited laboratory of i2 Analytical Ltd. The analytical results are presented in Appendix III.

Five of the samples recorded concentrations of individual TPH fractions above the laboratory level of detection, although the maximum recorded Total TPH concentrations were between 36mg/kg and 290mg/kg, with the majority within the heavy fractions C₂₁-C₃₅, suggesting this is probably due to fragments of macadam within the Made Ground materials. The samples from the natural strata / base of the holes did not record any TPH fractions above the laboratory detection limits.

Conclusions

The existing decommissioned underground tank is located in an access roadway/parking area to the south-east of the current hospital building.

The new above ground tank has been installed and the old tank emptied. There are no current plans to remove the old tank.

No visual or olfactory signs of potential contamination were noted within any of the materials encountered by the investigation. In addition, a maximum recorded Total TPH concentration of 290mg/kg was recorded within the Made Ground around the tank, and this was predominantly within the heavy fractions (C₂₁-C₃₅). It is suggested that this is due to fragments of macadam within the Made Ground materials. The samples from the natural strata / base of the holes / anticipated below the base of tank, did not record any TPH fractions above the laboratory detection limits.

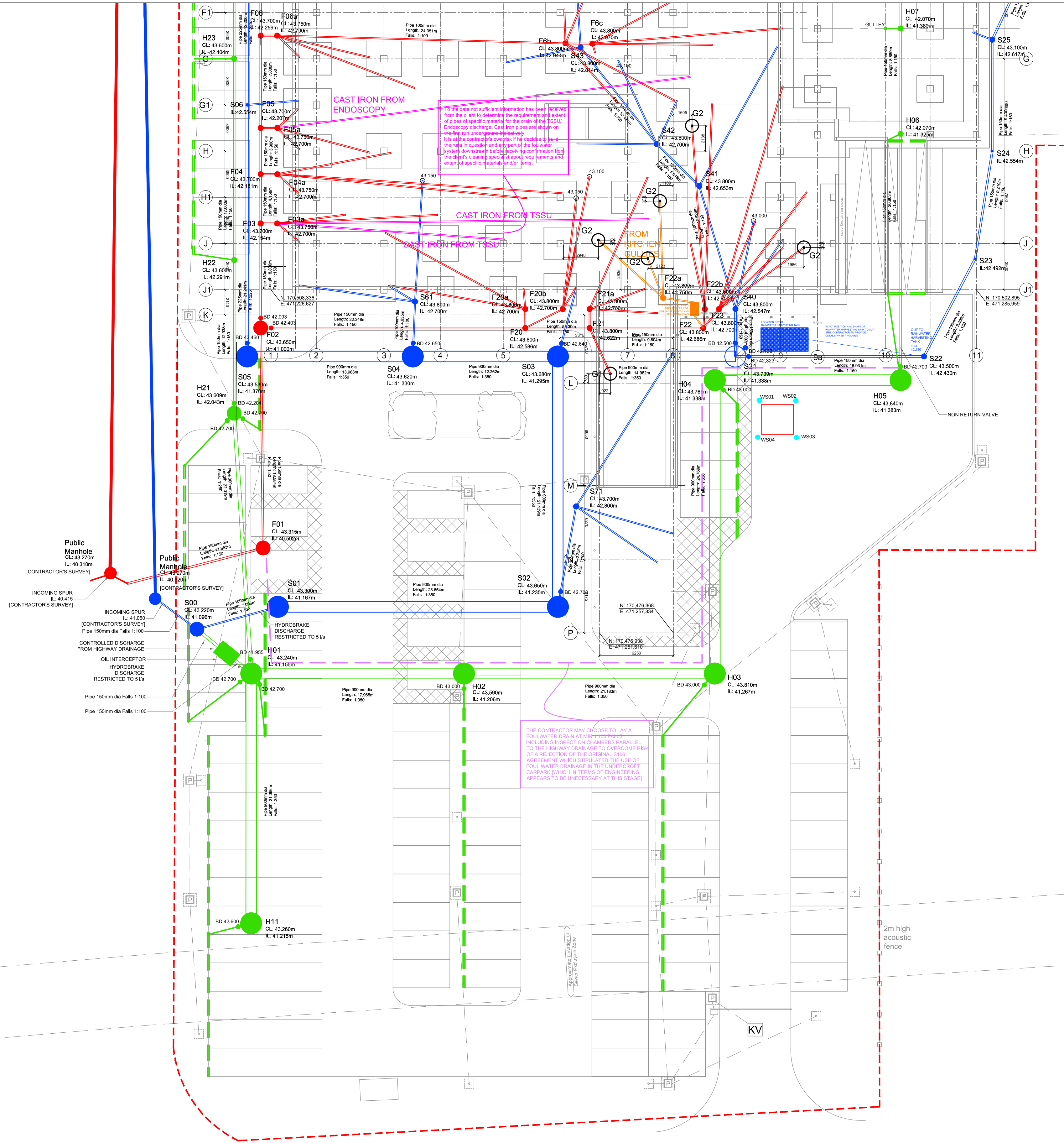
Whilst the tank and its surround is still in situ, the ground investigation has not identified the presence of significant concentration of hydrocarbons which could be as a result of leakage from the tank (deep samples all below the laboratory detection limit) or surface spillage (near surface samples with predominantly heavy hydrocarbon fractions). Whilst it is not possible to obtain samples from beneath the tank, the holes have been sunk in close proximity to the tank and hence would be expected to identify if significant contamination was present. No significant levels of hydrocarbon contamination have been identified, and hence it is considered that, as the tank area is to remain covered by hardstanding which will prevent infiltration into the subsurface, the tank does not present a significant risk to controlled waters.

Appendices

Appendix I	Drawings
Appendix II	Exploratory Hole Logs
Appendix III	Chemical Laboratory Test Results
Appendix IV	Photos of above ground Tank

APPENDIX I

DRAWINGS



RECORD STATUS

PLEASE NOTE: Record Status means that this is the final version of the design. BVL are not in a position to verify that this is what was actually built.

1:200 Underground Drainage Layout

MANHOLE SCHEDULE						
ID	Size	Type	Cover Type	INVERT LEVEL	COVER LEVEL	Depth mm
F01	1200mm dia	Manhole Type B	D400	40.502m	43.315m	2813
F02	1200mm dia	Manhole Type B	D400	41.000m	43.650m	2650
F03	450mm dia	Telescopic Inspection Chamber	D400	42.154m	43.700m	1546
F03a	450mm dia	Inspection Chamber	D400	42.700m	43.750m	1050
F04	450mm dia	Telescopic Inspection Chamber	D400	42.181m	43.700m	1519
F04a	450mm dia	Inspection Chamber	D400	42.700m	43.750m	1050
F05	450mm dia	Telescopic Inspection Chamber	D400	42.207m	43.700m	1493
F05a	450mm dia	Inspection Chamber	D400	42.700m	43.750m	1050
F06	450mm dia	Telescopic Inspection Chamber	D400	42.259m	43.700m	1441
F06a	450mm dia	Inspection Chamber	D400	42.700m	43.750m	1050
F07	450mm dia	Telescopic Inspection Chamber	D400	42.312m	43.700m	1388
F07a	450mm dia	Inspection Chamber	D400	42.700m	43.750m	1050
F08	450mm dia	Telescopic Inspection Chamber	D400	42.338m	43.700m	1362
F09	450mm dia	Telescopic Inspection Chamber	D400	42.390m	43.700m	1310
F09a	450mm dia	Inspection Chamber	D400	42.700m	43.750m	1050
F10	450mm dia	Telescopic Inspection Chamber	B125	42.426m	43.730m	1304
F11	450mm dia	Inspection Chamber	B125	42.613m	43.770m	1157
F11a	450mm dia	Inspection Chamber	B125	42.700m	43.800m	1100
F12	450mm dia	Inspection Chamber	B125	42.648m	43.770m	1122
F12a	450mm dia	Inspection Chamber	B125	42.700m	43.800m	1100
F13	450mm dia	Inspection Chamber	B125	42.677m	43.770m	1093
F13a	450mm dia	Inspection Chamber	B125	42.700m	43.800m	1100
F14	450mm dia	Inspection Chamber	B125	42.700m	43.770m	1070
F14a	450mm dia	Inspection Chamber	internal	42.978m	43.800m	822
F14b	450mm dia	Inspection Chamber	internal	43.052m	43.800m	748
F14c	450mm dia	Inspection Chamber	internal	42.840m	43.800m	960
F15	450mm dia	Inspection Chamber	B125	42.741m	43.770m	1029
F16	450mm dia	Inspection Chamber	B125	42.759m	43.770m	1011
F17	450mm dia	Inspection Chamber	B125	42.777m	43.770m	993
F18	450mm dia	Inspection Chamber	B125	42.860m	43.770m	910
F20	450mm dia	Telescopic Inspection Chamber	D400	42.586m	43.800m	1214
F20a	450mm dia	Inspection Chamber	D400	42.700m	43.800m	1100
F20b	450mm dia	Inspection Chamber	D400	43.800m	43.800m	1100
F21	450mm dia	Inspection Chamber	D400	42.622m	43.800m	1178
F21a	450mm dia	Inspection Chamber	D400	42.700m	43.800m	1100
F22	450mm dia	Inspection Chamber	D400	42.686m	43.800m	1114
F22b	450mm dia	Inspection Chamber	D400	42.700m	43.800m	1100
F23	450mm dia	Inspection Chamber	D400	42.700m	43.800m	1100
F24	450mm dia	Inspection Chamber	internal	42.944m	43.800m	856
F25	450mm dia	Inspection Chamber	internal	42.970m	43.800m	830
H01	1800mm dia	Manhole Type B	D400	41.155m	43.240m	2085
H02	1800mm dia	Manhole Type B	D400	41.206m	43.590m	2384
H03	1800mm dia	Manhole Type B	D400	41.267m	43.810m	2543
H04	1800mm dia	Manhole Type B	D400	41.338m	43.765m	2427
H05	1800mm dia	Manhole Type B	D400	41.383m	43.840m	2457
H06	450mm dia	Inspection Chamber	D400	41.525m	42.070m	545
H07	450mm dia	Inspection Chamber	D400	41.583m	42.070m	487
H08	450mm dia	Inspection Chamber	D400	41.670m	42.090m	420
H11	1800mm dia	Manhole Type B	D400	41.215m	43.260m	2045
H21	1200mm dia	Manhole Type B	D400	42.043m	43.600m	1556
H22	450mm dia	Telescopic Inspection Chamber	D400	42.291m	43.600m	1309
H23	450mm dia	Inspection Chamber	D400	42.404m	43.600m	1196
H24	450mm dia	Inspection Chamber	D400	42.482m	43.600m	1118
H25	450mm dia	Inspection Chamber	D400	42.530m	43.600m	1070
S01	1200mm dia	Manhole Type B	D400	41.096m	43.220m	2124
S02	1800mm dia	Manhole Type B	D400	41.167m	43.300m	2133
S02	1800mm dia	Manhole Type B	D400	41.235m	43.650m	2415
S03	1800mm dia	Manhole Type B	D400	41.295m	43.680m	2385
S04	1800mm dia	Manhole Type B	D400	41.330m	43.620m	2290
S05	1800mm dia	Manhole Type B	D400	41.370m	43.530m	2160
S07	450mm dia	Inspection Chamber	D400	42.613m	43.650m	1037
S09	450mm dia	Inspection Chamber	B125	42.736m	43.700m	964
S10	450mm dia	Inspection Chamber	B125	42.856m	43.720m	864
S11	450mm dia	Inspection Chamber	B125	43.007m	43.750m	743
S12	450mm dia	Inspection Chamber	B125	43.071m	43.750m	679
S21	1800mm dia	Manhole Type B	D400	41.338m	43.739m	2401
S22	450mm dia	Inspection Chamber	D400	42.430m	43.500m	1070
S25	450mm dia	Inspection Chamber	B125	42.617m	43.100m	483
S28	450mm dia	Inspection Chamber	B125	42.804m	43.500m	696
S30	450mm dia	Inspection Chamber	B125	42.900m	43.500m	600
S40	450mm dia	Inspection Chamber	D400	42.547m	43.800m	1253
S41	450mm dia	Inspection Chamber	internal	42.653m	43.800m	1147
S42	450mm dia	Inspection Chamber	internal	42.700m	43.800m	1100
S43	450mm dia	Inspection Chamber	internal	42.814m	43.800m	986
S44	450mm dia	Inspection Chamber	internal	42.900m	43.800m	900
S61	450mm dia	Inspection Chamber	D400	42.700m	43.800m	1100
S71	450mm dia	Inspection Chamber	D400	42.800m	43.700m	900

MANHOLE SCHEDULE NOTES
All internal manholes are to be double sealed and recessed.
All "Sx" manholes not included in the manhole schedule are junction points.
The contractor shall use stronger cover types if needed for construction operation.
The contractor may use alternatives for manhole types with similar dimensions and health&safety characteristics. In such case the contractor shall send the necessary details to the engineer for review.

Drainage Notes

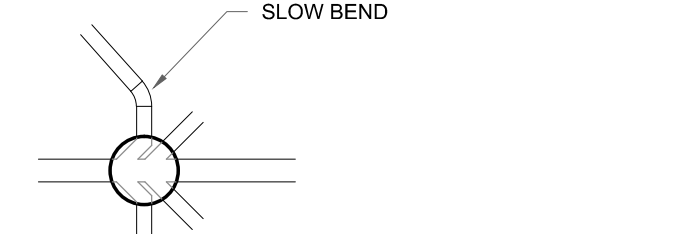
- Invert levels and positions of existing drains / chambers / sewers where new connections are to be made must be checked and confirmed to the engineer prior to the commencement of any works.
- All drainage works shall be carried out in accordance with the requirements of the Local Authority, the Environment Agency and in conjunction with all relevant British Standards, Codes of Practice and 'Sewers for Adoption' 6th Edition and any addendums as appropriate.
- All drainage shall comply with the typical details and the requirements of BSEN 752.
- Any part of the existing drainage system to be retained as part of the new scheme shall be cleaned and inspected. Any structural defects shall be repaired using appropriate and approved means.
- Refer to manhole schedules or drawings for manhole types, sizes, depths and specific requirements.
- For setting-out dimensions of SVP's, RWP's etc, refer to I09001-BWE-Z-S-XX-L-10013
- Pipes up to 300mm diameter to be either:
Verified Clay, extra strength to BSEN 295 or BS 65 with plain ended sleeved or socketed flexible joints.
or:
PVC-U to BS EN 1401-1, class SN4
All pipes of 375mm diameter or over, to be sulphate resisting concrete Class M with socketed flexible joints.
- Inverts of incoming branches shall be at springing level to the main pipe and formed generally using channel pipes and slipper bends, cut to suit.
- All foul and RWP connections shall be 100mm diameter unless otherwise specified.

Initial spurs to start at IL= 43200 U.N.O and to be laid at a minimum fall of 1:100 to connecting point

Where the schematic layout shows an initial spur interfering with a column stub, the initial vertical bend shall be made at an angle to ensure a straight run downstream

- All precast concrete units used in the drainage works shall be manufactured using sulphate resisting cement.
- Manhole covers and frames shall be BSEN 124 and shall be Kitemarked. Covers and frames shall be heavy duty D400 in carriageways and vehicular areas and medium duty B125 in footways and soft landscaping. In blocked paved areas covers shall be recessed fabricated steel.
- All internal manholes and inspection chambers are to be double sealed and recessed
- All spurs against the flow direction to be connected by slowbends

SLOW BEND



- Concrete surround to rectangular manholes may be omitted in non-vehicular areas.
- Cover levels are to be adjusted locally to suit finished ground levels.
- Drainage channels shall be laid strictly in accordance with the manufacturers recommendations with particular care being taken to prevent damage during installing pavement construction, surfacing etc.
- At least one soil pipe at the head of each foul run shall vent to the atmosphere.
- All lengths are approximate centre to centre lengths. The contractor is advised to allow for variations in lengths due to manholes, bends etc.
- All external positions are approximate and shall be adjusted to suit site locally. Report back if position changes by more than 250mm

20. HEALTH AND SAFETY: The works shall be carried out by specialist competent and experienced contractors who are members of a recognised national organisation.
Operatives shall have received full and appropriate training for the operations they are to undertake. All work shall be carried out in accordance with all pertinent Health and Safety Regulations.

Key

- HIGHWAYS DRAINAGE
- LINEAR DRAINAGE CHANNEL
- FOULWATER DRAINAGE
- STORMWATER DRAINAGE

G1 = Plant Gully, Cast iron heavy duty (suitable for Plant areas and light traffic) Trapped, As Wade D204 with M101 Grating (suitable for Un-finished floor areas)

G2 = Kitchen and Bin Store Gully Stainless steel Vari-Level for use with Sheet Floor Covering - as WADE (or similar) Trapped/Road-able 100mm Outlet (Wade Ref G3 Series) with K23 175mm Series grating.

G3 = Shower Gully in vinyl Aco Shower Gully, 110mm Vertical outlet, vinyl. Ref no. 405855

Do not scale from this drawing.
All dimensions to be verified on site prior to the commencement of any work or the production of any shop drawing. All discrepancies to be reported to the architect immediately.
This drawing is to be read in conjunction with all related Architect's and consultant drawings and any other relevant information.
This drawing is the copyright of Bryden Wood.

HAZARD IDENTIFICATION LEGEND:	
HAZARD IDENTIFICATION (if none state 'none relevant')	CONTROL AND MITIGATION MEASURES
REFER TO DRAWING I09001-BWM-S-XX-OF GA-00005	
NOTE: Hazards listed above are only those considered significant risks and: a) not likely to be obvious to a competent contractor or other designers, b) unusual, or c) likely to be difficult to manage effectively The above should be read in conjunction with additional information contained in the Pre-Construction Information documentation.	

R1	MH	17.05.12	RECORD STATUS
C7	PL	28.03.11	Gully References Added
C6	PL	03.03.11	As clouded
C5	PL	28.02.11	General Revisions
C4	PL	27.01.11	General Revisions
C3	PL	13.01.11	Release of Southern Half Storm and Highway Drainage. As Agreed
C2	RS	23.12.10	General Revisions
C1	RS	11.06.10	For Construction
T2	RS	11.06.10	Resubmission for Stage E
T1	RS	11.06.10	For Stage E
P2	JCS	14.12.09	Background updated
P1	JCS	11.12.09	Planning Issue
REV	DWN	DATE	DESCRIPTION

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Project:
Circle Health - Reading

Drawing Title:
External Drainage Layout
Sheet 2

Scale: 1:200
Paper Size: A1

Drawn By: RS
Checked By: MH

Date Drawing Created: 11.09.10
Revision: R1

Drawing Number:
I09001-BWM-S-XX-00-GA-00208

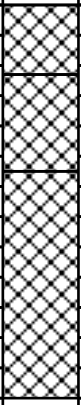
Client:



Bryden Wood
Architects and Designers for Manufacture

APPENDIX II

EXPLORATORY HOLE LOGS

			Project Title: Circle Reading Hospital				WS01				
			Project Number: 10/2628		Client: Circle Health Group Limited					Sheet 1 Of 1	
			GL (mAOD): 43.61		N Coord: 170494.123		E Coord: 471267.064				
Date: 28/10/2025			Method: Window Sampler		Driller: CK Drilling		Logged By: SRP				
Depth (m)	Type	Test Result	Level	Legend	Depth (m)	Description	Water	Standpipe			
0.30 - 0.40	ES		43.38		0.23	MADE GROUND: Dark grey tarmacadam.					
0.60	ES		43.06		0.55	MADE GROUND: Brown slightly clayey gravelly fine to coarse sand. Gravel is angular to subangular fine to coarse of tarmacadam, brick, chert and mixed lithologies with rare plastic sheeting.					
			42.61		1.00	MADE GROUND: Light cream sub-rounded medium to coarse gravel of chert.					
			42.31		1.30	0.55 Geotextile membrane at 0.55m bgl.					
			End Of Borehole At 1.30 m								
		41.61	2.00								
			40.61	3.00							
			39.61	4.00							
KEY D - Disturbed Sample B - Bulk Sample U - Undisturbed W - Water Sample S - Standard Penetration Test C - Cone Penetration Test N - Penetration Test 'N' Value V - Hand Shear Vane kPa  - Groundwater Strike  - Groundwater Level 			REMARKS No Groundwater Encountered Borehole terminated at 1.30m bgl due to collapsing Made Ground. Scale: 1:25			Water Strikes					
						Date	Strike	Level	Minutes	Casing	Sealed
						Daily Log Of Depths			Chiselling		
						Date	Casing	Water	From	To	Hours

		Project Title: Circle Reading Hospital				WS02	
		Project Number: 10/2628		Client: Circle Health Group Limited			
		GL (mAOD): 43.70		N Coord: 170493.938		E Coord: 471269.144	
Date: 28/10/2025		Method: Window Sampler		Driller: CK Drilling		Logged By: SRP	

Depth (m)	Type	Test Result	Level	Legend	Depth (m)	Description	Water	Standpipe
0.40 - 0.52	ES		43.50		0.20	MADE GROUND: Tarmacadam.		
			43.40		0.30	MADE GROUND: Grey sandy gravel. Sand is fine to coarse. Gravel is angular fine to coarse of concrete and tarmacadam.		
			43.12		0.58	MADE GROUND: Reddish brown slightly clayey gravelly fine to coarse sand. Gravel is angular to sub-angular fine to coarse of brick fragments, chert, concrete and mixed lithologies with rare pottery.		
1.20 - 1.65	SPT	N=4 (1,1,1,1)	42.70		1.00	MADE GROUND: Loose cream sub-angular to sub-rounded fine to coarse gravel of chert.		
1.70 - 1.80	ES							
2.00 - 2.45	SPT	N=2 (0,1,0,1)	41.70		2.00			
3.00 - 3.45	SPT	pp 50/297mm	40.85		2.85	MADE GROUND: Concrete. Dense orangeish brown silty fine to medium SAND. 3.00 - 3.45 SPT at 3.0m bgl was recovered as damp. End Of Borehole At 3.45 m		
			40.70		3.00			
			40.25		3.45			
			39.70		4.00			

KEY D - Disturbed Sample B - Bulk Sample U - Undisturbed W - Water Sample S - Standard Penetration Test C - Cone Penetration Test N - Penetration Test 'N' Value V - Hand Shear Vane kPa  - Groundwater Strike  - Groundwater Level		REMARKS No Groundwater Encountered 	Water Strikes																										
			<table border="1"> <thead> <tr> <th>Date</th> <th>Strike</th> <th>Level</th> <th>Minutes</th> <th>Casing</th> <th>Sealed</th> </tr> </thead> <tbody> <tr><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td></tr> </tbody> </table>						Date	Strike	Level	Minutes	Casing	Sealed															
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		<table border="1"> <thead> <tr> <th>Date</th> <th>Casing</th> <th>Water</th> <th>From</th> <th>To</th> <th>Hours</th> </tr> </thead> <tbody> <tr><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td></tr> </tbody> </table>						Date	Casing	Water	From	To	Hours																
Date	Casing	Water	From	To	Hours																								

		Project Title: Circle Reading Hospital				WS03	
		Project Number: 10/2628		Client: Circle Health Group Limited			
		GL (mAOD): 43.67		N Coord: 170491.449		E Coord: 471268.968	
Date: 28/10/2025		Method: Window Sampler		Driller: CK Drilling		Logged By: SRP	

Depth (m)	Type	Test Result	Level	Legend	Depth (m)	Description	Water	Standpipe
0.40	ES		43.42		0.25	MADE GROUND: Tarmacadam.		
			43.35		0.32	MADE GROUND: Light grey gravelly fine to coarse sand. Gravel is angular of concrete.		
			43.21		0.46	MADE GROUND: Brown slightly clayey gravelly fine to coarse sand. Gravel is angular to sub-rounded fine to coarse of brick, concrete, tarmacadam and chert.		
1.20 - 1.65	SPT	N=3 (1,0,1,1)	42.67		1.00	MADE GROUND: Loose cream medium to coarse gravel of chert.		
1.85 - 1.95	ES							
2.00 - 2.45	SPT	N=4 (1,1,1,1)	41.67		2.00			
2.90	ES	pp 50/285mm	40.87		2.80	Brown very silty fine to coarse sand.		
3.00 - 3.44	SPT		40.67		3.00	End Of Borehole At 3.00 m		
			39.67		4.00			

KEY D - Disturbed Sample B - Bulk Sample U - Undisturbed W - Water Sample S - Standard Penetration Test C - Cone Penetration Test N - Penetration Test 'N' Value V - Hand Shear Vane kPa  - Groundwater Strike  - Groundwater Level		REMARKS No Groundwater Encountered 	Water Strikes																										
			<table border="1"> <thead> <tr> <th>Date</th> <th>Strike</th> <th>Level</th> <th>Minutes</th> <th>Casing</th> <th>Sealed</th> </tr> </thead> <tbody> <tr><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td></tr> </tbody> </table>						Date	Strike	Level	Minutes	Casing	Sealed															
Date	Strike	Level	Minutes	Casing	Sealed																								
Scale: 1:25		Daily Log Of Depths																											
		<table border="1"> <thead> <tr> <th>Date</th> <th>Casing</th> <th>Water</th> <th>From</th> <th>To</th> <th>Hours</th> </tr> </thead> <tbody> <tr><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td></tr> </tbody> </table>						Date	Casing	Water	From	To	Hours																
Date	Casing	Water	From	To	Hours																								

		Project Title: Circle Reading Hospital				WS04	
		Project Number: 10/2628		Client: Circle Health Group Limited			
		GL (mAOD): 43.63		N Coord: 170491.569		E Coord: 471266.674	
Date: 28/10/2025		Method: Window Sampler		Driller: CK Drilling		Logged By: SRP	

Depth (m)	Type	Test Result	Level	Legend	Depth (m)	Description	Water	Standpipe
0.32 - 0.40	ES	N=4 (1,1,1,1)	43.41		0.22	MADE GROUND: Tarmacadam.		
			43.32		0.31	MADE GROUND: Grey sandy gravel. Gravel is angular fine to coarse of concrete and tarmacadam. Sand is fine to coarse.		
			43.13		0.50	MADE GROUND: Brown slightly clayey gravelly fine to coarse sand. Gravel is angular to sub-rounded fine to coarse of brick fragments, concrete, plastic, chert and tarmacadam.		
1.20 - 1.65	SPT	N=5 (1,0,1,3)	42.63		1.00	MADE GROUND: Loose to medium dense cream medium to coarse gravel of chert.		
2.00 - 2.45	SPT		41.63		2.00			
2.85 - 3.00	ES		40.63		3.00	End Of Borehole At 3.00 m		
			39.63		4.00			

KEY D - Disturbed Sample B - Bulk Sample U - Undisturbed W - Water Sample S - Standard Penetration Test C - Cone Penetration Test N - Penetration Test 'N' Value V - Hand Shear Vane kPa  - Groundwater Strike  - Groundwater Level		REMARKS No Groundwater Encountered Hole terminated at 3.00m due to collapsing ground above.	Water Strikes <table border="1"> <thead> <tr> <th>Date</th> <th>Strike</th> <th>Level</th> <th>Minutes</th> <th>Casing</th> <th>Sealed</th> </tr> </thead> <tbody> <tr><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td></tr> </tbody> </table>	Date	Strike	Level	Minutes	Casing	Sealed																		
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Date	Casing	Water	From	To	Hours																						

APPENDIX III
CHEMICAL LABORATORY HOLE LOGS

Clancy Consulting
Dunham Court
2 Dunham Road
Altrincham

t: 0161 613 6000

e: sophie.piercy@clancy.co.uk

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

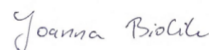
t: 01923 225404

f: 01923 237404

e: info-i2analytical@normecgroup.com

Analytical Report Number : 25-060305

Project / Site name:	Circle Reading Hospital	Samples received on:	04/11/2025
Your job number:	10 2628	Samples instructed on/ Analysis started on:	06/11/2025
Your order number:	36132	Analysis completed by:	20/11/2025
Report Issue Number:	1	Report issued on:	20/11/2025
Samples Analysed:	9 soil samples		



Signed:

Joanna Biolik
Senior Reporting Specialist
For & on behalf of i2 Analytical Ltd.

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

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

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

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

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

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

Any assessments of compliance with specifications are based on actual analytical results with no contribution from uncertainty of measurement.
Application of uncertainty of measurement would provide a range within which the true result lies.
An estimate of measurement uncertainty can be provided on request.

Analytical Report Number: 25-060305
Project / Site name: Circle Reading Hospital
Your Order No: 36132

Lab Sample Number	742216	742217	742218	742219	742220
Sample Reference	WS01	WS01	WS02	WS02	WS03
Sample Number	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Water Matrix	N/A	N/A	N/A	N/A	N/A
Depth (m)	0.30-0.40	0.60	0.40-0.52	1.70-1.80	0.40
Date Sampled	28/10/2025	28/10/2025	28/10/2025	28/10/2025	28/10/2025
Time Taken	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Test Limit of detection	Test Accreditation Status		

Stone Content	%	0.1	NONE	28.3	25.9	39.2	< 0.1	32.3
Moisture Content	%	0.01	NONE	7.5	5.9	8.2	4.8	8.3
Total mass of sample received	kg	0.1	NONE	1.2	1.1	1.2	1.2	1.2

Petroleum Hydrocarbons

TPHCWG - Aliphatic >EC5 - EC6 HS_1D_AL	mg/kg	0.01	MCERTS	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
TPHCWG - Aliphatic >EC6 - EC8 HS_1D_AL	mg/kg	0.01	MCERTS	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
TPHCWG - Aliphatic >EC8 - EC10 HS_1D_AL	mg/kg	0.01	MCERTS	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
TPHCWG - Aliphatic >EC10 - EC12 EH_CU_1D_AL	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPHCWG - Aliphatic >EC12 - EC16 EH_CU_1D_AL	mg/kg	2	MCERTS	< 2.0	< 2.0	2.5	< 2.0	< 2.0
TPHCWG - Aliphatic >EC16 - EC21 EH_CU_1D_AL	mg/kg	8	MCERTS	< 8.0	< 8.0	< 8.0	< 8.0	< 8.0
TPHCWG - Aliphatic >EC21 - EC35 EH_CU_1D_AL	mg/kg	8	MCERTS	60	16	30	< 8.0	18
TPHCWG - Aliphatic >EC5 - EC35 EH_CU+HS_1D_AL	mg/kg	10	NONE	60	16	32	< 10	18

TPHCWG - Aromatic >EC5 - EC7 HS_1D_AR	mg/kg	0.01	MCERTS	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
TPHCWG - Aromatic >EC7 - EC8 HS_1D_AR	mg/kg	0.01	MCERTS	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
TPHCWG - Aromatic >EC8 - EC10 HS_1D_AR	mg/kg	0.02	MCERTS	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020
TPHCWG - Aromatic >EC10 - EC12 EH_CU_1D_AR	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPHCWG - Aromatic >EC12 - EC16 EH_CU_1D_AR	mg/kg	2	MCERTS	4.3	< 2.0	< 2.0	< 2.0	3.2
TPHCWG - Aromatic >EC16 - EC21 EH_CU_1D_AR	mg/kg	10	MCERTS	17	< 10	< 10	< 10	< 10
TPHCWG - Aromatic >EC21 - EC35 EH_CU_1D_AR	mg/kg	10	MCERTS	89	20	54	< 10	24
TPHCWG - Aromatic >EC5 - EC35 EH_CU+HS_1D_AR	mg/kg	10	NONE	110	20	54	< 10	27

VOCs

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

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

Analytical Report Number: 25-060305
Project / Site name: Circle Reading Hospital
Your Order No: 36132

Lab Sample Number	742221	742222	742223	742224
Sample Reference	WS03	WS03	WS04	WS04
Sample Number	None Supplied	None Supplied	None Supplied	None Supplied
Water Matrix	N/A	N/A	N/A	N/A
Depth (m)	1.85-1.95	2.90	0.32-0.40	2.85-3.00
Date Sampled	28/10/2025	28/10/2025	28/10/2025	28/10/2025
Time Taken	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Test Limit of detection	Test Accreditation Status	

Stone Content	%	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	5.3	17	7.1	8
Total mass of sample received	kg	0.1	NONE	1.3	1.5	1.2	1.3

Petroleum Hydrocarbons

TPHCWG - Aliphatic >EC5 - EC6 _{HS_1D_AL}	mg/kg	0.01	MCERTS	< 0.010	< 0.010	< 0.010	< 0.010
TPHCWG - Aliphatic >EC6 - EC8 _{HS_1D_AL}	mg/kg	0.01	MCERTS	< 0.010	< 0.010	< 0.010	< 0.010
TPHCWG - Aliphatic >EC8 - EC10 _{HS_1D_AL}	mg/kg	0.01	MCERTS	< 0.010	< 0.010	< 0.010	< 0.010
TPHCWG - Aliphatic >EC10 - EC12 _{EH_CU_1D_AL}	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0
TPHCWG - Aliphatic >EC12 - EC16 _{EH_CU_1D_AL}	mg/kg	2	MCERTS	< 2.0	< 2.0	6.1	< 2.0
TPHCWG - Aliphatic >EC16 - EC21 _{EH_CU_1D_AL}	mg/kg	8	MCERTS	< 8.0	< 8.0	11	< 8.0
TPHCWG - Aliphatic >EC21 - EC35 _{EH_CU_1D_AL}	mg/kg	8	MCERTS	< 8.0	< 8.0	110	< 8.0
TPHCWG - Aliphatic >EC5 - EC35 _{EH_CU+HS_1D_AL}	mg/kg	10	NONE	< 10	< 10	130	< 10

TPHCWG - Aromatic >EC5 - EC7 _{HS_1D_AR}	mg/kg	0.01	MCERTS	< 0.010	< 0.010	< 0.010	< 0.010
TPHCWG - Aromatic >EC7 - EC8 _{HS_1D_AR}	mg/kg	0.01	MCERTS	< 0.010	< 0.010	< 0.010	< 0.010
TPHCWG - Aromatic >EC8 - EC10 _{HS_1D_AR}	mg/kg	0.02	MCERTS	< 0.020	< 0.020	< 0.020	< 0.020
TPHCWG - Aromatic >EC10 - EC12 _{EH_CU_1D_AR}	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0
TPHCWG - Aromatic >EC12 - EC16 _{EH_CU_1D_AR}	mg/kg	2	MCERTS	< 2.0	< 2.0	4.7	< 2.0
TPHCWG - Aromatic >EC16 - EC21 _{EH_CU_1D_AR}	mg/kg	10	MCERTS	< 10	< 10	21	< 10
TPHCWG - Aromatic >EC21 - EC35 _{EH_CU_1D_AR}	mg/kg	10	MCERTS	< 10	< 10	140	< 10
TPHCWG - Aromatic >EC5 - EC35 _{EH_CU+HS_1D_AR}	mg/kg	10	NONE	< 10	< 10	160	< 10

VOCs

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

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

Analytical Report Number : 25-060305

Project / Site name: Circle Reading Hospital

* These descriptions are only intended to act as a cross check if sample identities are questioned. The major constituent of the sample is intended to act with respect to MCERTS validation. The laboratory is accredited for sand, clay and loam (MCERTS) soil types. Data for unaccredited types of solid should be interpreted with care.

Stone content of a sample is calculated as the % weight of the stones not passing a 10 mm sieve. Results are not corrected for stone content.

Lab Sample Number	Sample Reference	Sample Number	Depth (m)	Sample Description *
742216	WS01	None Supplied	0.30-0.40	Brown sand with gravel and stones
742217	WS01	None Supplied	0.6	Brown clay and gravel with vegetation and stones
742218	WS02	None Supplied	0.40-0.52	Brown sand with gravel and stones
742219	WS02	None Supplied	1.70-1.80	Non Soil. ⁹⁹
742220	WS03	None Supplied	0.4	Brown loam and sand with gravel and stones
742221	WS03	None Supplied	1.85-1.95	Non Soil. ⁹⁹
742222	WS03	None Supplied	2.9	Brown clay and sand with gravel
742223	WS04	None Supplied	0.32-0.40	Non Soil. ⁹⁹
742224	WS04	None Supplied	2.85-3.00	Non Soil. ⁹⁹

Analytical Report Number : 25-060305

Project / Site name: Circle Reading Hospital

Water matrix abbreviations:

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

Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Moisture Content	Moisture content, determined gravimetrically (up to 30°C)	In-house method	L019B	W	NONE
Stones content of soil	Standard preparation for all samples unless otherwise detailed. Gravimetric determination of stone > 10 mm as % dry weight	In-house method based on British Standard Methods and MCERTS requirements.	L019B	D	NONE
BTEX and/or Volatile organic compounds in soil	Determination of volatile organic compounds in soil by headspace GC-MS	In-house method based on USEPA 8260	L073B	W	MCERTS
Total petroleum hydrocarbons with carbon banding by GC-FID in soil	Determination of total petroleum hydrocarbons in soil by GC-FID with carbon banding aliphatic and aromatic	In-house method	L076B	D	MCERTS
Total petroleum hydrocarbons with carbon banding by GC-FID/GC-MS HS in soil (Summed Bands)	Determination of total petroleum hydrocarbons in soil by GC-FID/GC-MS HS with carbon banding aliphatic and aromatic (Summed Bands).	Calculation	L076B/L088-PL	D/W	NONE
Total petroleum hydrocarbons with carbon banding by HS-GC/MS in soil	Determination of total petroleum hydrocarbons in soil by HS-GC/MS with carbon banding aliphatic and aromatic	In-house method	L088-PL	W	MCERTS
Soil Descriptions	Textural classification	In-house method	L019B	W	NONE

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

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

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

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

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

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

The result for sum should be interpreted with caution

*g - Unaccredited sample matrix.

Analytical Report Number : 25-060305

Project / Site name: Circle Reading Hospital

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

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

Sample ID	Other ID	Sample Type	Lab Sample Number	Sample Deviation	Test Name	Test Ref	Test Deviation
WS01	N/A	S	742216	c	BTEX and/or Volatile organic compounds in soil	L073B	c
WS01	N/A	S	742216	c	Total petroleum hydrocarbons with carbon banding by GC-FID in soil	L076B	c
WS01	N/A	S	742217	c	BTEX and/or Volatile organic compounds in soil	L073B	c
WS01	N/A	S	742217	c	Total petroleum hydrocarbons with carbon banding by GC-FID in soil	L076B	c
WS02	N/A	S	742218	c	BTEX and/or Volatile organic compounds in soil	L073B	c
WS02	N/A	S	742218	c	Total petroleum hydrocarbons with carbon banding by GC-FID in soil	L076B	c
WS02	N/A	S	742219	c	BTEX and/or Volatile organic compounds in soil	L073B	c
WS02	N/A	S	742219	c	Total petroleum hydrocarbons with carbon banding by GC-FID in soil	L076B	c
WS03	N/A	S	742220	c	BTEX and/or Volatile organic compounds in soil	L073B	c
WS03	N/A	S	742220	c	Total petroleum hydrocarbons with carbon banding by GC-FID in soil	L076B	c
WS03	N/A	S	742221	c	BTEX and/or Volatile organic compounds in soil	L073B	c
WS03	N/A	S	742221	c	Total petroleum hydrocarbons with carbon banding by GC-FID in soil	L076B	c
WS03	N/A	S	742222	c	BTEX and/or Volatile organic compounds in soil	L073B	c
WS03	N/A	S	742222	c	Total petroleum hydrocarbons with carbon banding by GC-FID in soil	L076B	c
WS04	N/A	S	742223	c	BTEX and/or Volatile organic compounds in soil	L073B	c
WS04	N/A	S	742223	c	Total petroleum hydrocarbons with carbon banding by GC-FID in soil	L076B	c
WS04	N/A	S	742224	c	BTEX and/or Volatile organic compounds in soil	L073B	c
WS04	N/A	S	742224	c	Total petroleum hydrocarbons with carbon banding by GC-FID in soil	L076B	c

APPENDIX IV
PHOTOS OF ABOVE GROUND TANK





