REPORT ON SOAKAGE TESTS
(FACTUAL REPORT)

Report 1223: Rev 0

31st August 2021

PROPOSED SPORTS PITCHES - LAND TO THE NORTH WEST OF THE JUNCTION BETWEEN PIXHAM FERRY LANE AND OLD ROAD SOUTH, KEMPSEY, WORCESTER WR5

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Contents

1.0 INTRODUCTION

New sports pitches are proposed on land formerly used for agricultural cultivation.

G7 Geotech Ltd have been instructed by STRI Ltd, to carry out soakage tests in general accordance with BRE 365 (2016), 'Soakaway Design', with the aim of providing design data for infiltration surface water drainage. As part of our work we were also requested to confirm the location and depth of an oil pipeline operated by Exolum which traversed across and below the site.

This factual report provides a summary of the fieldwork undertaken and ground conditions encountered together with the results of the field testing.

2.0 SITE DESCRIPTION

The proposed new sports pitches are to be located in an open field on the south-western outskirts of the village centre of Kempsey and centred approximately at National grid reference 384810E 248390N.

A preliminary development plan showing the proposed sports pitches is included in Appendix B.

The site comprises a field encompassed by trees and hedges. The ground surface slopes downwards in an approximate south-westerly direction and is covered in rough grass and wild seeded former vegetable crops (lettuce, potatoes tomatoes noted).

A plan showing the exploratory and test locations in relation to existing site features is included in Appendix B. A general aspect of the site is shown on the photograph on the front cover of this report.

3.0 OIL PIPELINE INDENTIFICATION

An Engineer from Exolum Ltd (the pipeline operator) was in attendance during this phase of our work on the 2nd August 2021. Initially, the route of the pipeline was surveyed using ground radar and electronic scanning techniques. Groundworks personnel excavated a trial pit with hand tools at each of these locations (TPA, TPB, TPC and TPD) so that the crest of the oil pipeline was exposed and available for inspection by the Exolum Engineer. The depth of the pipe and the GPS coordinates of the test locations were measured and recorded prior to backfilling with the arisings. The confirmed route of the pipeline is shown on the Site Plan in Appendix B

4.0 SOAKAGE TESTS

The soakage tests were supervised by G7 Geotech Ltd and carried out on 3rd August 2021.

Four trial pits (SA01, SA02, SA03 and SA04) were excavated by the groundworks personnel using hand tools to the specified soakage test depths ranging from 0.60m to 0.65m BGL. This work was carried out under the supervision of an experienced geotechnical engineer. The water used in the soakage tests was provided by a series of 25 litre plastic containers.

Close to SA04, a pair of boreholes (BH01 and BH01A) were also completed using a small tracked dynamic sampling rig. In BH01 a soakage test was carried out at a depth of 2m, whilst BH01A was constructed to a depth of 5.45m to provide additional information of the continuity of strata. In BH01A, Standard Penetration Testing (SPT) was carried out at regular intervals to provide an indication of the relative density of the strata met.

Representative disturbed samples of soil were obtained from the trial pits and borehole.

The trial pit and borehole records and the soakage test results are included in Appendix A. The test locations are shown on a plan in Appendix B.

5.0 GROUND CONDITIONS

The BGS published geology indicates the presence of the Worcester Member (river terrace sand and gravel) overlying Sidmouth Mudstone Formation (Triassic Mudstone). Alluvial soils (silt, clay, sand and gravel) associated with the River Severn are also shown along the western periphery of the field.

The Sidmouth Mudstone formation was not met during our field work. Detailed records of the ground conditions met are included in the trial pit and borehole records in Appendix A and are summarised below:

5.1 Made ground

The soils met above the oil pipeline in TPA to TPD comprised grey brown silty and gravelly sand with no obvious brick or other man-made component though some scattered coarse gravel sized stone fragments were occasionally noted. In appearance they resemble to surrounding natural soils and therefore we can assume that these soils are those locally excavated and replaced above the pipeline during its construction. There was no obvious or well defined topsoil layer which we assume is due to ploughing and working of the near surface layers during previous arable crop cultivation in the field.

5.2 Worcester member

These natural soils were met from the surface in all our exploratory holes and comprise a grey brown or pale brown silty gravelly sand containing roots. These essentially granular soils extended to the base of BH01 at 5.45 BGL. The results of SPT testing indicate the sands to occur in a medium dense becoming dense state of natural compaction at the borehole position.

Those sands met to the soakage test depths below the northern part of the site in SA01 and SA02 appear to have a slightly clayey matrix.

5.3 Groundwater

During our fieldwork, groundwater inflows were not noted in the trial pits, but a groundwater inflow was noted in BH01A at a depth of about 3.5m BGL.

6.0 SOAKAGE TEST RESULTS

Our soakage tests have indicated generally consistent soakage rates, typical of low to medium permeability and good drainage conditions within the trial pits. Repeat fills of water have shown that reasonably good drainage conditions are likely to be present even after prolonged inflows.

Our soakage tests indicated the following soakage rates:

Trial Pit	Soakage Rate Test 1 (metres / sec)	Soakage Rate Test 2 (metres / sec)	Soakage Rate Test 3 (metres / sec)
SA01	4.07×10^{-6}	3.05×10^{-6}	N/A
SA02	5.37×10^{-6}	3.96×10^{-6}	N/A
SA03	1.19×10^{-4}	4.37×10^{-5}	4.66×10^{-5}
SA04	3.44×10^{-5}	9.78×10^{-6}	7.14×10^{-6}
BH01	1.27×10^{-5}	N/A	N/A

7.0 CONCLUSIONS

Our test results indicate soakage rates of between 3.05×10^{-6} and 1.19×10^{-4} and represent low to medium permeability and good drainage conditions typical of slightly silty and gravelly sand. The results can be utilised in drainage design subject to the usual allowances for seasonal / weather variations, and prolonged rainfall.

GENERAL INFORMATION, LIMITATIONS AND EXCEPTIONS

Unless otherwise stated, our Report is a Ground Investigation Report [GIR] as defined in BS EN1997-2. Our Report is not intended to be and should not be viewed or treated as a Geotechnical Design Report [GDR] as defined in EN1997-2. If 'design' recommendations are provided, they are for guidance only and are intended to allow the designer to assess the results and implications of our investigation/testing and to permit preliminary design of relevant elements of the proposed scheme. When the title of the report is 'Factual Report on Ground Investigation' this means that geotechnical design recommendations are not provided.

The scope and methods of investigation used have been chosen taking into account project and site constraints including but not limited to access and space limitations. Where it has not been possible to reasonably undertake an EC7 compliant scope or investigation technique we have adopted a practical and economic scope and technique(s) to obtain indicative soil parameters and any interpretation is based upon our engineering experience and relevant published information.

The Report is issued on the condition that G7 Geotech Ltd will under no circumstances be liable for any loss arising directly or indirectly from ground conditions between the exploratory points which differ from those identified during our investigation. In addition G7 Geotech Ltd will not be liable for any loss arising directly or indirectly from any opinion given on the possible configuration of strata both between the exploratory points and/or below the maximum depth of the investigation; such opinions, where given, are for guidance only and no liability can be accepted as to their accuracy. The results of any measurements taken may vary spatially or with time and further confirmatory measurements should be made after any significant delay in using this Report.

Comments made relating to ground-water or ground-gas are based upon observations made during our investigation unless otherwise stated. Ground-water and ground-gas conditions may vary with time from those reported due to factors such as seasonal effects, atmospheric effects and and/or tidal conditions. We recommend that if monitoring installations have been included as part of our investigation, continued monitoring should be carried out to maximise the information gained.

Specific geotechnical features/hazards such as [but not limited to] areas of root-related desiccation and dissolution features in chalk/soluble rock can exist in discrete localised areas - there can be no certainty that any or all of such features/hazards have been located, sampled or identified. Where a risk is identified the designer should provide appropriate contingencies to mitigate the risk through additional exploratory work and/or an engineered solution.

Where spread foundations are used, we recommend that all excavations are inspected and approved by suitably experienced personnel; appropriate inspection records should be kept. This should also apply to any structures which are in direct contact with the soil where the soil could have a detrimental effect on performance or integrity of the structure.

Ground contamination often exists in small discrete areas - there can be no certainty that any or all such areas have been located, sampled or identified.

The findings and opinions conveyed in this Report may be based on information from a variety of third party sources such as commercially available desk based geological and environmental searches, historical maps, mining reports, radon reports, geotechnical laboratory testing and contamination laboratory analyses. G7 Geotech Ltd cannot and does not provide any guarantee as to the authenticity, accuracy or reliability of such information from third parties; such information has not been independently verified unless stated in our Report.

Our Report is written in the context of an agreed scope of work between G7 Geotech Ltd and the Client and should not be used in any different context. In light of additional information becoming available, improved practices and changes in legislation, amendment or re-interpretation of the assessment or the Report in part or in whole may be necessary after its original publication.

Unless otherwise stated our investigation does not include an arboricultural survey, asbestos survey, ecological survey or flood risk assessment and these should be deemed to be outside the scope of our investigation.

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APPENDIX A

EXPLORATORY RECORDS AND TEST RESULTS

FOREWORD TO TRIAL PIT RECORDS

TRAL PIT RECORDS

FOREWORD TO DYNAMIC SAMPLE BOREHOLE

DYNAMIC SAMPLE BOREHOLE RECORD

FOREWORD TO SOAKAGE TEST RESULTS

SOAKAGE TEST RESULTS

FOREWORD TO TRIAL PITS

GENERAL

The Trial Pit Records are compiled from the geotechnical engineer's description of the strata encountered, based on an examination of the soil arisings and the results of field and laboratory tests. Based on this data, the report presents an opinion on the configuration of strata within the site. However, such reasonable assumptions are given for guidance only and no liability can be accepted for changes in conditions not revealed by the trial pits.

EXCAVATION METHODS

Trial pits can be undertaken by either mechanical excavator or by the use of hand tools which allows the ground conditions to be reasonably well established. Some disturbance of the ground is inevitable which can influence field tests. Depths BGL relating to field tests undertaken on soil arisings are approximate only.

GROUNDWATER

The depth at which ground water is struck is entered on the Trial Pit Records. However, this observation may not indicate the true water level at that period. Due to the speed of excavation, natural ground water may be present at a depth slightly higher than the water strike. Moreover, ground water levels are subject to variations caused by changes in the local drainage conditions and by seasonal effects. When a moderate inflow of water does take place, excavation is suspended for at least 10 minutes to enable a more accurate short-term water level to be achieved. An estimate of the rate of inflow is also given. This is a relative term and serves only as a guide to the probable flow of water into an excavation. Further observations of the water level are made on completion.

SAMPLES

Disturbed bulk samples and small disturbed samples are taken and placed in polythene bags for geotechnical testing. Small jar samples and plastic tub samples are taken for laboratory ground contamination testing. Where ground water is encountered in sufficient quantity, a sample of the ground water is also taken.

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TRIAL PIT RECORD

Trial Pit No

TPA

Sheet 1 of 1

Project Name:	Proposed Sports Pitches	Job No 1223
Location:	NW of the Junction Pixham Ferry Lane and Old Road South, Kemspey	
Client:	STRI Group	

Trial Pit A hand excavated on 02/08/21

Groundwater not encountered.

Trial Pit backfilled with arisings on completion.
GL 17.15m OD GR: 384778E 248367N

Depth From	Depth To	Strata Descriptions	Samples & Tests Depth	Type
0.00	0.63	MADE GROUND: grey brown gravelly silty clayey sand. Gravel is fine to coarse subangular to subrounded. Roots present to 0.30m.	0.40	D
0.63		Steel pipe		

Remarks: Trial pit completed on meeting crest of steel pipe at 0.63m BGL . Pit sides remained stable during excavation with some minor spalling. Dry, no groundwater met.

Photograph

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TRIAL PIT RECORD

Trial Pit No

TPB

Sheet 1 of 1

Project Name:	Proposed Sports Pitches	Job No 1223
Location:	NW of the Junction Pixham Ferry Lane and Old Road South, Kemspey	
Client:	STRI Group	

Trial Pit B hand excavated on 02/08/21

Groundwater not encountered.

Trial Pit backfilled with arisings on completion.
GL 17.69m OD GR: 384773E 248445N

Depth From	Depth To	Strata Descriptions	Samples & Tests Depth	Type
0.00	0.84	MADE GROUND: grey brown gravelly silty clayey sand. Gravel is fine to coarse subangular to subrounded. Roots present.to 0.30m	0.40	D
0.84		Steel pipe		

Remarks: Trial pit completed on meeting crest of steel pipe at 0.84m BGL . Pit sides remained stable during excavation with some minor spalling. Dry, no groundwater met.

Photograph

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Leyland PR25 3AA

TRIAL PIT RECORD

Trial Pit No

TPC

Sheet 1 of 1

Project Name:	Proposed Sports Pitches	Job No 1223
Location:	NW of the Junction Pixham Ferry Lane and Old Road South, Kemspey	
Client:	STRI Group	

Trial Pit C hand excavated on 02/08/21

Groundwater not encountered.

Trial Pit backfilled with arisings on completion.
GL 17.70m OD GR: 384770E 248511N

Depth From	Depth To	Strata Descriptions	Samples & Tests Depth	Type
0.00	0.85	MADE GROUND: grey brown gravelly silty clayey sand. Gravel is fine to coarse subangular to subrounded. Frequent roots to 0.30m.	0.40	D
0.85		Steel pipe		

Remarks: Trial pit completed on meeting crest of steel pipe at 0.85m BGL . Pit sides remained stable during excavation with some minor spalling. Dry, no groundwater met.

Photograph

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TRIAL PIT RECORD

Trial Pit No

TPD

Sheet 1 of 1

Project Name:	Proposed Sports Pitches	Job No 1223	Trial Pit D hand excavated on 02/08/21 Groundwater not encountered. Trial Pit backfilled with arisings on completion. GL 16.73m OD GR: 384762E 248589N
Location:	NW of the Junction Pixham Ferry Lane and Old Road South, Kemspey		
Client:	STRI Group		

Depth From	Depth To	Strata Descriptions	Samples & Tests Depth	Type
0.00	1.07	MADE GROUND: grey brown gravelly silty clayey sand. Gravel is iine to coarse subanguar to subrounded, Roots present to 0.30m	0.40	D
1.07		Steel pipe		

Remarks: Trial pit completed on meeting crest of steel pipe at 1.07m BGL . Pit sides remained stable during excavation with some minor spalling. Dry, no groundwater met.

Photograph

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TRIAL PIT RECORD

Trial Pit No

SA01

Sheet 1 of 1

Project Name:	Proposed Sports Pitches	Job No 1223	Trial Pit SA01 hand excavated on 03/08/21 Groundwater not encountered. Trial Pit backfilled with arisings on completion. GL 17.71m OD GR: 384741E 248482N
Location:	NW of the Junction Pixham Ferry Lane and Old Road South, Kemspey		
Client:	STRI Group		

Depth

From	To	Strata Descriptions	Samples & Tests Depth	Type
0.00	0.60	Grey brown slightly clayey silty gravelly SAND. Gravel is fine to coarse subrounded. Frequent roots to 0.20m	0.40	D

Remarks: Soakage test carried out at 0.60m BGL. Pit sides remained stable during excavation with some minor spalling. Dry, no groundwater met.

Photographs

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TRIAL PIT RECORD

Trial Pit No

SA02

Sheet 1 of 1

Project Name:	Proposed Sports Pitches	Job No 1223
Location:	NW of the Junction Pixham Ferry Lane and Old Road South, Kemspey	
Client:	STRI Group	

Trial Pit SA02 hand excavated on 03/08/21

Groundwater not encountered.

Trial Pit backfilled with arisings on completion.
GL 18.17m OD GR: 384849E 248487N

Depth From	Depth To	Strata Descriptions	Samples & Tests Depth	Type
0.00	0.60	Pale brown slightly clayey silty SAND. Gravel is fine to coarse subrounded. Frequent roots to 0.25m	0.40	D

Remarks: Soakage test carried out at 0.60m BGL. Pit sides remained stable during excavation with some minor spalling. Dry, no groundwater met.

Photographs

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TRIAL PIT RECORD

Trial Pit No

SA03

Sheet 1 of 1

Project Name:	Proposed Sports Pitches	Job No 1223	Trial Pit SA03 hand excavated on 03/08/21 Groundwater not encountered. Trial Pit backfilled with arisings on completion. GL 17.51m OD GR: 384814E 248356N
Location:	NW of the Junction Pixham Ferry Lane and Old Road South, Kemspey		
Client:	STRI Group		

Depth From	Depth To	Strata Descriptions	Samples & Tests Depth	Type
0.00	0.65	Pale brown silty gravelly SAND. Gravel is fine to coarse subrounded. Frequent roots to 0.25m	0.40	D

Remarks: Soakage test carried out at 0.65m BGL. Pit sides remained stable during excavation with some minor spalling. Dry, no groundwater met.

Photographs

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TRIAL PIT RECORD

Trial Pit No

SA04

Sheet 1 of 1

Project Name:	Proposed Sports Pitches	Job No 1223	Trial Pit SA04 hand excavated on 03/08/21 Groundwater not encountered. Trial Pit backfilled with arisings on completion. GL 17.83m OD GR: 384862E 248358N
Location:	NW of the Junction Pixham Ferry Lane and Old Road South, Kemspey		
Client:	STRI Group		

Depth From	Depth To	Strata Descriptions	Samples & Tests Depth	Type
0.00	0.65	Pale brown silty gravelly SAND. Gravel is fine to coarse subrounded. Roots to 0.30m	0.40	D

Remarks: Soakage test carried out at 0.65m BGL. Pit sides remained stable during excavation with some minor spalling. Dry, no groundwater met.

Photographs

FOREWORD TO DYNAMIC SAMPLING, WINDOW SAMPLING AND DYNAMIC PROBING

Mini boreholes can be constructed by either window sampling or dynamic sampling, the relative merits depending on the requirements of the project, access arrangements and health and safety considerations.

Window sampling involves driving steel tubes into the ground under percussive action of a hand held jack-hammer and the tubes include long slots to enable description, testing and sampling of the soils recovered. Successive tubes reduce in diameter from 100mm to about 70mm. Whilst this technique has a role in restricted access areas, there are limitations of the equipment. The hand held jack-hammers can only be used for very short periods in accordance with health and safety guidance so there may only be limited penetration in hard strata. This method is also uncased so in loose granular soils, particularly with high groundwater, the hole side can collapse thereby limiting penetration.

Dynamic sampling involves the use of a tracked mini-rig with a percussive hammer driving steel tubes of gradually reducing diameter. The samples are recovered in plastic liners which are cut open to enable description, testing and sampling. The tracked mini-rig can enable casing to be installed for instance in loose granular soils with a high water table but this slows progress and may impact on the number of exploratory positions achievable in the allotted time.

Where a tracked mini-rig is deployed for dynamic sampling, this also allows Standard Penetration Testing (SPTs) in accordance with BS EN ISO 22476-3 : 2005. Tests are normally undertaken at 1m intervals prior to each drill run. The test length can be up to 450mm, so a substantial part of the upper half of each 1m run is disturbed by the test. In fine grained soils (clay and silt), this upper half of each run is not thereafter suitable for field testing by hand vane or hand penetrometer. The use of the SPT in fine grained soils has been questioned in the context of Eurocode 7, EN-1997 (2007) due to the uncertainties in the factors required to convert SPT 'N' values to undrained shear strength. In fine soils G7 Geotech Ltd tend to focus on direct measurement of strength by field tests including hand vane and hand penetrometer. SPTs are more appropriately used in granular soils (sand and gravel) thereby enabling estimations of relative density.

A tracked mini-rig also enables dynamic probing which involves driving steel rods and end cone into the ground under the action of a 63.5kg hammer falling through a mast height difference of 750mm. This is DPSH-B in accordance with BS EN ISO 22476-2 : 2005. The number of blows of the hammer are recorded for each 100mm penetration.

In difficult access areas where hand held window sampling has been used, dynamic probing can also be undertaken by portable electric rigs, or hand portable probes, but this normally involves a lighter hammer and amended drop height. The hammer and drop height are reported on the records.

Hand shear vane and hand penetrometers results are reported in kPa on the appended exploratory records.

Hand shear vane results are reported in kPa based on a direct reading from the test equipment.

Hand penetrometer results are measured in kg/cm^2 (7mm tip) or for soft / very soft soils kg converted to kg/cm^2 (10mm tip). The hand penetrometer measurements are reported in kPa on the basis of:

a) Assumption of undrained shear strength (Cu) = 0.50 x unconfined compressive strength (UCS)

b) In-house correction for the influence of plasticity

c) Site specific correlations with hand vane results

Readings from a Photoionization Detector (PID) are given in parts per million (ppm).

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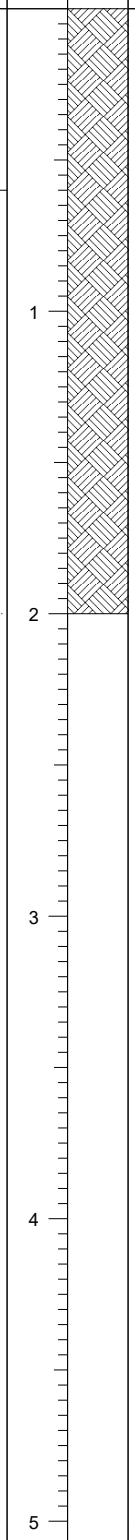
BOREHOLE RECORD

Borehole No.
BH01
Sheet 1 of 1

Project Name:	Kempsey	Job No 1223	Co-ords:	384862E - 248360N	Hole Type WLS
Location:	Land NW Junction Pixham Ferry Lane/Old Road South, Kempsey, Worcester W5		Level:	17.83	Scale 1:25
Client:	STRI Ltd		Dates:	03/08/2021	Logged By KOG

Comments	Sample and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	Well	Water Strikes
	Depth (m)	Type	Results						
BH started 03/08/21 Diam. 100mm to 2.00m				0.60	17.23		Pale brown and grey brown mottled slightly clayey silty SAND. Gravel is fine to coarse subrounded		
							Medium dense red/orange brown slightly clayey silty gravelly SAND. Gravel is fine to coarse subrounded		
BH dry				2.00	15.83		End of Borehole at 2.00m		



Remarks

BH01 adjacent to SA04 and BH01A. Borehole dry, no groundwater inflows met during drilling. Soakage test at 2.00

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BOREHOLE RECORD

Borehole No.
BH01A
Sheet 1 of 1

Project Name:	Kempsey	Job No 1223	Co-ords:	384862E - 248361N	Hole Type WLS
Location:	Land NW Junction Pixham Ferry Lane/Old Road South, Kempsey, Worcester W5		Level:	17.83	Scale 1:28
Client:	STRI Ltd		Dates:	03/08/2021	Logged By KOG

Comments	Sample and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	Well	Water Strikes
	Depth (m)	Type	Results						
BH started 03/08/21 Diam 100mm reducing with depth	0.40	D		0.60	17.23		Pale brown and grey brown mottled slightly clayey silty SAND. Gravel is fine to coarse subrounded		
	1.00	SPT	N=10 (3,3/2,2,3,3)				Medium dense red/orange brown slightly clayey silty gravelly SAND. Gravel is fine to coarse subrounded	1	
	1.50	D							
	2.00	SPT	N=11 (2,3/3,2,3,3)	2.00	15.83		Medium dense pale brown silty to very silty very gravelly SAND. Gravel is fine to coarse subrounded	2	
	2.50	D							
	3.00	SPT	N=14 (4,4/4,3,4,3)	2.80	15.03		Medium dense orange brown slightly gravelly silty SAND	3	
Water inflow at 3.50m	3.50	D							▼
	4.00	SPT	N=11 (3,2/3,2,2,4)	4.00	13.83		Dense orange brown and pale yellow brown mottled slightly silty SAND	4	
	4.50	D							
	5.00	SPT	N=33 (25 for 135mm/9,7,7,10)					5	
				5.45	12.38		End of Borehole at 5.45m		

Remarks

BH01A adjacent to BH01 and SA04. Water inflow at 3.5m .Hole collapsed to 3.5m after completion of SPT test at 5.00m.

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FOREWORD TO SOAKAGE TESTS

GENERAL

The soakage tests are undertaken in general accordance with BRE Digest 365 : 2016, Soakaway design. Soakage tests are undertaken in either machine-excavated or hand-excavated trial pits and water can be delivered either by means of a lorry mounted bowser or by portable 25 litre plastic containers, depending on the size / depth of excavation.

The BRE guidance requires soakage rates to be calculated on the basis of water levels recorded at 25% and 75% of the effective depth of the proposed soakaway. Soakage rates can vary substantially. In highly permeable granular soils the added water may drain relatively quickly, or in practically impermeable cohesive soils the water may drain very slowly, if at all. In the case of soils of low permeability or practically impermeable soils, water levels at 25% and 75% of the effective depth may not be achievable in the available time. In these circumstances, soakage rates are calculated based on alternative selected water levels and this is stated on the results sheets.

Where soakage tests are undertaken to assess the potential for infiltration drainage beneath a sports pitch, or other widescale drainage blanket, they can be undertaken in shallow trial pits of about 0.50m depth to target the proposed pitch formation level. In these circumstances, where the drainage blanket may be relatively thin or may include check dams at intervals, the effective depth of the soakaway as described in BRE Digest 365, is not necessarily relevant to the soakage rate calculation. Alternative selected water levels are therefore taken as the basis for calculation of the soakage rates.

The BRE Digest 365 requires soakage tests to be repeated to give 3 tests at each location in order to model the effects of reduced permeability resulting from saturation of the soils following prolonged rainfall. In the case of soils of low permeability or practically impermeable soils, repeat tests may not always be feasible in the available time. However, in these circumstances, soakaways may not be a suitable drainage option anyway, and a single test, can be sufficient in order to prove this negative outcome.

The Soakage Test Records are compiled from the geotechnical engineer's description of the strata encountered, based on an examination of the soil arisings and the results of field tests. Based on this data, the report presents an opinion on the configuration of strata within the site. However, such reasonable assumptions are given for guidance only, and no liability can be accepted for changes in conditions not revealed by the trial pits / soakage tests.

EXCAVATION METHODS

Trial pits can be undertaken either by mechanical excavator or by the use of hand tools which allows the ground conditions to be reasonably well established. Some disturbance of the ground is inevitable and depending on the type of excavator bucket used this can influence soakage test results.

GROUNDWATER

The depth at which ground water is struck is entered on the Soakage Test and Trial Pit Records. However, this observation may not indicate the true water level at that period. Due to the speed of excavation, natural ground water may be present at a depth slightly higher than the water strike. Moreover, ground water levels are subject to variations caused by changes in the local drainage conditions and by seasonal effects. When a moderate inflow of water does take place, excavation is suspended for at least 10 minutes to enable a more accurate short-term water level to be achieved. An estimate of the rate of inflow is also given. This is a relative term and serves only as a guide to the probable flow of water into an excavation. Further observations of the water level are made on completion.

SAMPLES

Disturbed soil samples are taken and placed in polythene bags for geotechnical testing. Small jar samples and plastic tub samples are taken for laboratory ground contamination testing. Where ground water is encountered in sufficient quantity, a sample of the ground water is also taken.

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SOAKAGE TEST RESULT

Soakage Test No

SA01

Sheet 1 of 1

Project Name:	Proposed Sports Pitches
Location:	Land to NW of Junction Pixham Ferry Lane and Old Road South Kempsey, Worcester WR5
Client:	STRI Ltd

Job No 1223

Soakage test undertaken within hand excavated trial pit at 0.60m depth.

SOAKAGE RATE

TP SOAKAGE TEST **SA01** **DEPTH** **0.60** **TEST No** **1** DATE : **3rd August 2021**

CASING DEPTH	0.00	m
DIMENSIONS		
WIDTH	0.30	m
LENGTH	0.30	m
DIAMETER		m
PERIMETER	1.200	m
BASE AREA	0.090	m^2

SOIL TYPE :- GL - 0.60 Grey brown slightly clayey silty gravelly SAND

Readings measured from **0.00** m above ground level

No	time	depth	Depth bgl	
1	**0**	**0.220**	0.220	
2	**0.5**	**0.230**	0.230	
3	**1**	**0.235**	0.235	
4	**2**	**0.245**	0.245	
5	**3**	**0.250**	0.250	
6	**4**	**0.255**	0.255	
7	**5**	**0.260**	0.260	
8	**10**	**0.280**	0.280	
9	**15**	**0.290**	0.290	
10	**20**	**0.300**	0.300	<< top reading
11	**30**	**0.320**	0.320	
12	**82**	**0.370**	0.370	
13	**111**	**0.400**	0.400	
14	**161**	**0.440**	0.440	<<bottom reading
15	**234**	**0.490**	0.490	
16	**244**	**0.495**	0.495	

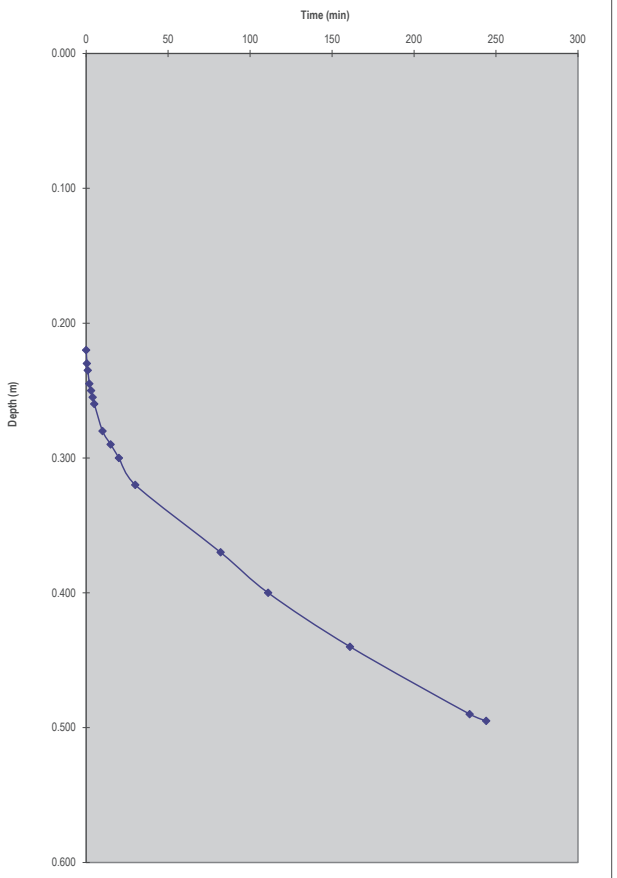
		Water Level (m)	Time sec
Top WL	**10**	0.30	1200
Bottom WL	**14**	0.44	9660

Vol change	=	0.0126	m^3	V
Soakage area	=	0.3660	m^2	A
Time	=	8460	sec	T

Soakage Rate **4.07E-06** **m/sec**

Soakage Rate is calculated using two selected water levels (equivalent to those at 25% and 75% of the fall in water level during the test) and is based on BRE Digest 365: 2016: Soakaway Design

Water Level v Time Graph



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SOAKAGE TEST RESULT

Soakage Test No

SA01

Sheet 1 of 1

Project Name:	Proposed Sports Pitches	Job No 1223
Location:	Land to NW of Junction Pixham Ferry Lane and Old Road South Kempsey, Worcester WR5	
Client:	STRI Ltd	

Soakage test undertaken within hand excavated trial pit at 0.60m depth.

SOAKAGE RATE

TP SOAKAGE TEST **SA01** **DEPTH** **0.60** **TEST No** **2** DATE : **3rd August 2021**

CASING DEPTH 0.00 m

DIMENSIONS

WIDTH 0.30 m

LENGTH 0.30 m

DIAMETER m

PERIMETER 1.200 m

BASE AREA 0.090 m^2

SOIL TYPE :- GL - 0.60 Grey brown slightly clayey silty gravelly SAND

Readings measured from **0.00** m above ground level

No	time	depth	Depth bgl	
1	**0**	**0.270**	0.270	
2	**1**	**0.275**	0.275	
3	**2**	**0.280**	0.280	
4	**3**	**0.285**	0.285	
5	**4**	**0.287**	0.287	
6	**5**	**0.290**	0.290	
7	**10**	**0.295**	0.295	
8	**15**	**0.300**	0.300	<< top reading
9	**141**	**0.400**	0.400	<<bottom reading
10	**165**	**0.420**	0.420	

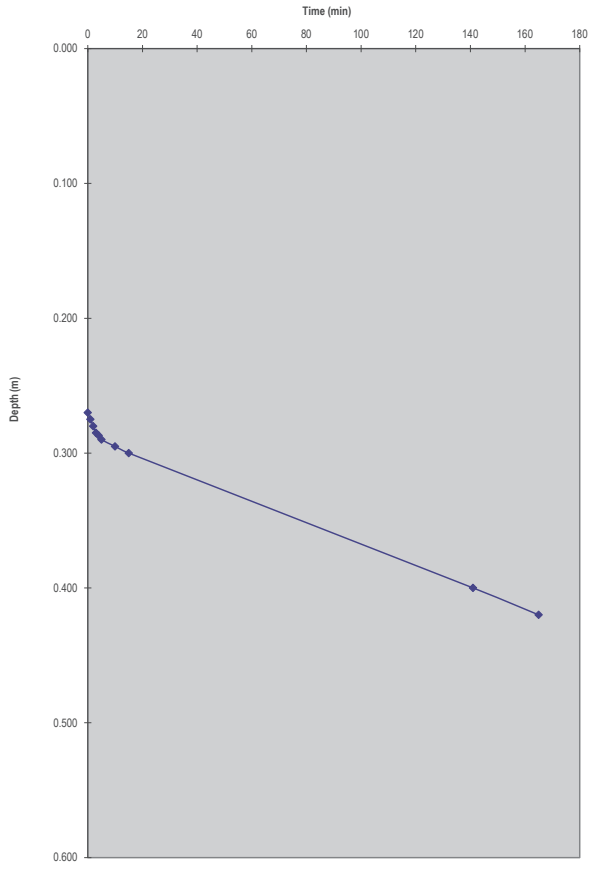
		Water Level (m)	Time sec
Top WL	**8**	0.30	900
Bottom WL	**9**	0.40	8460

Vol change	=	0.0090	m^3	V
Soakage area	=	0.3900	m^2	A
Time	=	7560	sec	T

Soakage Rate **3.05E-06** **m/sec**

Soakage Rate is calculated using two selected water levels (equivalent to those at 25% and 75% of the fall in water level during the test) and is based on BRE Digest 365: 2016: Soakaway Design

Water Level v Time Graph



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SOAKAGE TEST RESULT

Soakage Test No

SA02

Sheet 1 of 1

Project Name:	Proposed Sports Pitches
Location:	Land to NW of Junction Pixham Ferry Lane and Old Road South Kempsey, Worcester WR5
Client:	STRI Ltd

Job No 1223

Soakage test undertaken within hand excavated trial pit at 0.60m depth.

SOAKAGE RATE

TP SOAKAGE TEST **SA02** **DEPTH** **0.60** **TEST No** **1** DATE : **3rd August 2021**

CASING DEPTH	0.00	m
DIMENSIONS		
WIDTH	0.35	m
LENGTH	0.40	m
DIAMETER		m
PERIMETER	1.500	m
BASE AREA	0.140	m^2

Readings measured from **0.00** m above ground level

SOIL TYPE :- GL - 0.60 Pale brown slightly clayey silty gravelly SAND

No	time	depth	Depth bgl	
1	**0**	**0.240**	0.240	
2	**0.5**	**0.250**	0.250	
3	**1**	**0.260**	0.260	
4	**2**	**0.265**	0.265	
5	**3**	**0.270**	0.270	
6	**4**	**0.275**	0.275	
7	**5**	**0.280**	0.280	
8	**10**	**0.300**	0.300	
9	**15**	**0.315**	0.315	
10	**22**	**0.335**	0.335	
11	**30**	**0.350**	0.350	
12	**35**	**0.360**	0.360	
13	**69**	**0.410**	0.410	<< top reading
14	**113**	**0.450**	0.450	<<bottom reading
15	**187**	**0.510**	0.510	

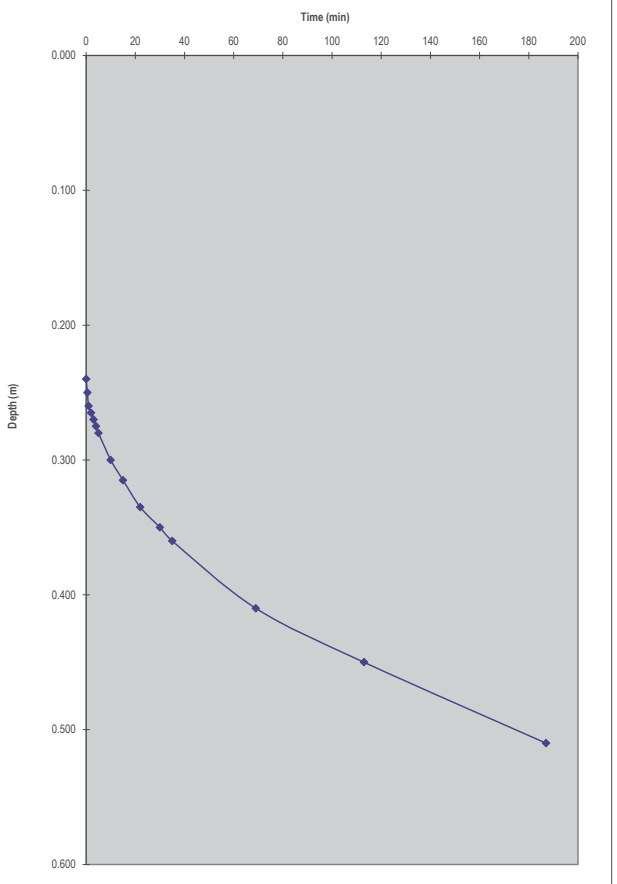
		Water Level (m)	Time sec
Top WL	**13**	0.41	4140
Bottom WL	**14**	0.45	6780

Vol change	=	0.0056	m^3	V
Soakage area	=	0.3950	m^2	A
Time	=	2640	sec	T

Soakage Rate **5.37E-06** **m/sec**

Soakage Rate is calculated using two selected water levels (equivalent to those at 25% and 75% of the fall in water level during the test) and is based on BRE Digest 365: 2016: Soakaway Design

Water Level v Time Graph



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SOAKAGE TEST RESULT

Soakage Test No

SA02

Sheet 1 of 1

Project Name:	Proposed Sports Pitches
Location:	Land to NW of Junction Pixham Ferry Lane and Old Road South Kempsey, Worcester WR5
Client:	STRI Ltd

Job No 1223

Soakage test undertaken within hand excavated trial pit at 0.60m depth.

SOAKAGE RATE

TP SOAKAGE TEST **SA02** **DEPTH** **0.60** **TEST No** **2** DATE : **3rd August 2021**

CASING DEPTH	0.00	m
DIMENSIONS		
WIDTH	0.35	m
LENGTH	0.40	m
DIAMETER		m
PERIMETER	1.500	m
BASE AREA	0.140	m^2

SOIL TYPE :- GL - 0.60 Pale brown slightly clayey silty gravelly SAND

Readings measured from **0.00** m above ground level

No	time	depth	Depth bgl	
1	**0**	**0.300**	0.300	
2	**1**	**0.300**	0.300	
3	**3**	**0.300**	0.300	
4	**4**	**0.305**	0.305	
5	**5.5**	**0.310**	0.310	
6	**10**	**0.315**	0.315	
7	**15**	**0.320**	0.320	<< top reading
8	**116**	**0.405**	0.405	<<bottom reading

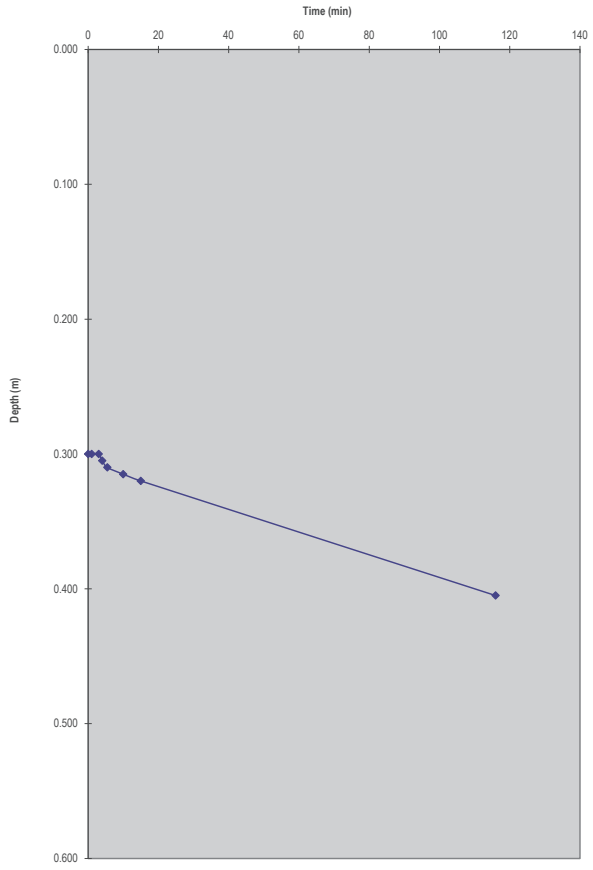
		Water Level (m)	Time sec
Top WL	**7**	0.32	900
Bottom WL	**8**	0.41	6960

Vol change	=	0.0119	m^3	V
Soakage area	=	0.4963	m^2	A
Time	=	6060	sec	T

Soakage Rate **3.96E-06** **m/sec**

Soakage Rate is calculated using two selected water levels (equivalent to those at 25% and 75% of the fall in water level during the test) and is based on BRE Digest 365: 2016: Soakaway Design

Water Level v Time Graph



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SOAKAGE TEST RESULT

Soakage Test No

SA03

Sheet 1 of 1

Project Name:	Proposed Sports Pitches
Location:	Land to NW of Junction Pixham Ferry Lane and Old Road South Kempsey, Worcester WR5
Client:	STRI Ltd

Job No 1223

Soakage test undertaken within hand excavated trial pit at 0.65m depth.

SOAKAGE RATE

TP SOAKAGE TEST **SA03** **DEPTH** **0.65** **TEST No** **1** DATE : **3rd August 2021**

CASING DEPTH	0.00	m
DIMENSIONS		
WIDTH	0.45	m
LENGTH	0.45	m
DIAMETER		m
PERIMETER	1.800	m
BASE AREA	0.203	m^2

SOIL TYPE :- GL - 0.65 Pale brown silty gravelly SAND

Readings measured from **0.00** m above ground level

No	time	depth	Depth bgl	
1	**0**	**0.440**	0.440	
2	**0.5**	**0.460**	0.460	
3	**1**	**0.470**	0.470	
4	**2**	**0.490**	0.490	<< top reading
5	**3**	**0.510**	0.510	
6	**4**	**0.530**	0.530	
7	**5**	**0.550**	0.550	
8	**10**	**0.600**	0.600	<<bottom reading
9	**15**	**0.640**	0.640	

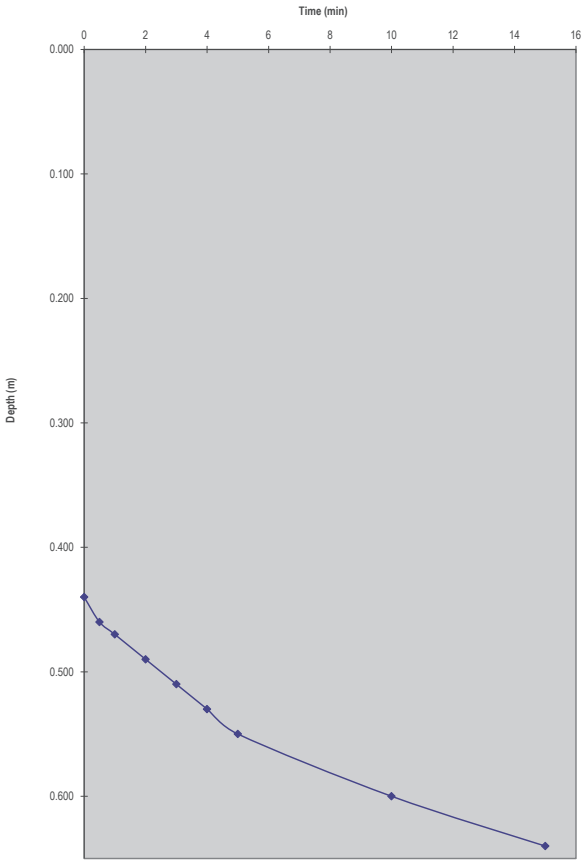
		Water Level (m)	Time sec
Top WL	**4**	0.49	120
Bottom WL	**8**	0.60	600

Vol change	=	0.0223	m^3	V
Soakage area	=	0.3915	m^2	A
Time	=	480	sec	T

Soakage Rate **1.19E-04** **m/sec**

Soakage Rate is calculated using two selected water levels (equivalent to those at 25% and 75% of the fall in water level during the test) and is based on BRE Digest 365: 2016: Soakaway Design

Water Level v Time Graph



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SOAKAGE TEST RESULT

Soakage Test No

SA03

Sheet 1 of 1

Project Name:	Proposed Sports Pitches	Job No 1223
Location:	Land to NW of Junction Pixham Ferry Lane and Old Road South Kempsey, Worcester WR5	
Client:	STRI Ltd	

Soakage test undertaken within hand excavated trial pit at 0.65m depth.

SOAKAGE RATE

TP SOAKAGE TEST **SA03** **DEPTH** **0.65** **TEST No** **2** DATE : **3rd August 2021**

CASING DEPTH	0.00	m
DIMENSIONS		
WIDTH	0.45	m
LENGTH	0.45	m
DIAMETER		m
PERIMETER	1.800	m
BASE AREA	0.203	m^2

SOIL TYPE :- GL - 0.65 Pale brown silty gravelly SAND

Readings measured from **0.00** m above ground level

No	time	depth	Depth bgl	
1	**0**	**0.415**	0.415	
2	**0.5**	**0.430**	0.430	
3	**1**	**0.440**	0.440	
4	**2**	**0.450**	0.450	
5	**3**	**0.455**	0.455	
6	**4**	**0.460**	0.460	<< top reading
7	**6**	**0.470**	0.470	
8	**11**	**0.500**	0.500	
9	**15**	**0.530**	0.530	
10	**20**	**0.555**	0.555	<<bottom reading
11	**27**	**0.590**	0.590	

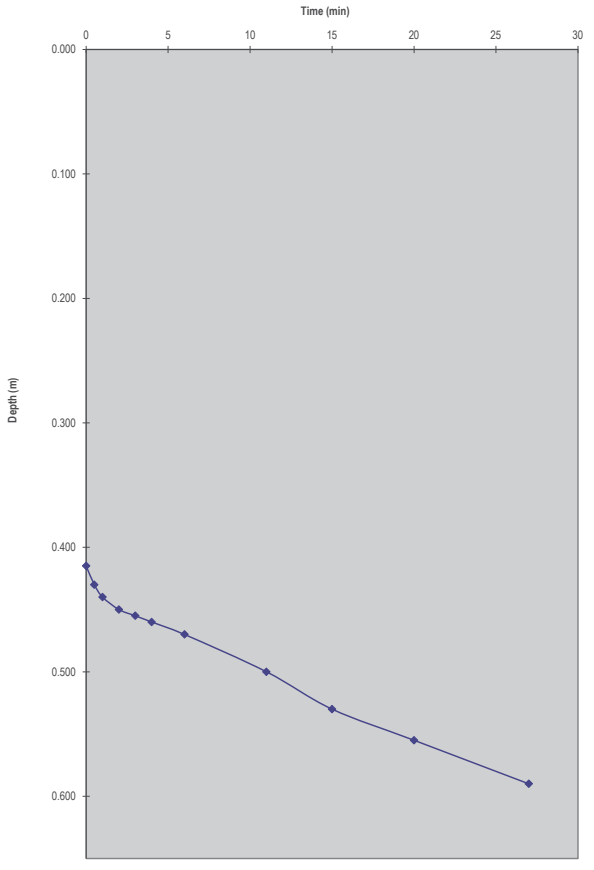
		Water Level (m)	Time sec
Top WL	**6**	0.46	240
Bottom WL	**10**	0.56	1200

Vol change	=	0.0192	m^3	V
Soakage area	=	0.4590	m^2	A
Time	=	960	sec	T

Soakage Rate **4.37E-05** **m/sec**

Soakage Rate is calculated using two selected water levels (equivalent to those at 25% and 75% of the fall in water level during the test) and is based on BRE Digest 365: 2016: Soakaway Design

Water Level v Time Graph



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SOAKAGE TEST RESULT

Soakage Test No

SA03

Sheet 1 of 1

Project Name:	Proposed Sports Pitches
Location:	Land to NW of Junction Pixham Ferry Lane and Old Road South Kempsey, Worcester WR5
Client:	STRI Ltd

Job No 1223

Soakage test undertaken within hand excavated trial pit at 0.65m depth.

SOAKAGE RATE

TP SOAKAGE TEST **SA03** **DEPTH** **0.65** **TEST No** **3** DATE : **3rd August 2021**

CASING DEPTH	0.00	m
DIMENSIONS		
WIDTH	0.45	m
LENGTH	0.45	m
DIAMETER		m
PERIMETER	1.800	m
BASE AREA	0.203	m^2

SOIL TYPE :- GL - 0.65 Pale brown silty gravelly SAND

Readings measured from **0.00** m above ground level

No	time	depth	Depth bgl	
1	**0**	**0.390**	0.390	
2	**1**	**0.410**	0.410	
3	**2**	**0.420**	0.420	
4	**3**	**0.435**	0.435	<< top reading
5	**4**	**0.450**	0.450	
6	**6**	**0.465**	0.465	
7	**10**	**0.490**	0.490	
8	**15**	**0.520**	0.520	<<bottom reading
9	**23**	**0.583**	0.583	

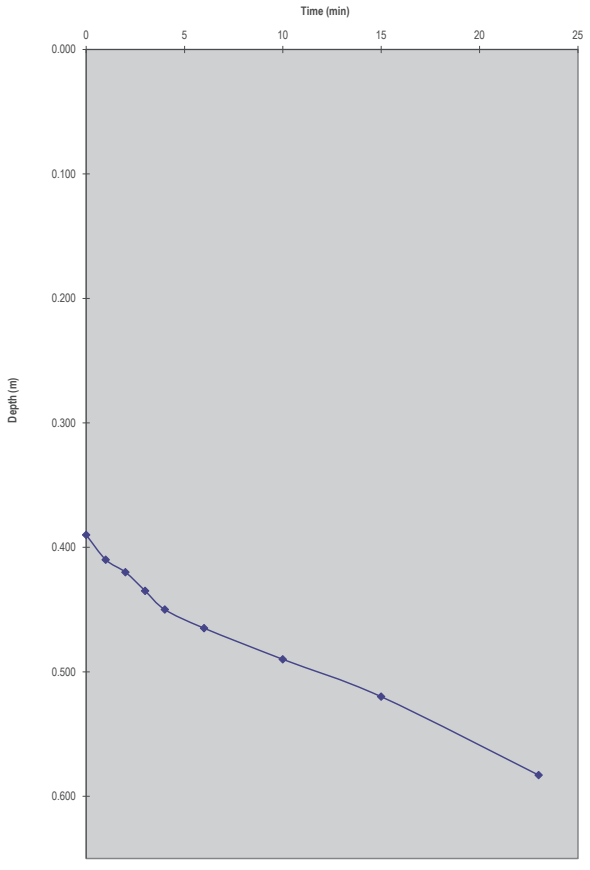
		Water Level (m)	Time sec
Top WL	**4**	0.44	180
Bottom WL	**8**	0.52	900

Vol change	=	0.0172	m^3	V
Soakage area	=	0.5130	m^2	A
Time	=	720	sec	T

Soakage Rate **4.66E-05** **m/sec**

Soakage Rate is calculated using two selected water levels (equivalent to those at 25% and 75% of the fall in water level during the test) and is based on BRE Digest 365: 2016: Soakaway Design

Water Level v Time Graph



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SOAKAGE TEST RESULT

Soakage Test No
SA04
Sheet 1 of 1

Project Name:	Proposed Sports Pitches	Job No 1223
Location:	Land to NW of Junction Pixham Ferry Lane and Old Road South Kempsey, Worcester WR5	
Client:	STRI Ltd	

Soakage test undertaken within hand excavated trial pit at 0.65m depth.

SOAKAGE RATE

TP SOAKAGE TEST **SA04** **DEPTH** **0.65** **TEST No** **1** DATE : **3rd August 2021**

CASING DEPTH 0.00 m
DIMENSIONS
WIDTH 0.45 m
LENGTH 0.45 m
DIAMETER m

PERIMETER 1.800 m
BASE AREA 0.203 m^2

Readings measured from **0.00** m above ground level

SOIL TYPE :- GL - 0.65 Pale brown silty gravelly SAND

No	time	depth	Depth bgl	
1	**0**	**0.415**	0.415	
2	**0.5**	**0.430**	0.430	
3	**1**	**0.440**	0.440	
4	**2**	**0.445**	0.445	
5	**3**	**0.460**	0.460	<< top reading
6	**7**	**0.490**	0.490	
7	**10**	**0.505**	0.505	
8	**15**	**0.530**	0.530	
9	**20**	**0.550**	0.550	
10	**30**	**0.580**	0.580	<<bottom reading
11	**45**	**0.640**	0.640	

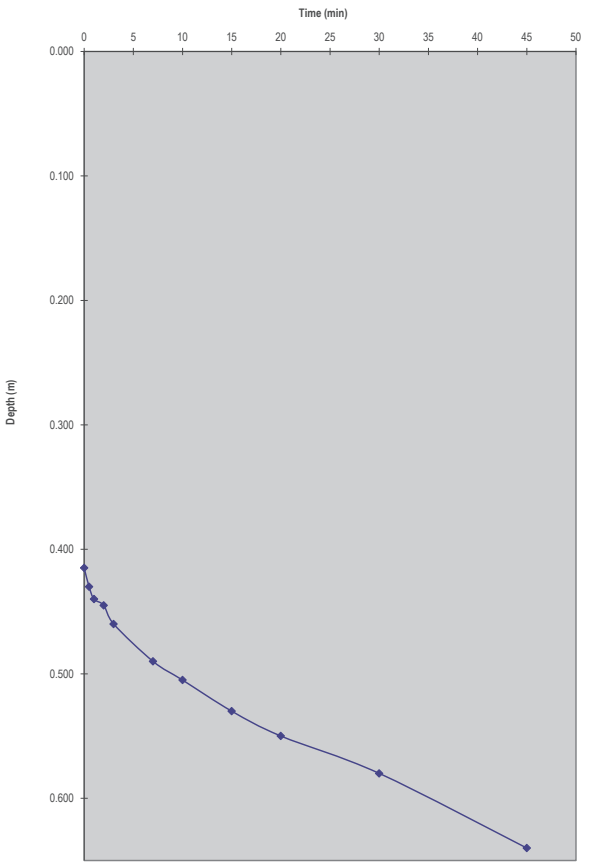
		Water Level (m)	Time sec
Top WL	**5**	0.46	180
Bottom WL	**10**	0.58	1800

Vol change	=	0.0243	m^3	V
Soakage area	=	0.4365	m^2	A
Time	=	1620	sec	T

Soakage Rate **3.44E-05** **m/sec**

Soakage Rate is calculated using two selected water levels (equivalent to those at 25% and 75% of the fall in water level during the test) and is based on BRE Digest 365: 2016: Soakaway Design

Water Level v Time Graph



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SOAKAGE TEST RESULT

Soakage Test No

SA04

Sheet 1 of 1

Project Name:	Proposed Sports Pitches
Location:	Land to NW of Junction Pixham Ferry Lane and Old Road South Kempsey, Worcester WR5
Client:	STRI Ltd

Job No 1223

Soakage test undertaken within hand excavated trial pit at 0.65m depth.

SOAKAGE RATE

TP SOAKAGE TEST **SA04** **DEPTH** **0.65** **TEST No** **2** DATE : **3rd August 2021**

CASING DEPTH	0.00	m
DIMENSIONS		
WIDTH	0.45	m
LENGTH	0.45	m
DIAMETER		m
PERIMETER	1.800	m
BASE AREA	0.203	m^2

SOIL TYPE :- GL - 0.65 Pale brown silty gravelly SAND

Readings measured from **0.00** m above ground level

No	time	depth	Depth bgl	
1	**0**	**0.435**	0.435	
2	**1**	**0.445**	0.445	
3	**2**	**0.450**	0.450	
4	**3**	**0.455**	0.455	
5	**4**	**0.460**	0.460	<< top reading
6	**5**	**0.460**	0.460	
7	**10**	**0.470**	0.470	
8	**15**	**0.480**	0.480	
9	**20**	**0.485**	0.485	
10	**71**	**0.550**	0.550	<<bottom reading

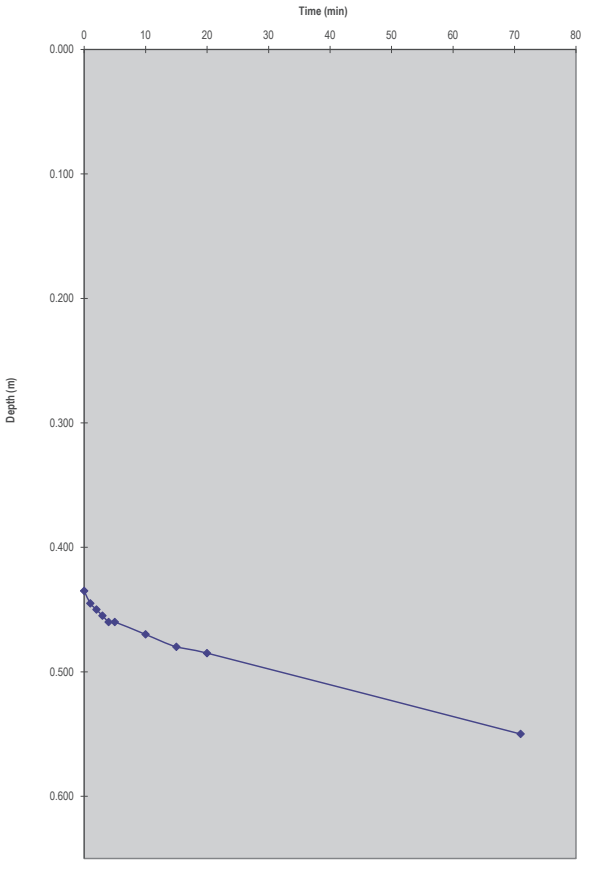
		Water Level (m)	Time sec
Top WL	**5**	0.46	240
Bottom WL	**10**	0.55	4260

Vol change	=	0.0182	m^3	V
Soakage area	=	0.4635	m^2	A
Time	=	4020	sec	T

Soakage Rate **9.78E-06** **m/sec**

Soakage Rate is calculated using two selected water levels (equivalent to those at 25% and 75% of the fall in water level during the test) and is based on BRE Digest 365: 2016: Soakaway Design

Water Level v Time Graph



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SOAKAGE TEST RESULT

Soakage Test No

SA04

Sheet 1 of 1

Project Name:	Proposed Sports Pitches
Location:	Land to NW of Junction Pixham Ferry Lane and Old Road South Kempsey, Worcester WR5
Client:	STRI Ltd

Job No 1223

Soakage test undertaken within hand excavated trial pit at 0.65m depth.

SOAKAGE RATE

TP SOAKAGE TEST **SA04** **DEPTH** **0.65** **TEST No** **3** DATE : **3rd August 2021**

CASING DEPTH	0.00	m
DIMENSIONS		
WIDTH	0.45	m
LENGTH	0.45	m
DIAMETER		m
PERIMETER	1.800	m
BASE AREA	0.203	m^2

SOIL TYPE :- GL - 0.65 Pale brown silty gravelly SAND

Readings measured from **0.00** m above ground level

No	time	depth	Depth bgl	
1	**0**	**0.300**	0.300	
2	**1**	**0.310**	0.310	
3	**2**	**0.320**	0.320	
4	**3**	**0.320**	0.320	
5	**4**	**0.325**	0.325	
6	**5**	**0.330**	0.330	<< top reading
7	**10**	**0.350**	0.350	
8	**15**	**0.355**	0.355	
9	**66**	**0.420**	0.420	<<bottom reading

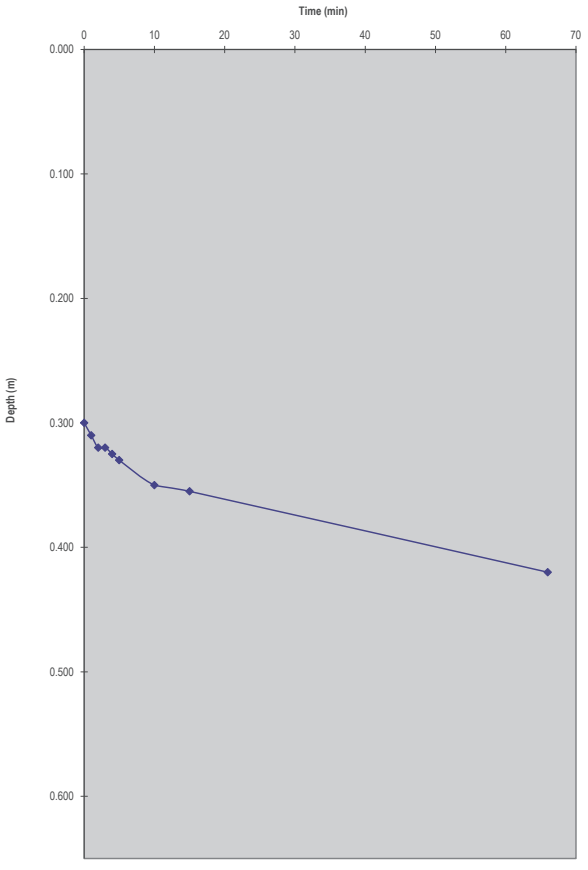
		Water Level (m)	Time sec
Top WL	**6**	0.33	300
Bottom WL	**9**	0.42	3960

Vol change	=	0.0182	m^3	V
Soakage area	=	0.6975	m^2	A
Time	=	3660	sec	T

Soakage Rate **7.14E-06** **m/sec**

Soakage Rate is calculated using two selected water levels (equivalent to those at 25% and 75% of the fall in water level during the test) and is based on BRE Digest 365: 2016: Soakaway Design

Water Level v Time Graph



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G7 Geotech Ltd
49, Church Rd
Leyland PR25 3AA

SOAKAGE TEST RESULT

Soakage Test No

BH01

Sheet 1 of 1

Project Name:	Proposed Sports Pitches
Location:	Land to NW of Junction Pixham Ferry Lane and Old Road South Kempsey, Worcester WR5
Client:	STRI Ltd

Job No 1223

Soakage test undertaken in uncased borehole at 2m depth

SOAKAGE RATE

TP SOAKAGE TEST **BH1** **DEPTH** **2.00** **TEST No** **1** DATE : **3rd August 2021**

CASING DEPTH	0.00	m
DIMENSIONS		
WIDTH		m
LENGTH		m
DIAMETER	0.10	m
PERIMETER	0.314	m
BASE AREA	0.008	m^2

Readings measured from **0.00** m above ground level

SOIL TYPE :- GL - 0.60 Pale brown slightly clayey silty gravelly SAND 0.60
- 2.00 Orange brown/red slightly clayey silty gravelly SAND (Hole collapsed after reading No.11)

No	time	depth	Depth bgl	
1	**0**	**0.140**	0.140	
2	**0.5**	**0.360**	0.360	<< top reading
3	**1**	**0.410**	0.410	
4	**3**	**0.590**	0.590	
5	**4**	**0.620**	0.620	
6	**5**	**0.650**	0.650	
7	**7**	**0.700**	0.700	
8	**10**	**0.780**	0.780	<<bottom reading
9	**20**	**0.860**	0.860	
10	**25**	**0.900**	0.900	
11	**30**	**0.940**	0.940	

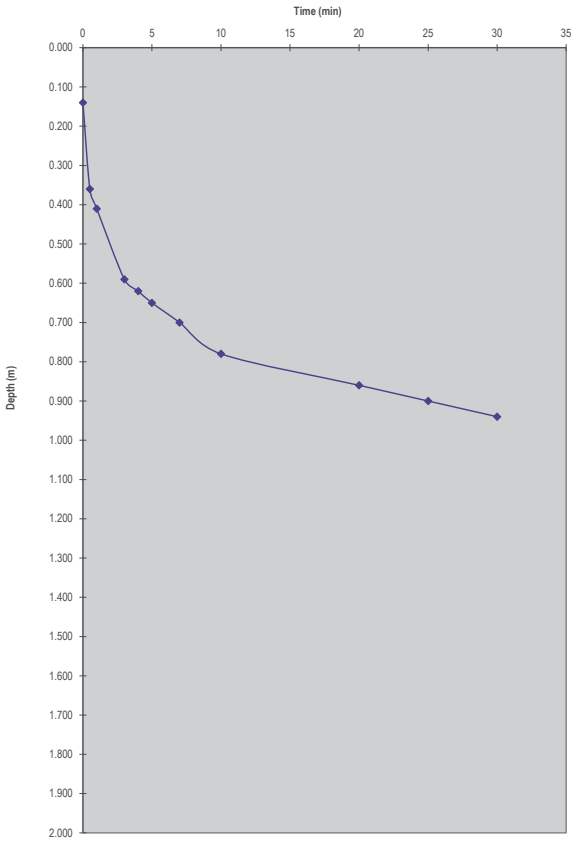
		Water Level (m)	Time sec
Top WL	**2**	0.36	30
Bottom WL	**8**	0.78	600

Vol change	=	0.0033	m^3	V
Soakage area	=	0.4572	m^2	A
Time	=	570	sec	T

Soakage Rate **1.27E-05** **m/sec**

Soakage Rate is calculated using two selected water levels (equivalent to those at 25% and 75% of the fall in water level during the test) and is based on BRE Digest 365: 2016: Soakaway Design

Water Level v Time Graph



APPENDIX B

PLANS AND MAPS

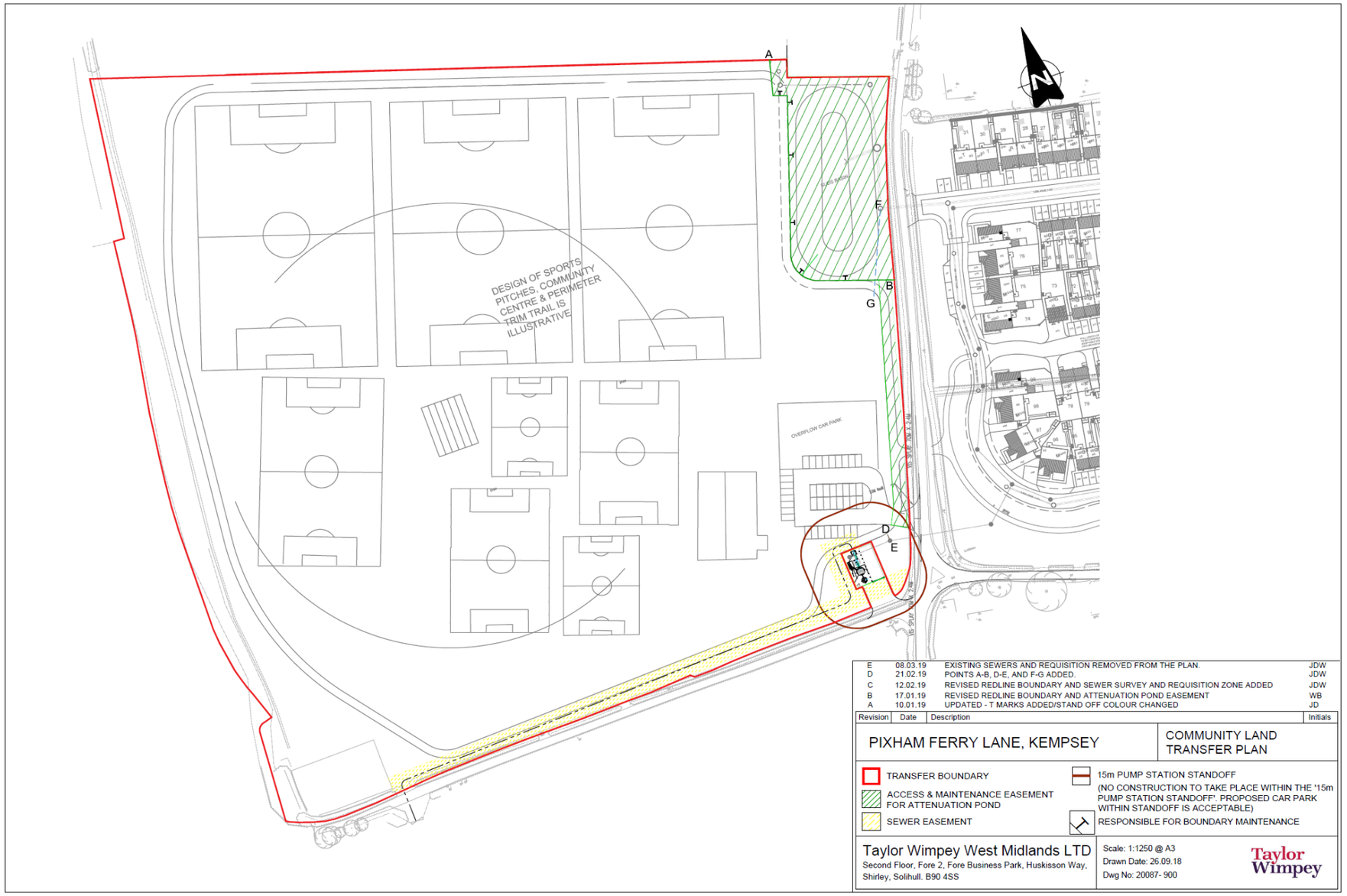
PROPOSED DEVELOPMENT PLAN

SITE PLAN

LOCATION PLAN

Site Location	LAND to NW of JUNCTION BETWEEN PIXHAM FERRY LANE & OLD ROAD SOUTH, KEMPSEY, WORCESTER WR5	Report No	1223

PRELIMINARY PROPOSED DEVELOPMENT PLAN



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Revision	Date	Description	Initials
E	08.03.19	EXISTING SEWERS AND REQUISITION REMOVED FROM THE PLAN.	JDW
D	21.02.19	POINTS A-B, D-E, AND F-G ADDED.	JDW
C	12.02.19	REVISED REDLINE BOUNDARY AND SEWER SURVEY AND REQUISITION ZONE ADDED	JDW
B	17.01.19	REVISED REDLINE BOUNDARY AND ATTENUATION POND EASEMENT	WB
A	10.01.19	UPDATED - T MARKS ADDED/STAND OFF COLOUR CHANGED	JD

PIXHAM FERRY LANE, KEMPSEY

COMMUNITY LAND TRANSFER PLAN

TRANSFER BOUNDARY

ACCESS & MAINTENANCE EASEMENT FOR ATTENUATION POND

SEWER EASEMENT

15m PUMP STATION STANDOFF (NO CONSTRUCTION TO TAKE PLACE WITHIN THE '15m PUMP STATION STANDOFF'. PROPOSED CAR PARK WITHIN STANDOFF IS ACCEPTABLE)

RESPONSIBLE FOR BOUNDARY MAINTENANCE

Taylor Wimpey West Midlands LTD
Second Floor, Fore 2, Fore Business Park, Huskisson Way, Shirley, Solihull. B90 4SS

Scale: 1:1250 @ A3
Drawn Date: 26.09.18
Dwg No: 20087- 900

Taylor Wimpey

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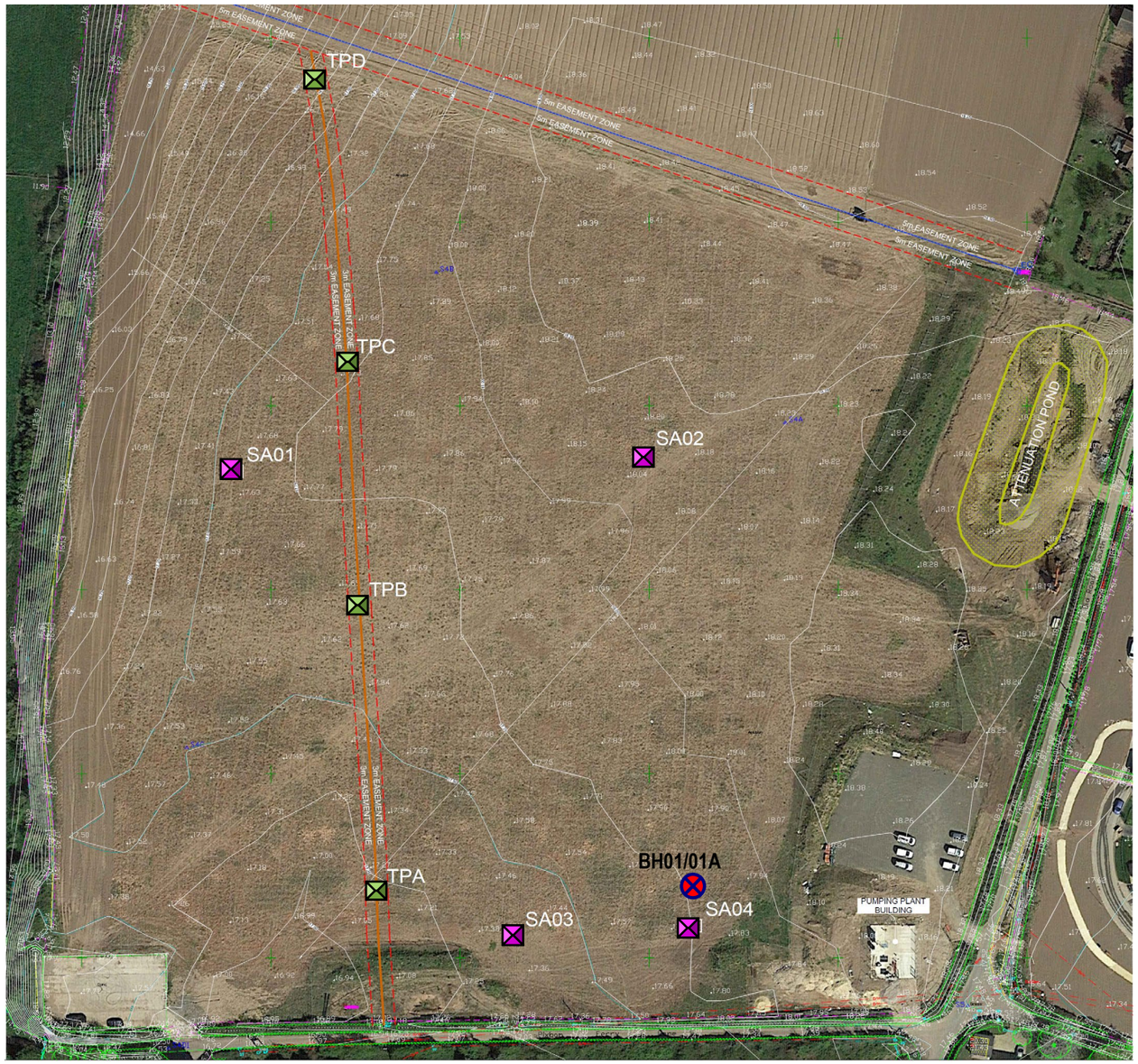
Site Location	LAND to NW of JUNCTION BETWEEN PIXHAM FERRY LANE & OLD ROAD SOUTH, KEMPSEY, WORCESTER WR5	Report No	1223

SITE PLAN



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Not to scale

Legend

Trial Pit soakage test

Trial Pit to locate oil pipeline

Borehole for soakage test

plan

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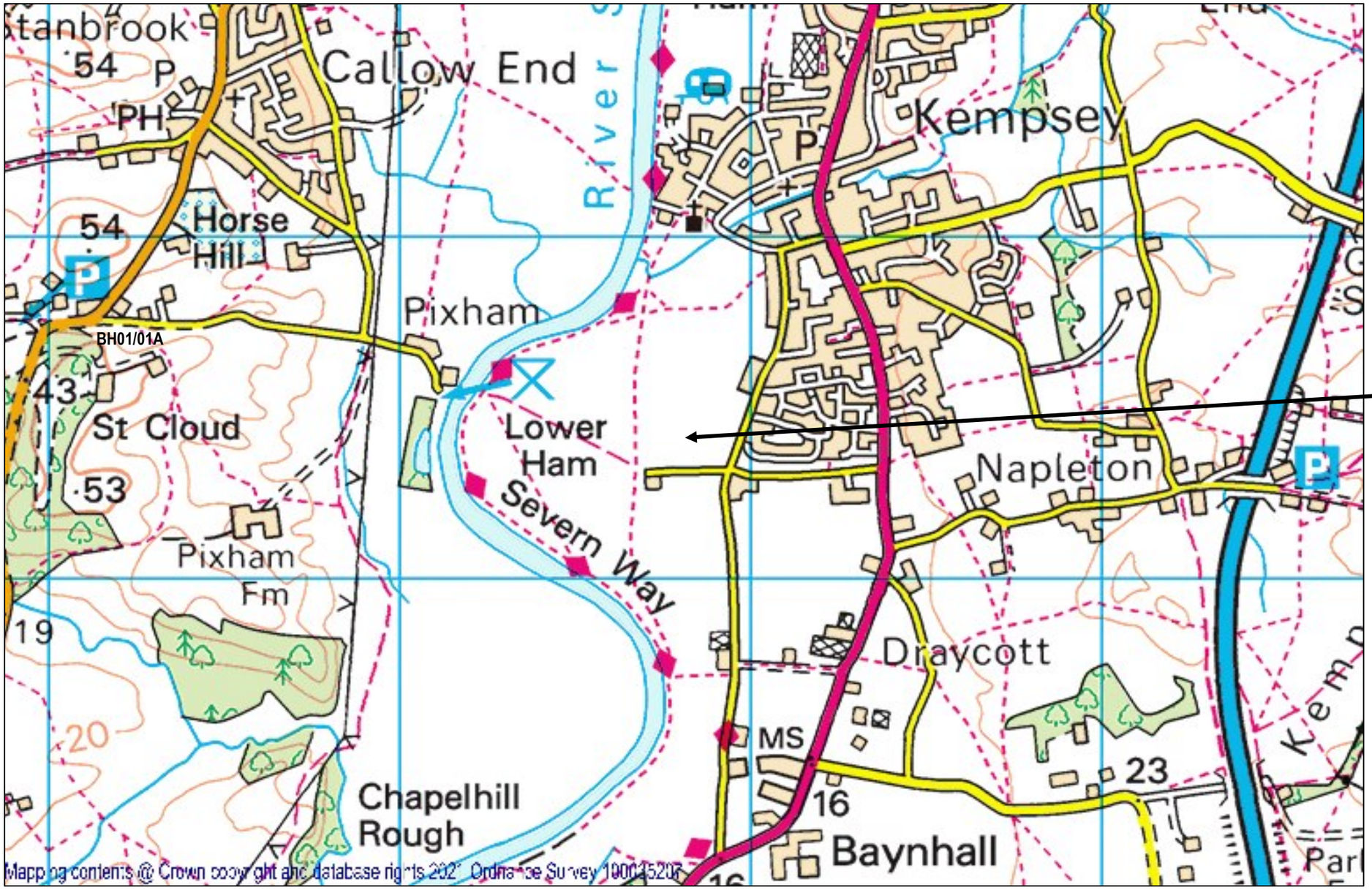
Site Location	LAND to NW of JUNCTION BETWEEN PIXHAM FERRY LANE & OLD ROAD SOUTH, KEMPSEY, WORCESTER WR5	Report No	1223

LOCATION PLAN



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Not to scale

THE SITE

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