

11th January 2022

Our ref: GE20565/FG01/220111

Paul Thomas
Bargate Homes
The New Barn
Vicarage Farm Business Park
Winchester Road
Fair Oak
Hampshire
SO50 7HD



Dear Paul,

RE: Phase 2 Manor Farm, Lower Road, Bedhampton – Soakage Testing and Installation of Groundwater Monitoring Wells

Geo-Environmental Services Limited (Geo-Environmental) was instructed by Bargate Homes to install groundwater monitoring wells and undertake infiltration testing at the above named site.

The purpose of this investigation was to ascertain the ground conditions, infiltration values of the strata encountered within the exploratory holes and the depth to groundwater beneath the site to inform the emerging drainage strategy for the proposed development and address specific queries raised by the Lead Local Flood Authority.

Scope of Works

The following scope of works was agreed with the Client:

- The construction of 2No. machine dug trial pits, one in the swale location to 1m bgl and one in the basin location to 2m bgl, for the purpose of soakage testing.
- Undertake trial pit soakage tests in general accordance with BRE Digest 365.
- Construction of 1No. cable percussion borehole to a provisional depth of 10m bgl together with in-situ testing and sampling at regular intervals.
- Undertake a falling head test in the Chalk encountered at depth in the cable percussion borehole.
- Construction of 2No. dynamic sampler boreholes to target depths of up to 5m bgl.
- Installation of a groundwater monitoring well to 5m bgl in each dynamic sampler borehole (screened section 1-5m bgl) and in the cable percussive borehole to 10m bgl (provisional screened section 8-10m bgl) to facilitate return monitoring. The wells were completed with a lockable covers.
- Undertake groundwater monitoring (8No. monitoring visits at approximately fortnightly intervals) of installed wells.

The intrusive investigation works were undertaken on 10th December 2021 to install the shallow monitoring wells and on 6th and 7th January 2022 to undertake the trial pit soakage testing and the cable percussive borehole, with all the works supervised by a Geo-Environmental Engineer.

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Site Description

The site comprised part of a larger arable field at the time of the intrusive investigation works. The field was relatively flat with a very gentle slope southwards. Bounding the site to the south was a hedgerow with a railway line beyond. The western site boundary was former of a hedgerow and trees with the A3 and A27 beyond. An industrial type unit was located to the north of the site with residential properties located along Lower Road. The full extent of the arable field lay to the east of the site, this was fenced with Heras fencing for the as part of the Phase 1 development area.

Ground Conditions

The locations and depths of the exploratory holes were located in-line with proposed drainage features.

The ground conditions encountered during the investigation were broadly consistent with the anticipated published sequence of strata. In summary, ground conditions typically comprised a mantle of Topsoil overlying River Terrace Deposits with Chalk of the White Chalk Subgroup at depth.

Whilst a summary of the ground conditions encountered is presented in Table 1, reference should also be made to the individual exploratory hole logs for further information which are presented within Appendix A. The exploratory hole locations are shown on Figure 2.

Top (m bgl)	Base (m bgl)	Description
0	0.20-0.50	TOPSOIL: Crop stubble over dark brown slightly gravelly CLAY with frequent roots and rootlets.
0.20-0.50	2.40-3.50	RIVER TERRACE DEPOSITS: Firm orange brown CLAY with varying proportions of medium to coarse sub angular to sub rounded flint gravel with occasional flint cobbles; Firm light brown CLAY with varying proportions of fine to coarse sub angular to sub rounded flint and chalk gravel.
2.40-3.50	10.00+	CHALK: Recovered as structureless off white weathered CHALK composed of silty chalk matrix with weak to moderately weak strength sand to gravel sized chalk clasts. CIRIA Grade Dm.

Table 1 Summary of ground conditions

Made Ground was not encountered within any of the exploratory holes, but brick was encountered at shallow depths with the window sampler borehole locations. This brick is presumed to have been deposited by the farmer in these locations due to very wet and soft conditions during wetter periods and winter months.

The methods used to construct the boreholes (shallow and deep) cause loss of any in-situ structure and recovery of disturbed Chalk. As such, it is possible that the quality and weathering condition of the Chalk at depth could differ from that described based on the chalk recovered. The classification as CIRIA Grade Dm has been applied as a conservative estimate.

Groundwater

Groundwater was encountered within BH01 at 6.50m bgl during drilling and rose to 6m bgl after drilling had been suspended for 20 minutes.

Groundwater monitoring wells were installed within WS1 and WS2 and to date two groundwater monitoring rounds have been completed on the 22nd December 2021, and 7th January 2022, with the encountered

groundwater depths (m bgl) detailed in Table 2. Table 2 also reports the groundwater depth as measured in BH01 immediately prior to undertaking a falling head test.

Location	Depth of Groundwater (m bgl)	
	22/12/2021	07/01/2022
WS1	2.65	1.99
WS2	2.80	2.26
BH01	-	2.09

Table 2 Summary of monitored groundwater depths (m bgl)

It should also be noted that changes in groundwater levels do occur for a number of reasons including seasonal effects and variations in drainage. Such fluctuations may only be recorded by the measurement of the groundwater level within a series of standpipes or piezometers installed within appropriate response zones.

Groundwater monitoring is ongoing, therefore this assessment will be updated upon completion of the further monitoring.

Obstructions

A trunk water main and high pressure gas main run beneath the south western corner of the site. The high pressure gas main was identified from a with marker post on the site's southern boundary and, at the time of the investigation works, its alignment had been staked out on site. Both the water main and high pressure gas main are marked on service plans provided to Geo-Environmental by Bargate.

Flint cobbles were noted to be presence within the River Terrace Deposits encountered on site, therefore the presence of natural obstructions elsewhere on site cannot be completely discounted.

Soakage Testing

Trial pit soakage testing was undertaken within 2No. trial pits, SA01 at 1m bgl and SA02 at 2.1m bgl. The soakage testing was undertaken in general accordance with BRE Digest 365 with an infiltration rate calculated, where possible, for each test using the standard methodology contained in BRE Digest 365 'Soakaway Design'.

The testing was undertaken over two consecutive days. It was not possible to calculate an infiltration rate for SA02, as water levels within this trial pit increased during the testing period, therefore the test was deemed to have failed. There was an insufficient fall in head to calculate an infiltration rate for the tests undertaken within SA01, which were located within the cohesive River Terrace Deposits, and it is not considered suitable or reliable to estimate a permeability based on the actual measured range as this would be likely to derive an overly optimistic permeability. The soakage testing results are presented within Appendix B.

Falling Head Testing

Falling head testing was undertaken over three successive cycles within the cable percussive borehole, BH01. The tests were undertaken following the installation of the groundwater monitoring well. This monitoring well was constructed with the slotted section located between 7m and 10m bgl such that it was situated within the Chalk strata beneath the site.

Groundwater was present within the borehole during testing and was recorded at a depth of 2.09m bgl prior to commencing testing. The estimated preliminary infiltrations rates for each test undertaken within BH01 are summarised within Table 3 below with the results presented in a graphical format in Appendix C.

Trial Pit	Stratum tested	Estimated infiltration rates (m/s)		
		Test 1	Test 2	Test 3
BH01	Chalk	2.29×10^{-7}	1.41×10^{-7}	1.43×10^{-7}

Table 3 Estimated Infiltration values derived from borehole falling head tests

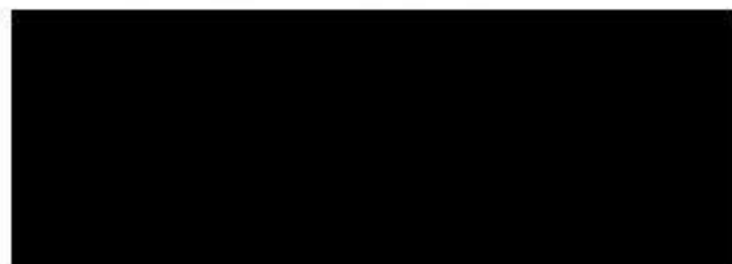
Given the presence of highly weathered Chalk strata at relatively shallow depth, it is recommended that any infiltration devices are located at least 20m from any structures.

Closure

We trust we have interpreted your request correctly and provided sufficient information for your current requirements.

Should you have any queries please do not hesitate to contact us.

Yours sincerely
For and on Behalf of Geo-Environmental



FIONA GOODE BSc (Hons), MSc, FGS, MEnvSc, RSoBRA
Senior Consultant Engineer
fiona.goode@gesl.net

- Enc Figure 1 - Site Location Plan
 Figure 2 – Exploratory Hole Location Plan (Aerial)
 Figure 3 – Exploratory Hole Location Plan (Proposed development)
 Appendix A - Exploratory Hole Logs
 Appendix B – Soakage Testing Results
 Appendix C – Falling Head Test Results



FIGURES





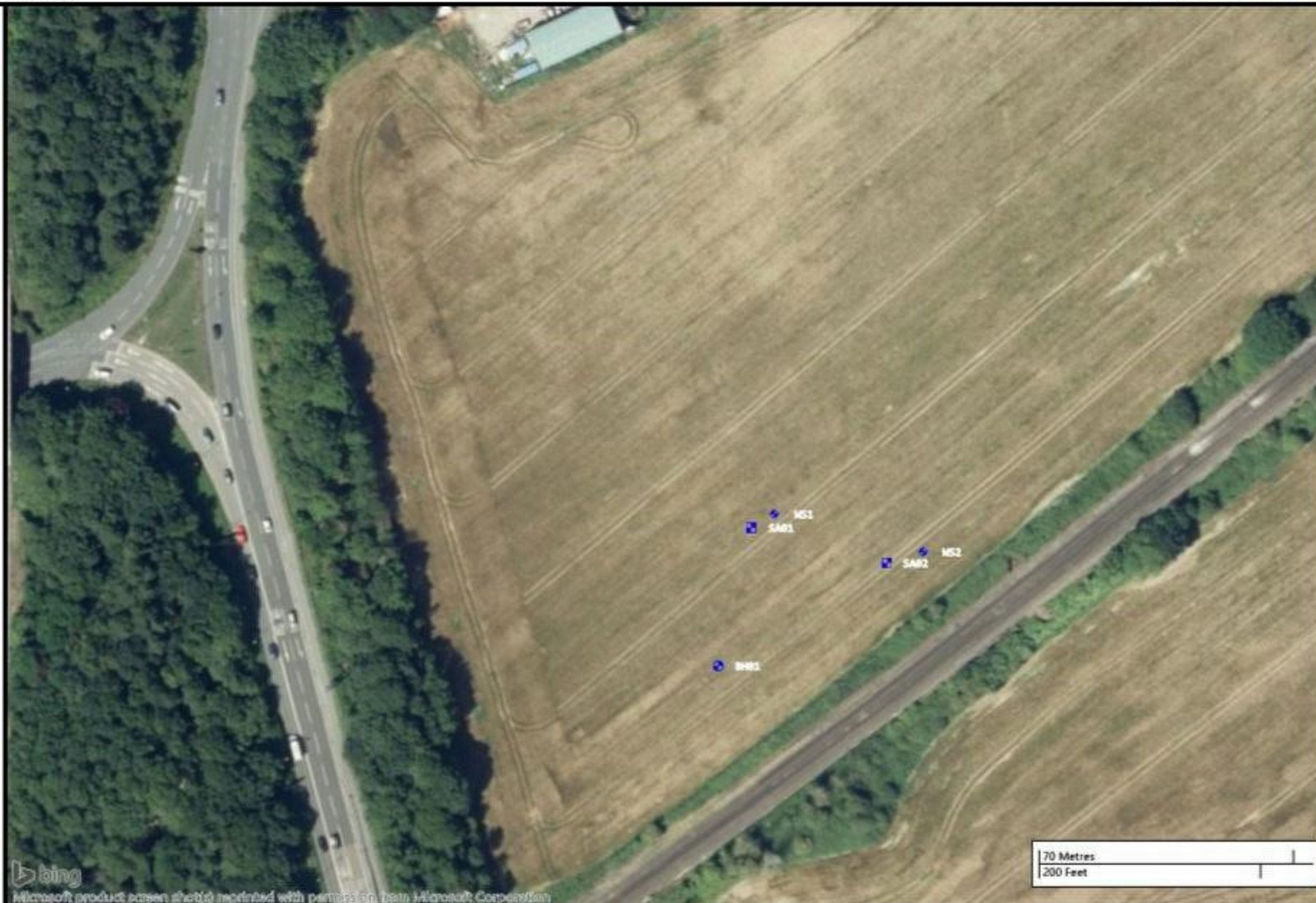
Project:	Phase 2 Development, Manor Farm, Lower Road, Bedhampton, Hampshire, PO9 3LH			Title	Site Location Plan	
Client:	Bargate Homes			Geo-Environmental Services Ltd Unit 7 Danworth Farm, Cuckfield Road Hurstpierpoint, West Sussex BN6 9GL +44(0)1273 832972 www.gesl.net		
Ref No:	GE20565	Revision:	0			
Drawn:	SA	Date:	08/12/2021			
Figure:	1	Scale:	Not To Scale			
				 Geo-Environmental		

Project Title: Phase 2 Development, Manor Farm
Location : Lower Road, Bedhampton, Hampshire
Project No. : GE20565
Client : Bargate Homes

Title : Figure 2 - Exploratory Hole Location Plan
Scale: 1:1500
Engineer: Travis Underdown

Legend Key

- Locations By Type - CP
- Locations By Type - TP
- Locations By Type - WLS



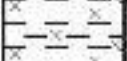
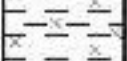
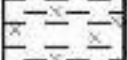
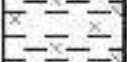
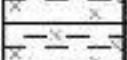
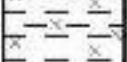
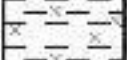
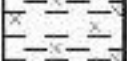
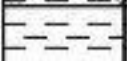
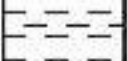
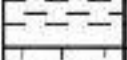
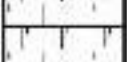
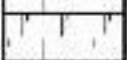
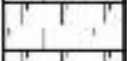
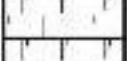
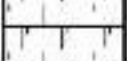
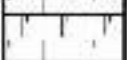
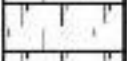
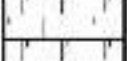
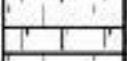
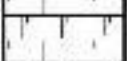


APPENDIX A

Exploratory Hole Logs



 Unit 7, Danworth Farm Hurstpierpoint BN6 9GL www.gesl.net		Borehole Log			Borehole No. BH01 Sheet 1 of 1	
Project Name: Phase 2 Development, Manor Farm		Project No. GE20565		Co-ords: 469873E - 105919N		Hole Type CP
Location: Lower Road, Bedhampton, Hampshire		Level: 4.75		Scale 1:50		
Client: Bargate Homes		Dates: 06/01/2021		Logged By PL		

Well	Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
		Depth (m)	Type	Results					
					0.25	4.50		Crop stubble over dark brown slightly gravelly CLAY with occasional roots and rootlets TOPSOIL	
		0.50 - 1.00	B					Soft to firm brown silty CLAY. RIVER TERRACE DEPOSITS	
		1.00	S	N=10 (3,2,2,3,3)					1
		1.45	D						
		1.50 - 2.00	B		1.60	3.15		Firm to stiff brown silty CLAY. RIVER TERRACE DEPOSITS	
		2.00	S	N=12 (3,2,3,4,3)					2
		2.45	D						
		2.50 - 3.00	B		2.70	2.05		Firm brown CLAY. With chalkstone and flints. RIVER TERRACE DEPOSITS	
		3.00	S	N=13 (5,4,3,3,3)					3
		3.45	D		3.50	1.25		Recovered as structureless white CHALK with flint clasts. WHITE CHALK SUBGROUP	
		4.00	S	N=14 (4,3,4,3,4)					4
		4.45	D						
		5.00	S	N=14 (5,4,3,4,3)					5
		5.45	D						
		6.00	D		6.20	-1.45		Recovered as structureless white to brown CHALK with flint clasts. WHITE CHALK SUBGROUP	
		6.50	S	N=12 (3,2,3,3,4)					6
	6.95	D						7	
	7.50	D							
	8.00	S	N=11 (3,2,3,3,3)					8	
	8.45	D							
	9.00	D						9	
	9.50	S	N=14 (4,3,3,4,4)						
				10.00	-5.25		End of Borehole at 10.00m	10	

Casing		Water Strikes (mbgl)		Chiselling (mbgl)		Remarks
Diameter	Depth (m)	Depth Strike	Rose to	Depth from	Depth to	
		6.50	6.00			





Unit 7, Danworth Farm
Hurstpierpoint
BN6 9GL

Geo-Environmental www.gesl.net

Trial Pit Log

Trial Pit No
SA01
Sheet 1 of 1

Project Name: Phase 2 Development, Manor Farm

Project No.
GE20565

Co-ords: 469881.73 - 105957.19
Level: 5.13

Date
06/01/2021

Location: Lower Road, Bedhampton, Hampshire

Dimensions
(m):

1.80

Depth
1.00

0.60

Scale
1:25

Logged
FG

Client: Bargate Homes

Water Strike	Samples & In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
	Depth	Type	Results				
	0.20			4.93			Crop stubble over dark brown slightly gravelly CLAY with occasional roots and rootlets TOPSOIL
	1.00			4.13			Firm orange brown slightly silty CLAY with occasional rootlets RIVER TERRACE DEPOSITS
							End of Pit at 1.00m

Depth (m)	Time to dig (min)

Remarks

Stability Sides stable





Unit 7, Danworth Farm
Hurstpierpoint
BN6 9GL

Geo-Environmental www.gesl.net

Trial Pit Log

Trial Pit No
SA02
Sheet 1 of 1

Project Name: Phase 2 Development, Manor Farm

Project No.
GE20565

Co-ords: 469919.05 - 105947.99
Level: 5.26

Date
06/01/2021

Location: Lower Road, Bedhampton, Hampshire

Dimensions
(m):

1.90

Depth
2.10

0.60

Scale
1:25

Logged
FG

Client: Bargate Homes

Water Strike	Samples & In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
	Depth	Type	Results					
	0.25			0.25	5.01		Crop stubble over dark brown slightly gravelly CLAY with frequent roots and rootlets TOPSOIL	
	1.20			1.20	4.06		Firm orange brown slightly gravelly CLAY. Gravel is medium to coarse sub angular to sub rounded of flint RIVER TERRACE DEPOSITS	1
	1.80			1.80	3.46		Firm orange brown gravelly CLAY with occasional flint cobbles. Gravel is medium to coarse sub angular to sub rounded of flint RIVER TERRACE DEPOSITS	
	2.10			2.10	3.16		Firm light brown very gravelly CLAY. Gravel is fine to coarse sub angular to sub rounded of flint and chalk RIVER TERRACE DEPOSITS	2
							End of Pit at 2.10m	3
								4
								5

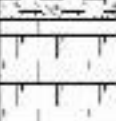
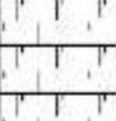
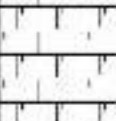
Depth (m)	Time to dig (min)

Remarks

Stability Sides stable



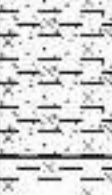
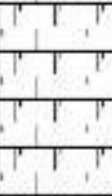
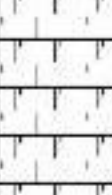
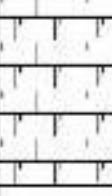
 Unit 7, Danworth Farm Hurstpierpoint BN6 9GL www.gesi.net		Borehole Log			Borehole No. WS1 Sheet 1 of 1	
Project Name: Phase 2 Development, Manor Farm		Project No. GE20565		Co-ords: 469888E - 105961N		Hole Type WLS
Location: Lower Road, Bedhampton, Hampshire		Level: 5.16		Scale 1:25		
Client: Bargate Homes		Dates: 10/12/2021		Logged By TU		

Well	Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
		Depth (m)	Type	Results					
		0.30			0.30	4.86		Crop stubble over dark brown slightly gravelly silty CLAY. Gravels are mostly flint coarse subangular to angular. Occasional rootlets 1mm-3mm. Rare brick fragments found between 0.10 - 0.20. TOPSOIL	1
	0.50	PP	0.5kg/cm2					Soft to firm brown silty CLAY. Rare rootlets 1mm to 3mm. RIVER TERRACE DEPOSITS	
	0.80	PP	1.0kg/cm2						
	1.20	PP	1.5kg/cm2	1.20	3.96		Firm to stiff brown gravelly silty CLAY. Gravels are flint medium to coarse, subrounded to angular. Gravel content decreases to slightly gravelly with depth. RIVER TERRACE DEPOSITS		
	1.50	PP	2.0kg/cm2						
	1.80	PP	0.5kg/cm2	1.80	3.36		Soft to firm light brown slightly chalky sandy silty CLAY. Sands are coarse subrounded to subangular. Chalk clasts are fine to medium subrounded to subangular. RIVER TERRACE DEPOSITS		
	2.00	PP	0.5kg/cm2						
	2.20	PP	1.0kg/cm2						
	2.40			2.40	2.76		Recovered as structureless beige CHALK composed of silty subrounded to subangular gravel. Clasts are medium to coarse, weak, medium density, white. WHITE CHALK SUBGROUP		
	3.60			3.60	1.56		Recovered as structureless beige CHALK composed of silty subrounded to subangular gravel. Clasts are coarse, moderately weak, high density, white. Brown staining at 4.4m. WHITE CHALK SUBGROUP		
5.00			5.00	0.16	End of Borehole at 5.00m		5		

Casing		Water Strikes (mbgl)		Chiselling (mbgl)		Remarks
Diameter	Depth (m)	Depth Strike	Rose to	Depth from	Depth to	



 Unit 7, Danworth Farm Hurstpierpoint BN6 9GL www.gesl.net		Borehole Log				Borehole No. WS2 Sheet 1 of 1	
Project Name: Phase 2 Development, Manor Farm		Project No. GE20565		Co-ords: 469929E - 105951N		Hole Type WLS	
Location: Lower Road, Bedhampton, Hampshire				Level: 5.36		Scale 1:25	
Client: Bargate Homes				Dates: 10/12/2021		Logged By TU	

Well	Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description			
		Depth (m)	Type	Results							
					0.50	4.86		Dark brown slightly sandy slightly gravelly silty CLAY. Sands are fine to coarse subrounded to subangular. Gravels are fine to medium subrounded to angular. Rare rootlets 1mm-2mm. Rare brick fragment at 0.15m. TOPSOIL	1		
		0.80	PP	1.5kg/cm2				Firm to very stiff brown slightly sandy slightly gravelly silty CLAY. Sands are coarse subrounded to subangular. Gravels are fine to medium subrounded to angular. Sand and gravel decrease with depth. RIVER TERRACE DEPOSITS			
		1.20	PP	3.0kg/cm2				Stiff brown silty CLAY. RIVER TERRACE DEPOSITS			
					1.40	3.96				Stiff light brown slightly sandy chalky silty CLAY. Sands are fine to medium subrounded. Chalk clasts are fine to coarse rounded to subangular. RIVER TERRACE DEPOSITS	2
		1.50	PP	2.5kg/cm2				Stiff light brown slightly sandy slightly gravelly chalky silty CLAY. Sands are fine to medium subrounded. Gravels are coarse subangular to angular flint. Chalk clasts are fine to coarse rounded to subangular. RIVER TERRACE DEPOSITS			
		1.80	PP	2.0kg/cm2				Stiff brown slightly sandy slightly gravelly silty CLAY. Sands are medium to coarse subrounded. Gravels are fine subrounded to subangular. RIVER TERRACE DEPOSITS			
					1.90	3.46				Recovered as structureless beige CHALK composed of silty subrounded to subangular gravels. Clasts are medium to coarse, weak, medium density, white. WHITE CHALK SUBGROUP	3
		2.00	PP	2.5kg/cm2				Recovered as structureless beige CHALK composed of silty subrounded to subangular calcite gravels. Clasts are coarse, moderately weak, high density, white. Brown staining at 4.4m. WHITE CHALK SUBGROUP			
		2.30	PP	2.5kg/cm2				Recovered as structureless beige CHALK composed of silty subrounded to subangular calcite gravels. Clasts are coarse, moderately weak, high density, white. Brown staining at 4.4m. WHITE CHALK SUBGROUP			
					2.30	3.06				Recovered as structureless beige CHALK composed of silty subrounded to subangular calcite gravels. Clasts are coarse, moderately weak, high density, white. Brown staining at 4.4m. WHITE CHALK SUBGROUP	4
		2.50	PP	2.7kg/cm2				Recovered as structureless beige CHALK composed of silty subrounded to subangular calcite gravels. Clasts are coarse, moderately weak, high density, white. Brown staining at 4.4m. WHITE CHALK SUBGROUP			
		2.60	PP	2.0kg/cm2				Recovered as structureless beige CHALK composed of silty subrounded to subangular calcite gravels. Clasts are coarse, moderately weak, high density, white. Brown staining at 4.4m. WHITE CHALK SUBGROUP			
			2.70	2.76				Recovered as structureless beige CHALK composed of silty subrounded to subangular calcite gravels. Clasts are coarse, moderately weak, high density, white. Brown staining at 4.4m. WHITE CHALK SUBGROUP	5		
			2.90	2.46				Recovered as structureless beige CHALK composed of silty subrounded to subangular calcite gravels. Clasts are coarse, moderately weak, high density, white. Brown staining at 4.4m. WHITE CHALK SUBGROUP			
			4.10	1.26				Recovered as structureless beige CHALK composed of silty subrounded to subangular calcite gravels. Clasts are coarse, moderately weak, high density, white. Brown staining at 4.4m. WHITE CHALK SUBGROUP			
			5.00	0.36				End of Borehole at 5.00m			

Casing		Water Strikes (mbgl)		Chiselling (mbgl)		Remarks
Diameter	Depth (m)	Depth Strike	Rose to	Depth from	Depth to	





APPENDIX B

Soakage Testing results





Soakaway Test Results BRE Digest 365)

(after

Geo-Environmental Services Limited
Unit 7 Danworth Farm, Cuckfield Road,
Hurstpierpoint, West Sussex BN6 9GL
+44(0)1273 832972 www.gesl.net

Project Name : Phase 2 Manor Farm, Bedhampton

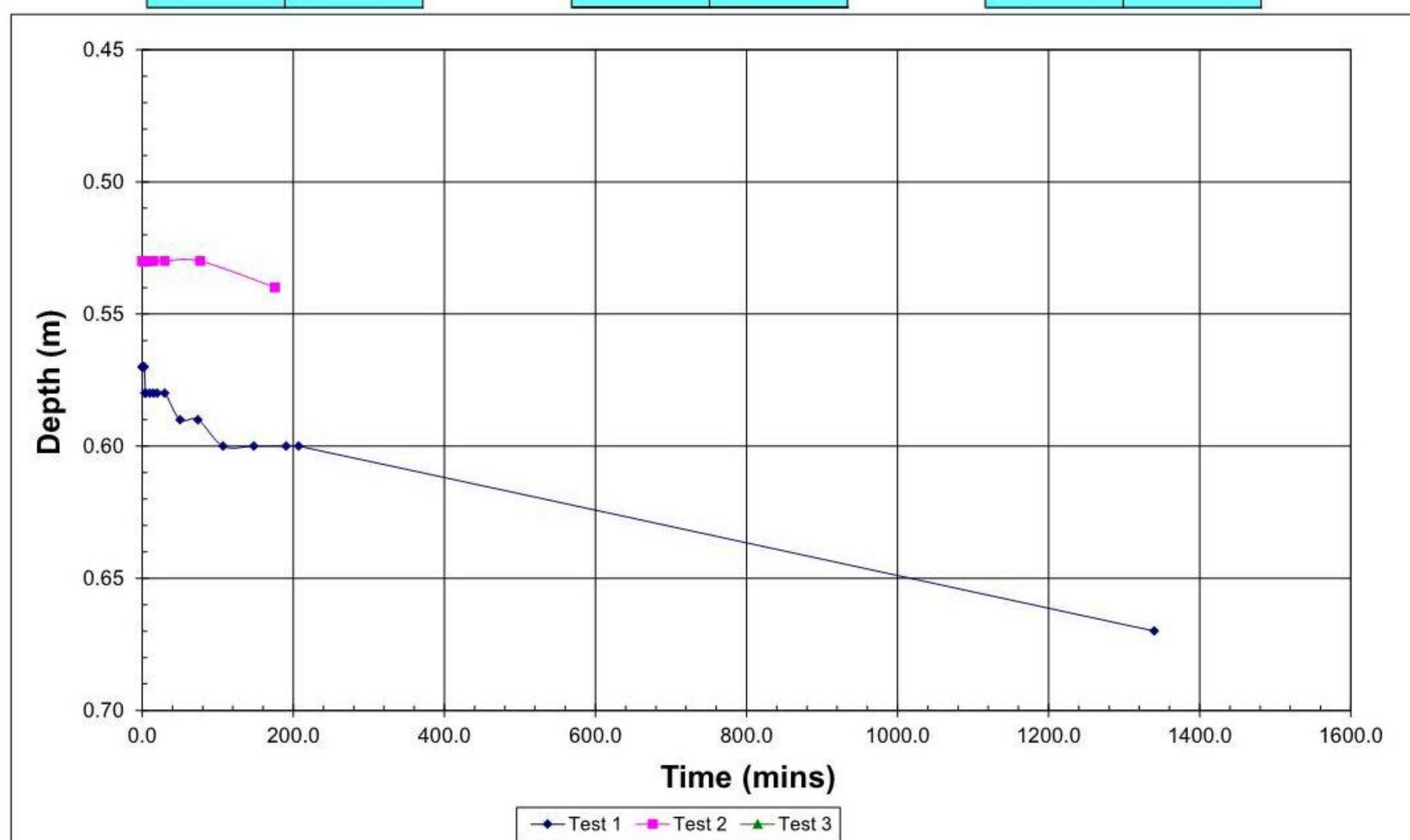
Client : Bargate Homes

Job No. : GE20565

Date : 11/01/2022

Pit reference	SA01
Pit depth (m)	1.03
Pit width (m)	0.45
Pit length (m)	1.80
Depth to standing water (m)	

Time (min)	Depth (m)
0.0	0.57
1.0	0.57
2.0	0.57
3.0	0.57
4.0	0.58
5.0	0.58
10.0	0.58
15.0	0.58
20.0	0.58
30.0	0.58
50.0	0.59
74.0	0.59
107.0	0.60
148.0	0.60
191.0	0.60
207.0	0.60
1340.0	0.67

[illegible][illegible]

Max. depth (m)	1.03	1.03	1.03
Effective depth (m)	0.46	0.50	1.03
75% effective depth (m)	0.69	0.66	0.26
50% effective depth (m)	0.80	0.78	0.52
25% effective depth (m)	0.92	0.91	0.77
t75 (min)			
t50 (min)			
t25 (min)			
Vp 75-25	0.19	0.20	0.42
ap 50	1.845	1.935	3.1275
tp 75-25	0.00	0.00	0.00

Soil infiltration rate (m/s)	Insufficient fall in water to complete test	
Soil infiltration rate (mm/hr)	Insufficient fall in water to complete test	

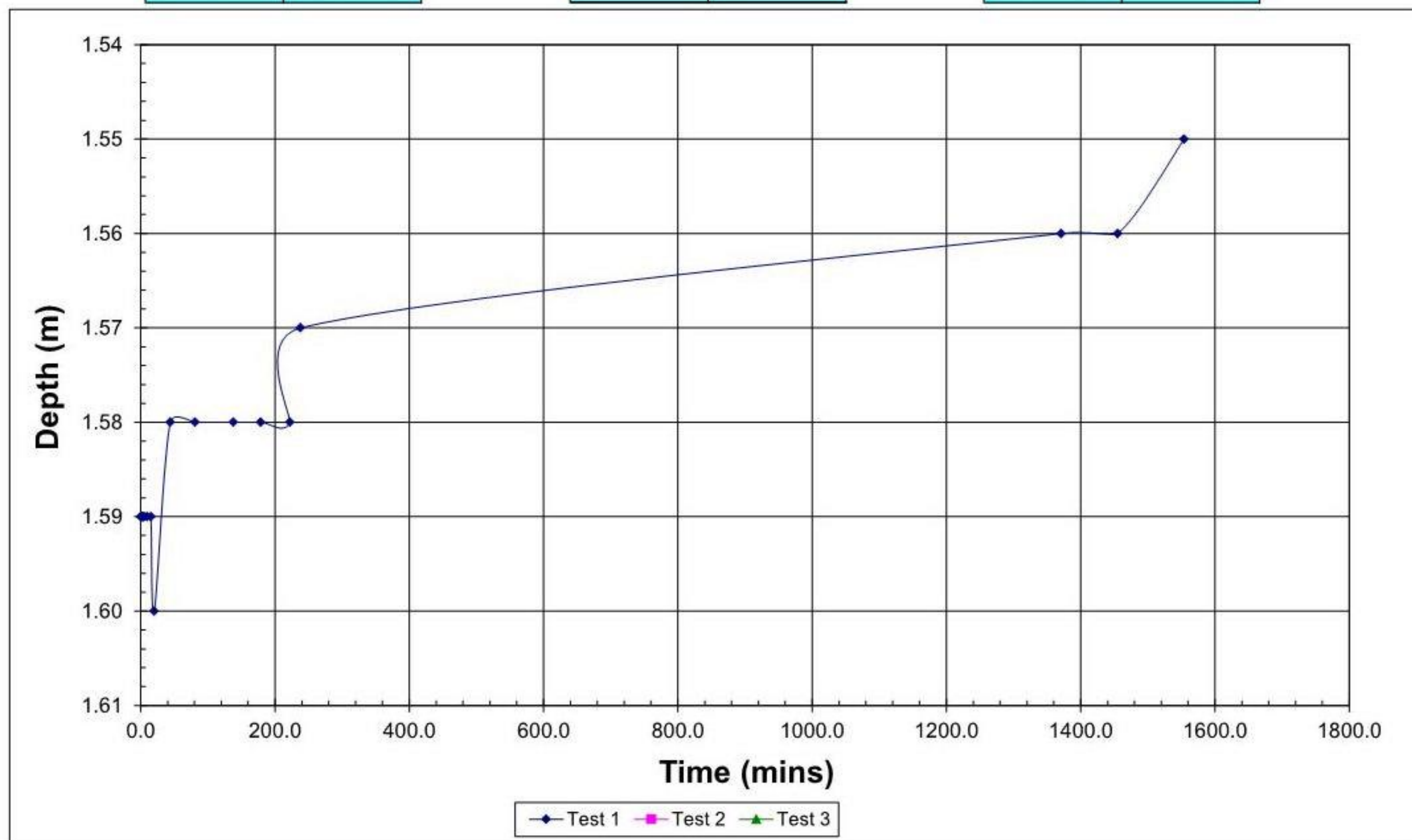
 Geo-Environmental	Soakaway Test Results BRE Digest 365)	(after	Geo-Environmental Services Limited Unit 7 Danworth Farm, Cuckfield Road, Hurstpierpoint, West Sussex BN6 9GL +44(0)1273 832972 www.gesl.net
Project Name : Phase 2 Manor Farm, Bedhampton			Job No. : GE20565
Client : Bargate Homes			Date : 11/01/2022

Pit reference	SA02
Pit depth (m)	2.10
Pit width (m)	0.45
Pit length (m)	1.85
Depth to standing water (m)	

Test 1	
Time (min)	Depth (m)
0.0	1.59
1.0	1.59
2.0	1.59
3.0	1.59
4.0	1.59
5.0	1.59
10.0	1.59
15.0	1.59
20.0	1.60
44.0	1.58
81.0	1.58
138.0	1.58
179.0	1.58
222.0	1.58
238.0	1.57
1371.0	1.56
1455.0	1.56
1554.0	1.55

Test 2	
Time (min)	Depth (m)

Test 3	
Time (min)	Depth (m)



Max. depth (m)	2.10	2.10	2.10
Effective depth (m)	0.51	2.10	2.10
75% effective depth (m)	1.72	0.53	0.53
50% effective depth (m)	1.85	1.05	1.05
25% effective depth (m)	1.97	1.58	1.58
t75 (min)			
t50 (min)			
t25 (min)			
Vp 75-25	0.21	0.87	0.87
ap 50	2.0055	5.6625	5.6625
tp 75-25	0.00	0.00	0.00

Soil infiltration rate (m/s)	Insufficient fall in water to complete test	
Soil infiltration rate (mm/hr)	Insufficient fall in water to complete test	



APPENDIX C

Falling Head Test Results



 Geo-Environmental	Falling Head Test	Geo-Environmental Services Limited Unit 7 Danworth Farm, Cuckfield Road, Hurstpierpoint, West Sussex BN6 9GL +44(0)1273 832972 www.gesl.net
Project Name : Manor Farm, Bedhampton		Job No. : GE20565 Date : 07/01/2022
Client : Bargate Homes		

BH Reference:	BH01
Borehole depth (m bgl)	10.00
Borehole Diameter (m)	0.15
Well screen diameter (mm)	50.00
Top of screened well section (m bgl)	7.00
Base of screened well section (m bgl)	10.00
Screened well section length (m)	3.00
Length/diameter	60.00

Groundwater Information	
Strike depth (m bgl)	6.50
Standing depth at 20mins (m bgl)	6.00
Standing depth at start of test (m bgl)	2.90

Test 1			Test 2			Test 3		
Time (min)	Time (secs)	Depth (m)	Time (min)	Time (secs)	Depth (m)	Time (min)	Time (secs)	Depth (m)
0.1	6.0	1.05	0.1	6.0	0.97	0.1	6.0	1.04
1.0	60.0	1.65	0.5	30.0	1.49	0.5	30.0	1.45
1.5	90.0	1.82	1.0	60.0	1.66	1.0	60.0	1.66
2.0	120.0	1.90	1.5	90.0	1.81	1.5	90.0	1.82
2.5	150.0	1.95	2.0	120.0	1.88	2.0	120.0	1.88
3.0	180.0	2.00	2.5	150.0	1.91	2.5	150.0	1.94
4.0	240.0	2.04	3.0	180.0	1.95	3.0	180.0	1.97
5.0	300.0	2.06	3.5	210.0	1.97	3.5	210.0	1.99
6.0	360.0	2.07	4.0	240.0	2.00	4.0	240.0	2.01
7.0	420.0	2.08	5.0	300.0	2.02	5.0	300.0	2.02
10.0	600.0	2.09	6.0	360.0	2.04	6.0	360.0	2.03
15.0	900.0	2.09	7.0	420.0	2.05	7.0	420.0	2.04
25.0	1500.0	2.09	8.0	480.0	2.05	8.0	480.0	2.05
			9.0	540.0	2.05	9.0	540.0	2.06
			10.0	600.0	2.05	10.0	600.0	2.06
			20.0	1200.0	2.07	20.0	1200.0	2.07
			32.0	1920.0	2.07	40.0	2400.0	2.07
			45.0	2700.0	2.08			

