

PRELIMINARY GROUND INVESTIGATION

AT

26 ILEX WAY, GORING BY SEA

FOR

ANGIE & PHIL BACON

G6687

09 December 2025



Ground Management Ltd
Civil and Geotechnical Engineering Services

DOCUMENT CONTROL

Report Title: Preliminary Ground Investigation
26 Ilex Way, Goring by Sea

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Pope Stevens Architecture Ltd

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1.0 INTRODUCTION

- 1.1 Ground Management Ltd have carried out a preliminary ground investigation at 26 Ilex Way, Goring by Sea (location indicated on Figure 1) to inform drainage and foundation design for a proposed dwelling as indicated on attached Figure 3.
 - 1.2 The existing site layout is indicated on the architect's drawings, an extract of which is included as Figure 2.
 - 1.3 The exploratory holes were located as indicated on Figure 4 and details of the soils encountered are presented on the appended logs.
 - 1.4 The work commenced 17 October 2025 with the excavation of two borehole referenced BH1 and BH2 by dynamic (windowless) sampling to examine the ground profile and install groundwater monitoring standpipes.
 - 1.5 BH1 and BH2 extended to refusal at depths of 4.6m and 3.8m respectively with SPT tests conducted at 1m intervals and hand shear vane tests carried out on suitable cohesive samples. Results of the tests are included on the appended borehole logs. Sample photos are appended.
 - 1.6 The scope of infiltration testing was then agreed and carried out in accordance with BRE365 within two trial pits referenced as TP1 and TP2 that were machine excavated on 7 November 2025. Trial pits TP1 and TP2 were excavated to depths of 1.6m and 1.0m respectively. Testing concluded on 10 November and the trial pits were subsequently backfilled. Results of the infiltration tests are appended together with a summary and the derived infiltration rates.
 - 1.7 Selected cohesive samples were laboratory tested for moisture content, Atterberg Limits (plasticity) and particle size distribution (PSD) to inform assessment of soil volume change potential. The tests recorded a plasticity index of 22% for both samples taken from the near sandy silty clay and silty clay strata at depths of 1.8-2.0m and 0.8-1.0m in BH1 and BH2 respectively. The PSD tests recorded less than 35% fines within the underlying gravels indicating that material would be classified as non shrinkable. A copy of the laboratory test results is attached.
 - 1.8 Groundwater levels have been monitored with the Client's assistance and a copy of the observation records obtained since installation on 17/10/25 are appended. Monitoring is ongoing.
-

- 1.9 The work was carried out for Angie and Phil Bacon with instruction from Pope Stevens Architecture Ltd and nothing in this report confers or purports to confer on any third party, any benefit or any right to enforce any term of this report pursuant to the Contract (Rights of Third Parties) Act 1999.

PROJECT: 26 Ilex Way, Goring by Sea

PREPARED: AJHT

SECTION: Preliminary Ground Investigation

CHECKED: AJHT

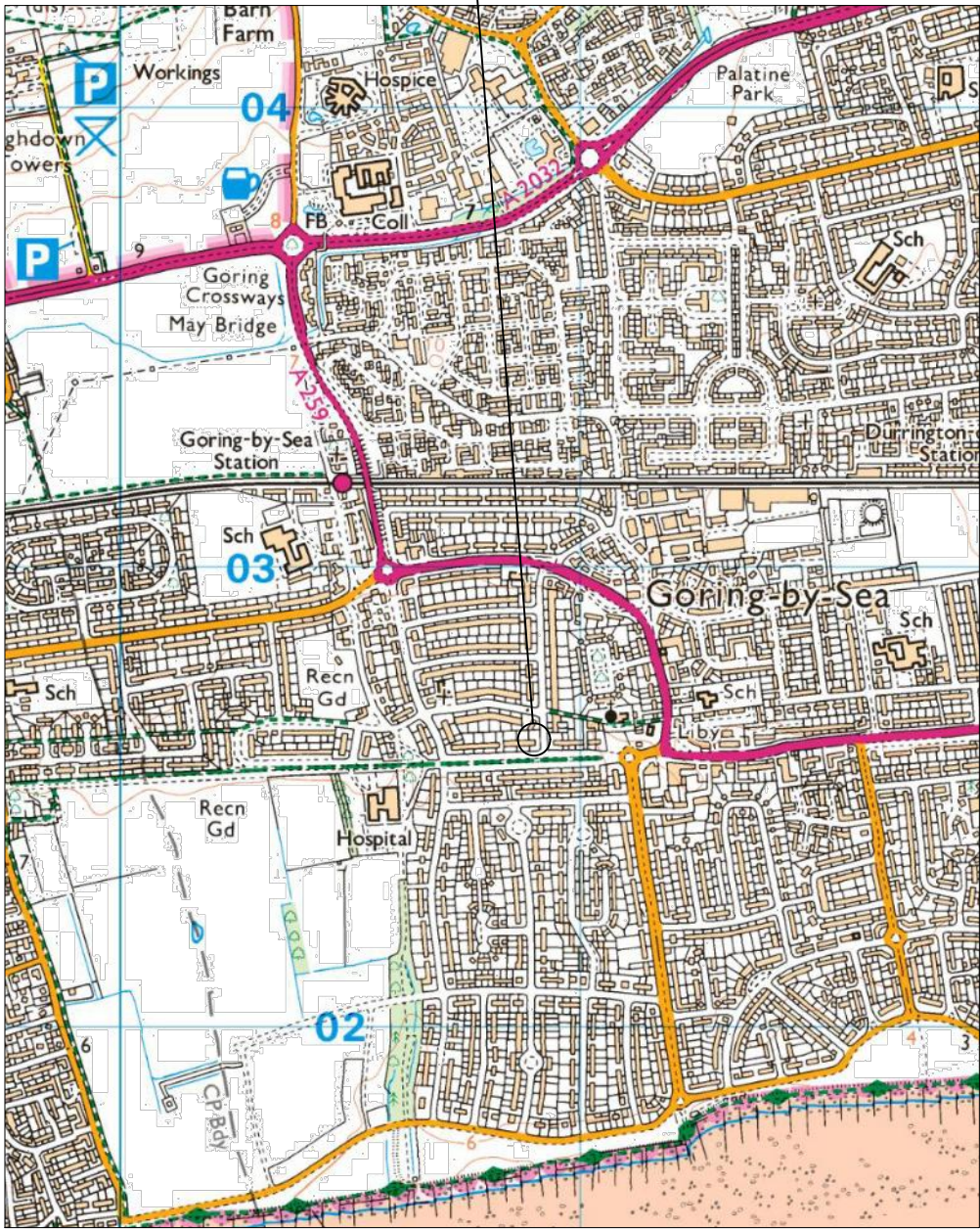
TITLE: Site Location Plan

DATE: Nov 2025

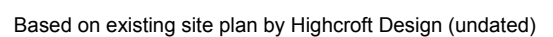


North
(Not to scale)

Site Location



DATE: Nov 2025





PROJECT: 26 Ilex Way, Goring by Sea

PREPARED: AJHT

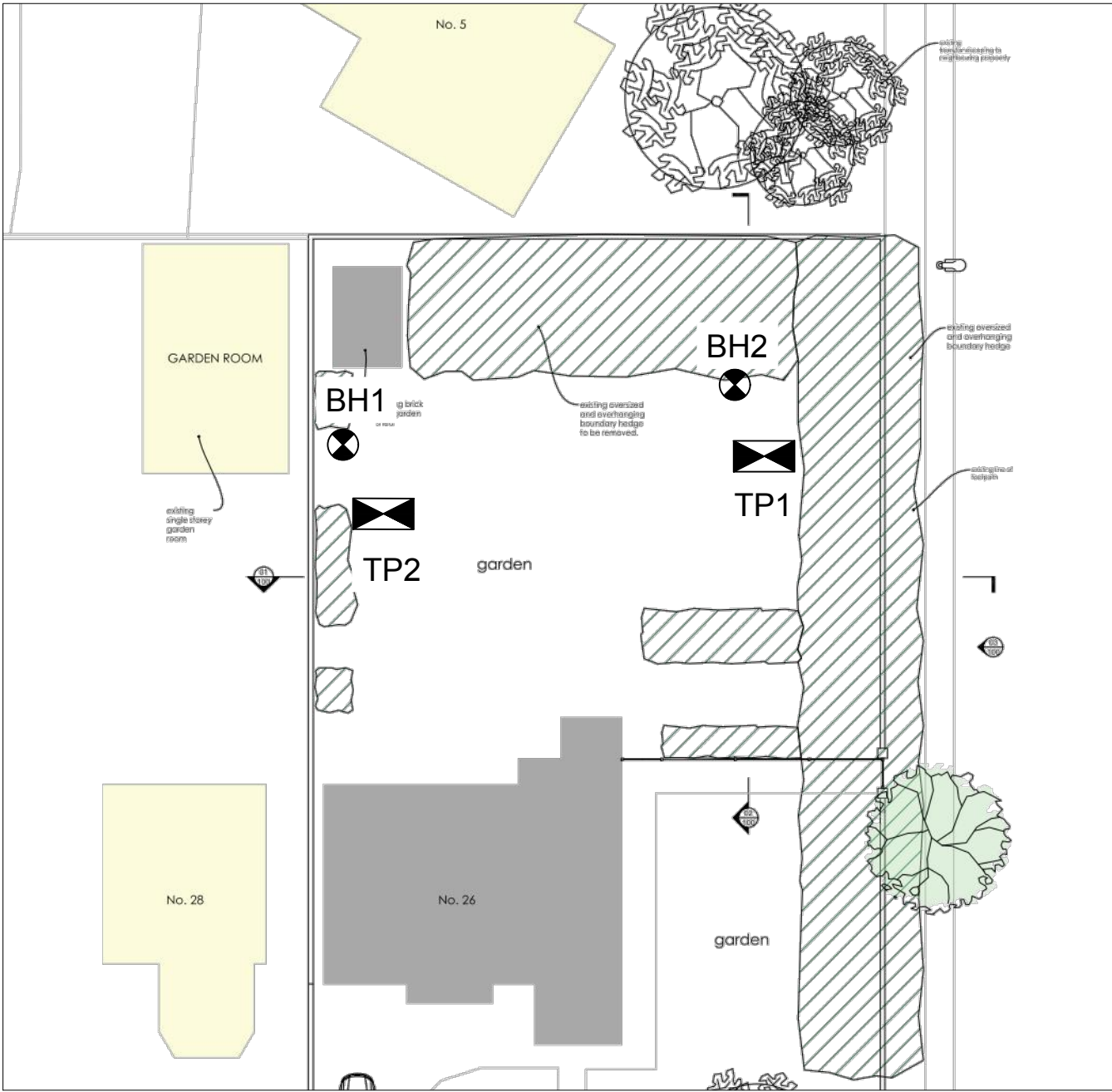
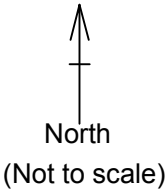
SECTION: Preliminary Ground Investigation

CHECKED: AJHT

TITLE: Exploratory Hole Location Plan

DATE: Nov 2025

Exploratory hole locations shown are indicative unless dimensioned



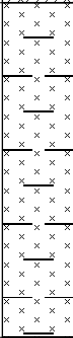
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Site 26 Ilex Way, Goring by Sea	Number BH1
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Excavation Method Dynamic (windowless) sampling using Archway Dart	Dimensions 90mm to 1.00m 80/70 to 3.00m 60/50 to 4.60m	Ground Level (mOD)	Client Angie and Phil Bacon	Job Number G6687
	Location West end of plot - See Location Plan	Dates 17/10/2025	Engineer Pope Stevens Architecture Ltd	Sheet 1/1

Depth (m)	Sample / Tests	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water
0.80-1.00	D1		PP at 0.75m : 1.25, 1.25, 1.25 kg/cm2		(0.30)	Grass over moist dark brown slightly sandy (fine) slightly clayey silty TOPSOIL with a little medium and fine subangular flint gravel		
					0.30	Firm to stiff brown CLAY / SILT with occasional fine subangular flint gravel		
1.00-1.45	SPT N=8		HV at 1.0m : 80, 80, 75 kPa 1,2/1,2,2,3		(1.10)			
1.80-2.00	D2		PP at 1.75m : 1.0, 1.0, 1.0 kg/cm2		1.40	Firm yellow brown very silty CLAY with a little coarse medium and fine subangular flint gravel		
					(0.75)			
2.00-2.45	SPT N=47		HV at 2.0m : 50, 45, 45 kPa 1,5/9,10,14,14		2.15	Dense coarse medium and fine angular to subangular flint gravel with a little moist brown sandy clay		
2.50-3.00	D3				(2.45)			
4.00-4.50	D4				4.60			

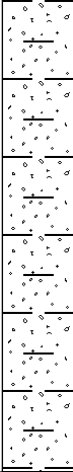
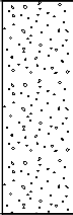
Remarks Borehole remained stable and open during excavation Groundwater was not encountered 25mm dia standpipe insatalled on completion : 3m slotted with geosoc and gravel surround, 1.6m plain with bentonite pellet seal	Scale (approx) 1:25	Logged By AT
	Figure No. G6687.BH1	

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Site 26 Ilex Way, Goring by Sea	Number BH2
Client Angie and Phil Bacon	Job Number G6687
Engineer Pope Stevens Architecture Ltd	Sheet 1/1

Excavation Method Dynamic (windowless) sampling using Archway Dart		Dimensions 90mm to 1.00m 80/70 to 3.00m 60/50 to 3.80m		Ground Level (mOD)		Dates 17/10/2025	
Location East end of plot - See Location Plan		Level (mOD)		Depth (m) (Thickness)		Description	
Depth (m)	Sample / Tests	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend
0.80-1.00	D1				(0.30)	Grass over moist dark brown slightly sandy (fine) slightly clayey silty TOPSOIL with occasional medium and fine subrounded flint gravel and brick fragment	
1.00-1.45	SPT N=18		HV at 1.0m : Unable to penetrate 3,2/4,4,4,6		0.30	Stiff (desicated) brown very silty CLAY	
1.50-2.00	D2				(1.00)	... becoming yellow brown below 1.1m and with occasional coarse subangular flint gravel below 1.2m	
2.00-2.45	CPT N=40		8,10/7,8,11,14		1.30	Dense coarse medium and fine angular to subangular flint gravel with a little slightly moist brown sandy clay	
3.20-3.80	D3				(1.80)		
					3.10	Dense dry brown and yellow brown very sandy GRAVEL. Gravel is coarse medium and fine subangular to rounded flint	
					(0.70)	REFUSAL at 3.8m	
					3.80	Complete at 3.80m	

Remarks Borehole remained stable and open during excavation Groundwater was not encountered 25mm dia standpipe insatalled on completion : 3m slotted with geosoc and gravel surround, 0.8m plain with bentonite pellet seal	Scale (approx)	Logged By
	1:25	AT
	Figure No. G6687.BH2	

Ground Management Ltd

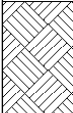
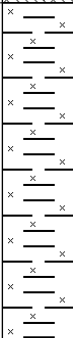
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Site
26 Ilex Way, Goring by Sea

Trial Pit
Number
TP1

Excavation Method Machine excavated		Dimensions 0.45m x 1.4m		Ground Level (mOD)		Client Angie and Phil Bacon		Job Number G6687	
		Location East end of site. See location plan		Dates 07/11/2025		Engineer Pope Stevens Architecture Ltd		Sheet 1/1	

Depth (m)	Sample / Tests	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water
						Grass over moist brown slightly sandy (fine) slightly clayey silt TOPSOIL with a little coarse medium and fine subangular flint gravel. Some roots up to 20mm dia.		
					0.30	Stiff orange brown / yellow brown very silty CLAY with occasional coarse medium and fine subangular flint gravel		
					(0.90)			
					1.20	Stiff yellow brown very silty CLAY with some coarse medium and fine subangular flint gravel		
					(0.40)			
					1.60	Complete at 1.60m		

Plan					Remarks Pit sides remained stable and vertical during excavation Groundwater was not encountered			
					Scale (approx)	Logged By	Figure No.	
					1:20	AT	G6687.TP1	

Civil and Geotechnical Engineering Services

Site	26 Ilex Way, Goring by Sea
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**Trial Pit
Number**
TP2

Excavation Method Machine excavated	Dimensions 0.3m x 1.4m	Ground Level (mOD)	Client Angie and Phil Bacon	Job Number G6687
	Location West end of site. See location plan	Dates 07/11/2025	Engineer Pope Stevens Architecture Ltd	Sheet 1/1

Depth (m)	Sample / Tests	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water
						Grass over moist brown slightly sandy (fine) slightly clayey silt TOPSOIL with occasional coarse medium and fine subangular flint gravel.		
0.50	HV 53.33kPa		50,60,50/Av. 53.33		0.30	Firm becoming firm to stiff orange brown very silty CLAY with occasional coarse medium and fine subangular flint gravel		
0.80	HV 100kPa		110,100,90/Av. 100.00		0.70			
					1.00	Complete at 1.00m		

Plan 	Remarks Pit sides remained stable and vertical during excavation Groundwater was not encountered		
	Scale (approx) 1:20	Logged By AT	Figure No. G6687.TP2

Job No. : G6687
 Project : 26 Ilex Way, Goring by Sea

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Hole	Depth	Description	Natural moisture content	Liquid Limit (%)	Plastic Limit (%)	Plasticity Index (%)	<425 μ m (%)
BH1	0.8 - 1.0	Firm to stiff orange brown very silty CLAY	22.7				
BH1	1.8 - 2.0	Firm yellow brown sandy (fine) very silty CLAY with occasional fine subangular flint gravel	21.6	40	18	22	99.9
BH2	0.8 - 1.0	Stiff orange brown very silty CLAY	14.9	42	20	22	100

Testing in accordance with BS1377-2:1990

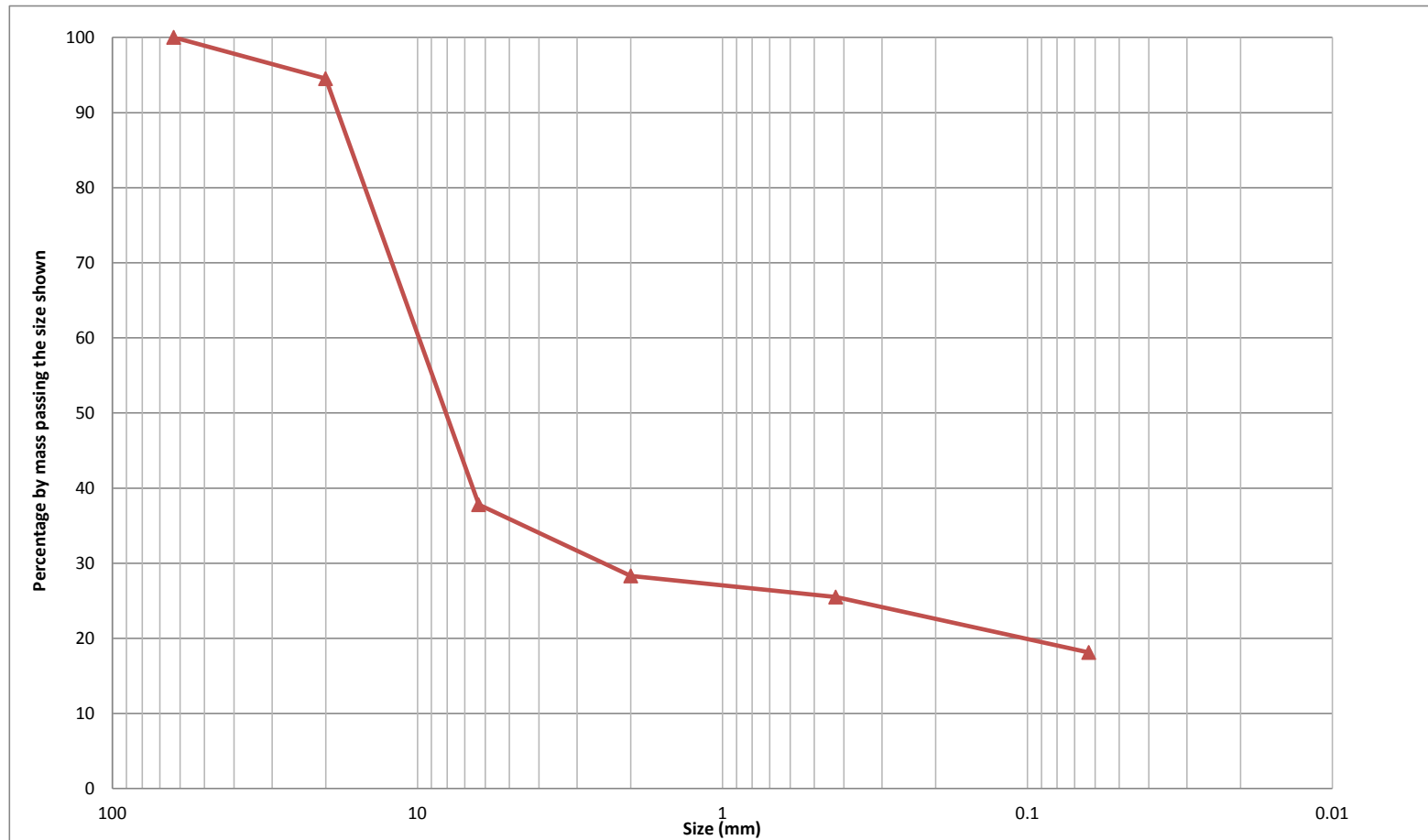
Date: 18-Nov-25
 Prepared: AT.

Job No. : G6687
Project : 26 Ilex Way, Goring by Sea

Sample: BH1 @ 2.5 - 3.0

Sample Description: Coarse medium and fine angular to subangular flint GRAVEL with a little brown sandy clay

Sieve	% passing
500	
300	
125	
90	
80	
75	
63	100
40	
37.5	
31.5	
28	
20	95
16	
14	
10	
8	
6.3	38
5	
4	
3.35	
2	28
1.18	
1	
0.63	
0.425	26
0.212	
0.15	
0.063	18
0.002	



Prepared: AT.

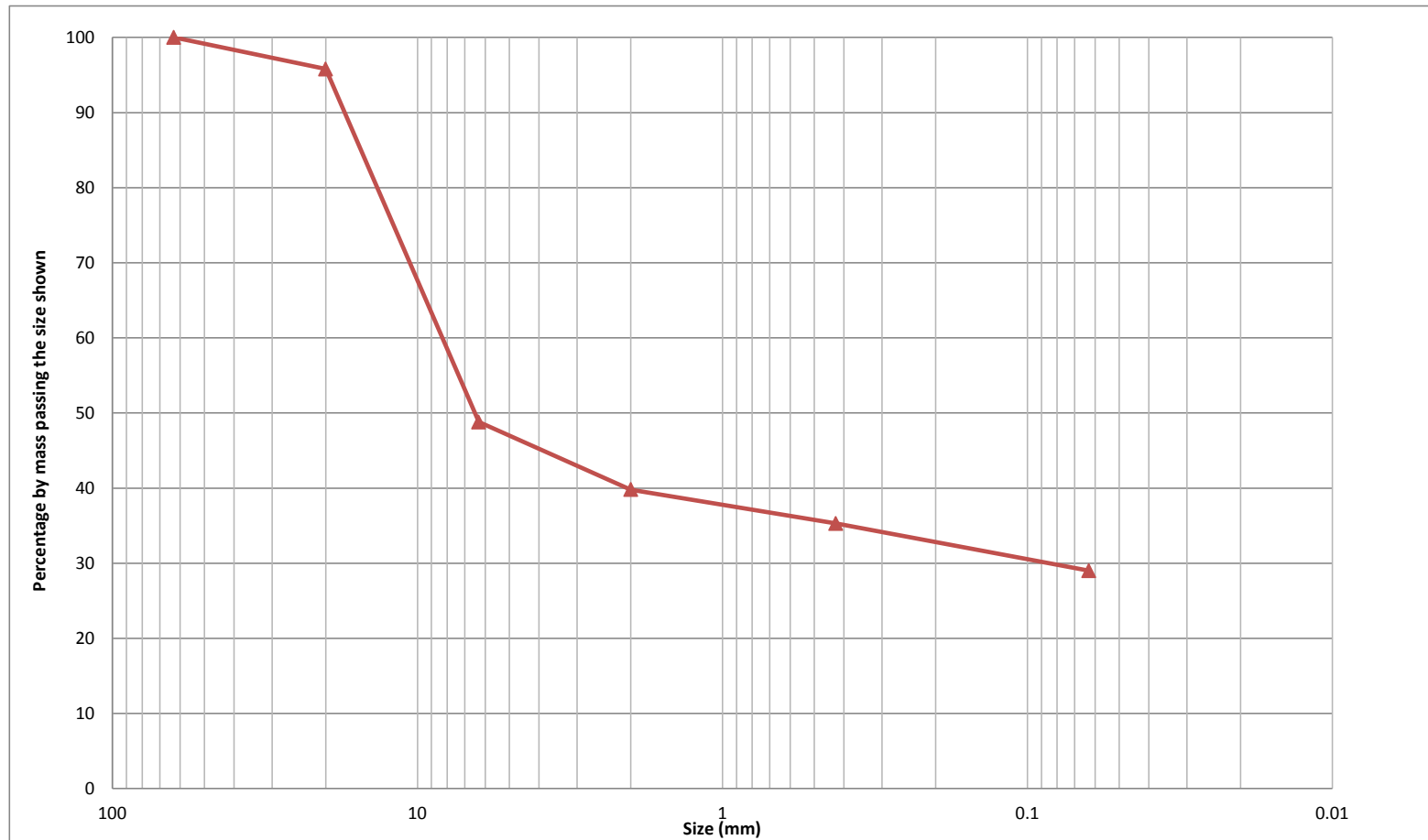
Date: 18-Nov-25

Job No. : G6687
Project : 26 Ilex Way, Goring by Sea

Sample: BH2 @ 1.5 - 2.0

Sample Description: Coarse medium and fine angular to subangular flint GRAVEL with some brown sandy clay

Sieve	% passing
500	
300	
125	
90	
80	
75	
63	100
40	
37.5	
31.5	
28	
20	96
16	
14	
10	
8	
6.3	49
5	
4	
3.35	
2	40
1.18	
1	
0.63	
0.425	35
0.212	
0.15	
0.063	29
0.002	



Prepared: AT.

Date: 18-Nov-25

G6687 6 Ilex Way Goring by Sea Soakage Test

TP1 Test 1

Test Start Date: 07-Nov-25

Dimensions (m):

width = 0.45

length = 1.40

depth = 1.60

[illegible]

End Fit

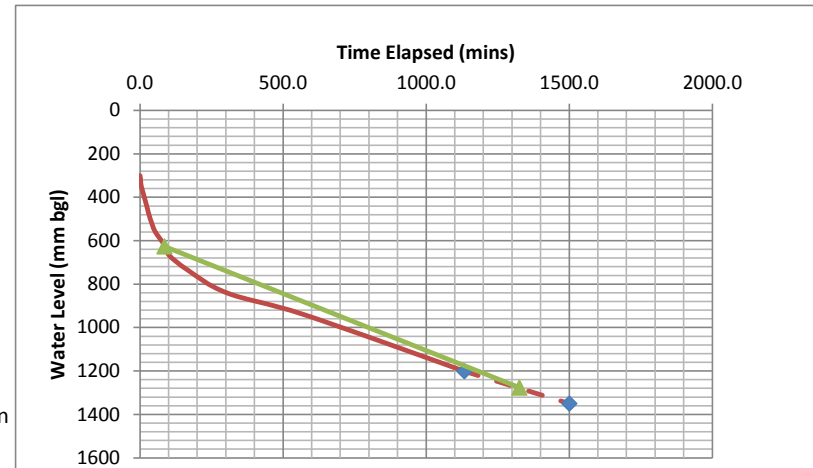
Weather

dry

o'night rain

1200

1350 Projected



	Time (mins)	
t0	300	
t25	625	85
t50	950	
t75	1275	1325
t100	1600	
fall		1.3
t25 - t75		0.65
Area t50		3.035

Infiltration Coefficient = 1.81E-06 m/s

G6687 6 Ilex Way Goring by Sea
Soakage Test

TP1 Test 2

Test Start Date: 08-Nov-25

Dimensions (m): width = 0.45 length = 1.40 depth = 1.60

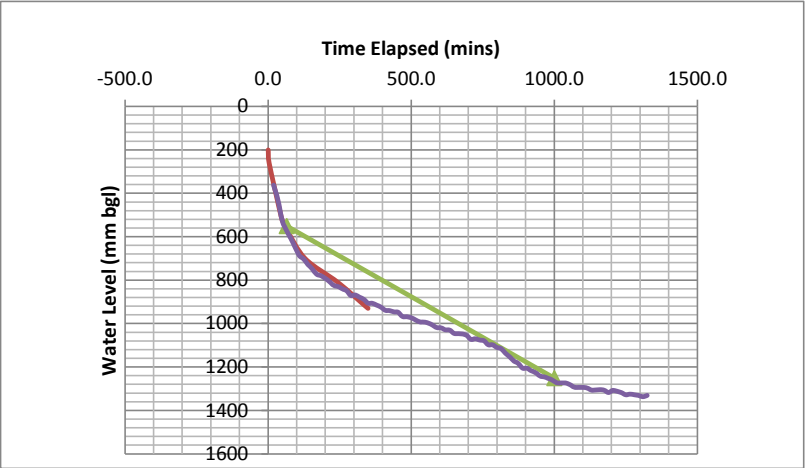
Date	Time	Date and time	Elapsed	Dip
08/11/2025	11:09	08/11/2025 11:09	start	dry
08/11/2025	11:11	08/11/2025 11:11	0.0	200
08/11/2025	11:14:00	08/11/2025 11:14	3.0	260
08/11/2025	11:58:00	08/11/2025 11:58	47.0	515
08/11/2025	12:07:00	08/11/2025 12:07	56.0	540
08/11/2025	12:17:00	08/11/2025 12:17	66.0	570
08/11/2025	13:20:00	08/11/2025 13:20	129.0	700
08/11/2025	15:15:00	08/11/2025 15:15	244.0	810
08/11/2025	17:00:00	08/11/2025 17:00	349.0	930
09/11/2025	09:22:00	09/11/2025 09:22	1331.0	
Levels recorded by datalogger (FC755) shown as blue line				

End Fit

Weather

dry

0
0 Projected



Time (mins)		
t0	200	
t25	550	65
t50	900	
t75	1250	1000
t100	1600	
fall		1.4
t25 - t75		0.7
Area t50		3.22

Infiltration Coefficient = 2.44E-06 m/s

G6687 6 Ilex Way Goring by Sea
Soakage Test

TP1 Test 3

Test Start Date: 09-Nov-25

Dimensions (m):

width = 0.45

length = 1.40

depth = 1.60

[illegible]

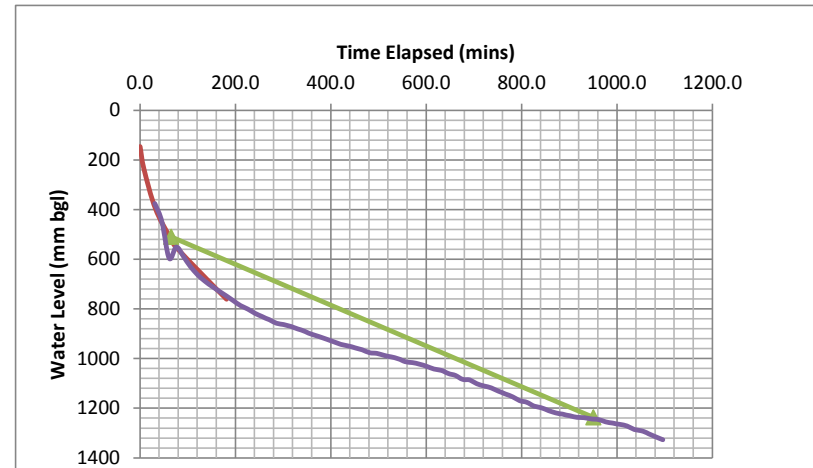
End Fit

Weather

dry

0

0 Projected



	Time (mins)	
t0	145	
t25	508.75	65
t50	872.5	
t75	1236.25	950
t100	1600	
fall		1.455
t25 - t75		0.7275
Area t50		3.32175

Infiltration Coefficient =	2.6E-06 m/s
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G6687 6 Ilex Way Goring by Sea
Soakage Test

TP2 Test 1

Test Start Date: 07-Nov-25

Dimensions (m):

width = 0.30

length = 1.40

depth = 1.00

[illegible]

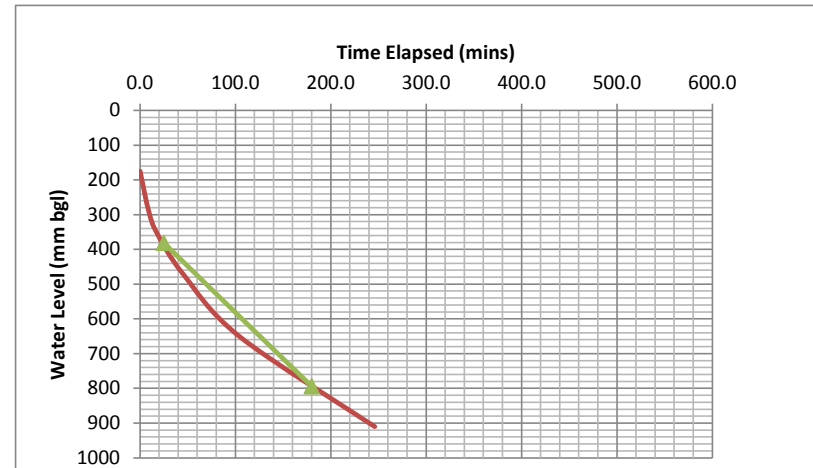
End Fit

Weather

dry

0

0 Projected



	Time (mins)	
t0	175	
t25	381.25	25
t50	587.5	
t75	793.75	180
t100	1000	
fall		0.825
t25 - t75		0.4125
Area t50		1.8225

Infiltration Coefficient = 1.02E-05 m/s

G6687 6 Ilex Way Goring by Sea
Soakage Test

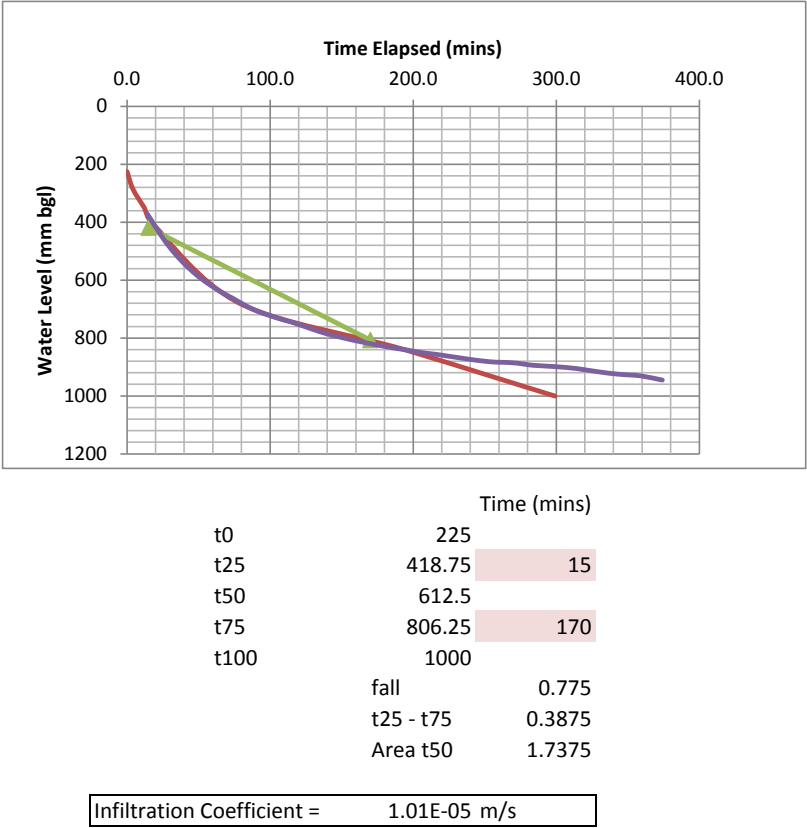
TP2 Test 2

Test Start Date: 08-Nov-25

Dimensions (m): width = 0.30 length = 1.40 depth = 1.00

Date	Time	Date and time	Elapsed	Dip
08/11/2025	11:59	08/11/2025 11:59	start	dry
08/11/2025	12:01	08/11/2025 12:01	0.0	225
08/11/2025	12:05:00	08/11/2025 12:05	4.0	285
08/11/2025	12:13:00	08/11/2025 12:13	12.0	350
08/11/2025	12:19:00	08/11/2025 12:19	18.0	405
08/11/2025	13:20:00	08/11/2025 13:20	79.0	680
08/11/2025	15:15:00	08/11/2025 15:15	194.0	840
08/11/2025	17:00:00	08/11/2025 17:00	299.0	1000
Levels recorded by datalogger (Y4995) shown as blue line				

End Fit
Weather
dry
0
0 Projected



G6687 6 Ilex Way Goring by Sea
Soakage Test

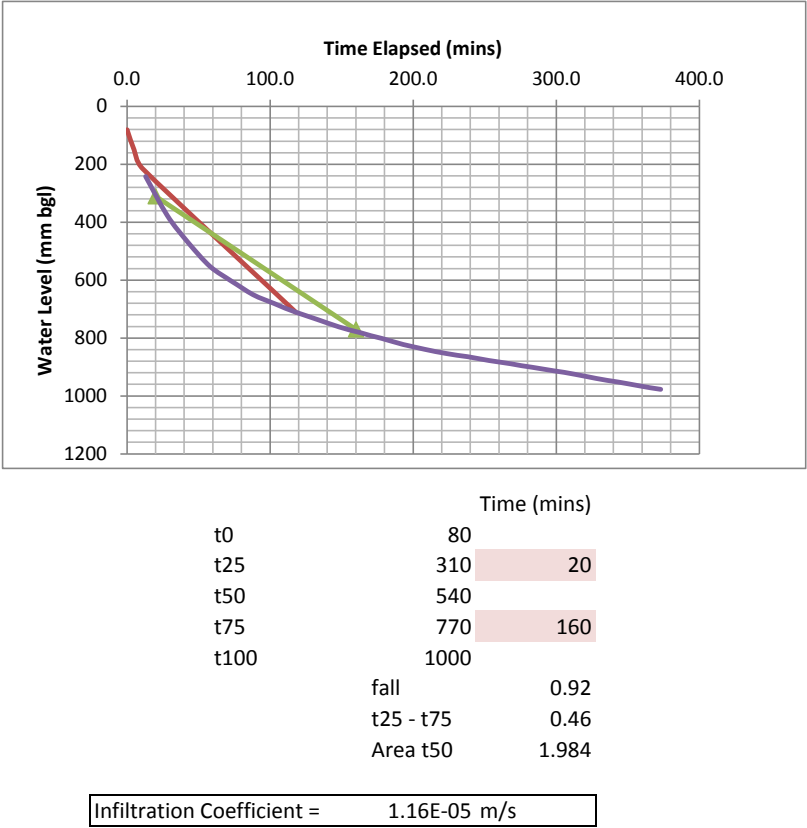
TP2 Test 3

Test Start Date: 09-Nov-25

Dimensions (m): width = 0.30 length = 1.40 depth = 1.00

Date	Time	Date and time	Elapsed	Dip
09/11/2025	10:30	09/11/2025 10:30	start	dry
09/11/2025	10:32	09/11/2025 10:32	0.0	80
09/11/2025	10:37:00	09/11/2025 10:37	5.0	150
09/11/2025	10:43:00	09/11/2025 10:43	11.0	215
09/11/2025	12:30:00	09/11/2025 12:30	118.0	710
Levels recorded by datalogger (Y4995) shown as blue line				

End Fit
Weather
dry
0
0 Projected



G6687 26 Ilex Way, Goring by Sea

Trial Pit	Pit Dimensions LxWxD (metres)	Test No.	Water Level at start of test (mm below ground level)	Duration of test (mins)	Fall of water level during test (mm)	Infiltration Coefficient (m/s) (see note)
TP1	0.45 x 1.4 x 1.6	1	300	1133	900	1.8×10^{-6}
		2	200	1331	1124	2.4×10^{-6}
		3	145	1096	1180	2.6×10^{-6}
TP2	0.3 x 1.4 x 1.0	1	175	246	735	1.0×10^{-5}
		2	225	374	719	1.0×10^{-5}
		3	80	373	897	1.2×10^{-5}

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26 Ilex Way Goring by Sea
24-Nov-25

		BH1	BH2			
Upstand (m)		0.840	0.680			
Ground Level (mAOD)						
Cover level (mAOD)						
Base dip (m)		5.420	4.470			

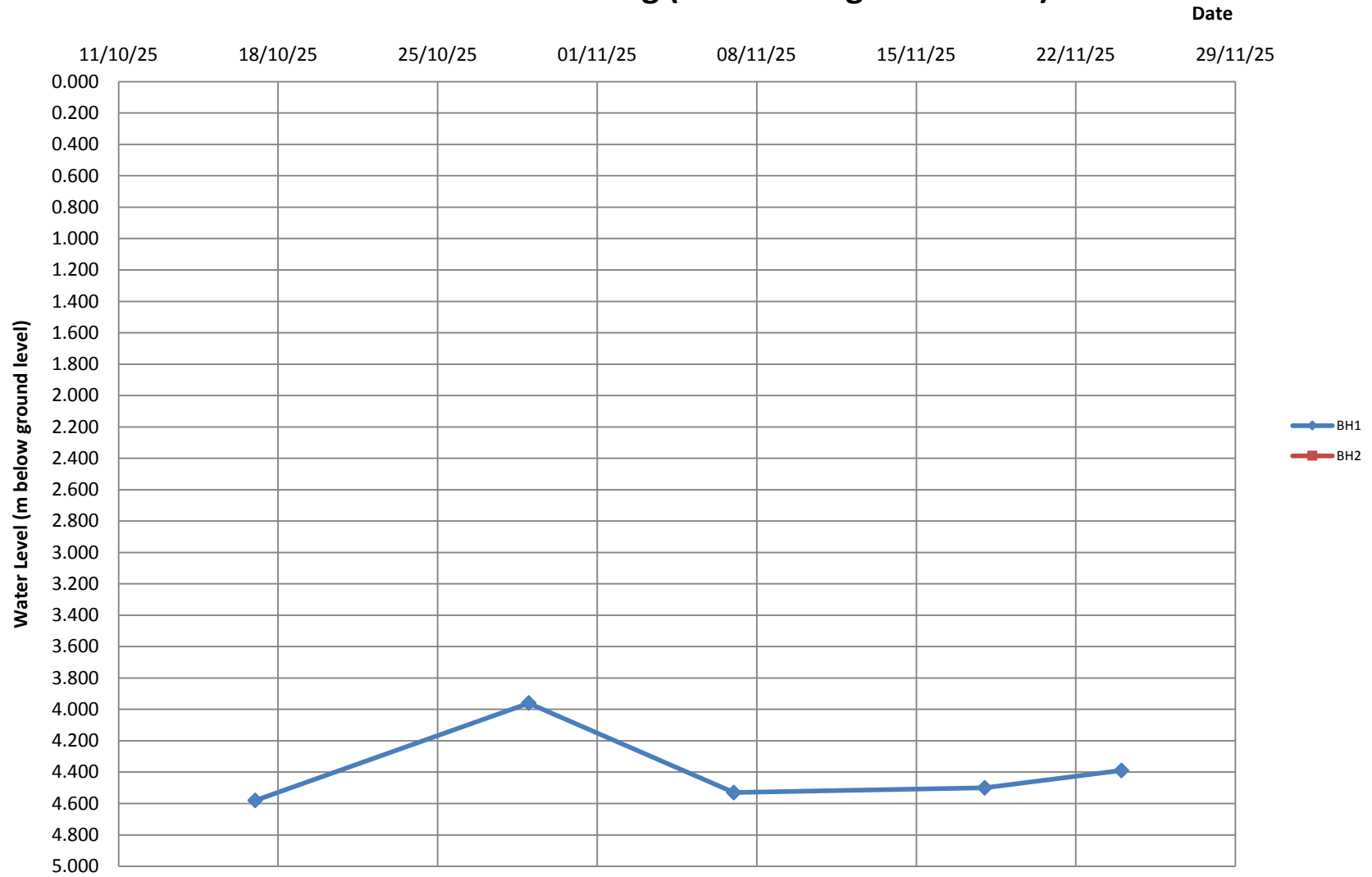
mAOD: metres Above Ordnance Datum

Ground levels not available

[illegible]

G6687 26 Ilex Way, Goring by Sea

Water Level Monitoring (relative to ground level)





Photograph 1 : BH1 location looking west



Photograph 2 : Samples extracted from BH1



Photograph 3 : BH2 Location looking east



Photograph 4 : Samples extracted from BH2



Photograph 5 : Trial Pit TP1 Location



Photograph 6 : TP1 excavation



Photograph 7 : TP1 Arisings



Photograph 8 : Trial Pit TP2 Location



Photograph 9 : Trial Pit TP2 Excavation



Photograph 10 : Trial Pit TP2 Arisings