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Ref: 28927L01/mc

10th March 2017

Gladman Developments Ltd
Gladman House
Alexandria Way
Congleton
CW12 1LB

For the attention of Mr P Gallagher

Dear Sirs

RE: 124 - 2016 – DOVER ROAD, DEAL, KENT – BOREHOLE AND SOAKAGE TESTING

1. INTRODUCTION

Following the production of a Preliminary Risk Assessment (Report 28927 R01, dated December 2016), RSK Environment Ltd (RSK) were commissioned by Gladman Developments Ltd to undertake a borehole with soakage tests at the development site at Dover Road, Kent. The work was carried out in relation to the proposals for the construction of attenuation basins as a part of the wider development of the site.

This letter report presents the borehole record and the results of the soakage tests.

2. SITE WORKS

2.1 Cable Percussion Borehole

A suitably qualified RSK Engineer supervised the sinking of a single light cable percussive borehole on the 8th February 2017 in the north eastern corner of the plot of land, as shown on the enclosed figure. The investigation and the soil descriptions were carried out in general accordance with BS5930: 2015 - Code of Practice for Ground Investigations.

The ground conditions encountered across the entire site comprise an initial thickness of topsoil, over predominantly cohesive Head deposits, with the Seaford Chalk Formation at depth. Detailed descriptions of the strata encountered is given in the exploratory hole log appended to this letter.

An Insitu falling head permeability test was carried out within the borehole, targeting the Seaford Chalk Formation below the casing generally in accordance with the method described in Kent County Council Soakaway Design Guide. The results of the testing are appended to this letter report and summarised overleaf.



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Borehole No.	Test One	Test Two
BH1	4.05×10^{-6}	1.52×10^{-6}

These results and recommendations are discussed within RSK Report 881053 R2 (02) FRA dated February 2017.

Please note that in accordance with the Kent County Council Soakaway Design Guide, in order to avoid the risk of instability in the chalk stratum in the vicinity of any structures, the soakaways should be situated within 10m (and definitely not closer than 5m) from building foundations.

We trust that the above comments are acceptable, but if clarification is required, then please contact the undersigned.

Yours faithfully
For **RSK Environment Ltd**

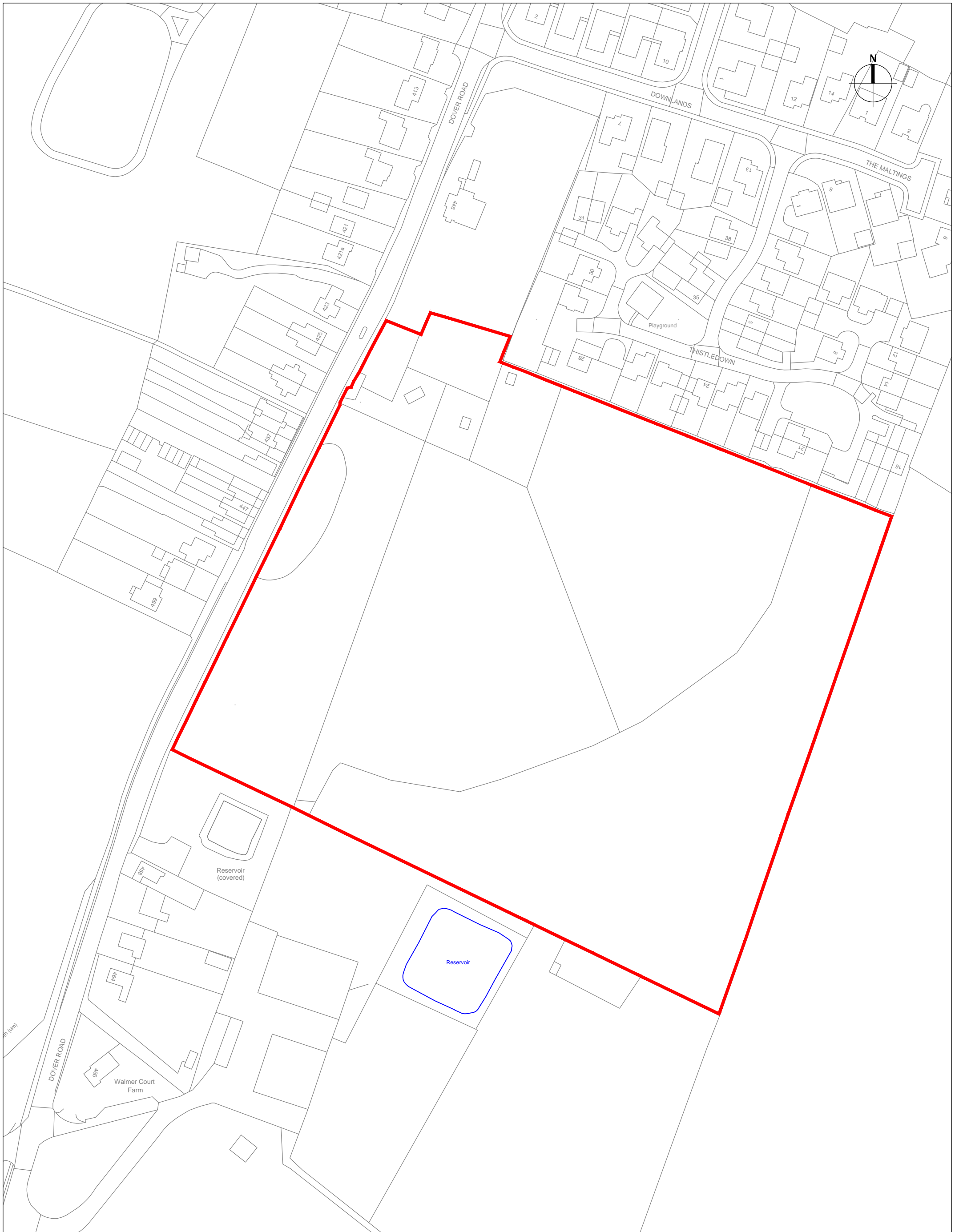


Morwenna Corry
Senior Geo-environmental Engineer



Svetislav Trajkovski
Principal Geotechnical Engineer

Enclosed:
Site Plan
Borehole Log
Soakage Test Results




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Rev	Date	By	Revision notes
*	*	*	*
DRAFT			

Project
Dover Road, Deal

Title
LOCATION PLAN

Drawn by PG	Issue date 13/10/16
Title checked by CHECKED BY	Title checked date CHECKED_DATE
Highways checked by CHECKED BY	Highways checked date CHECKED_DATE
Topo checked by CHECKED BY	Topo checked date CHECKED_DATE
Scale(s) 1:1250 @ A3	
Drawing No 2016-124 101	



BOREHOLE LOG

Contract: 124 Dover Road		Client: Gladman Developments Ltd		Borehole: BH1
Contract Ref: 28927	Start: 08.02.17 End: 08.02.17	Ground Level: 37.61	National Grid Co-ordinate: E:636803.0 N:149626.0	Sheet: 1 of 1

Depth (m)	Samples & Testing			Backfill	Water	Description of Strata	Depth (Thickness)	Material Graphic Legend
	No	Type	Results					
						Soft to firm light brown silty CLAY with occasional rootlets. (HEAD DEPOSITS)	(1.00)	
						Soft to firm light brown silty gravelly CLAY. Gravel is fine subrounded of chalk fragments. (HEAD DEPOSITS)	1.00 (1.50)	
						Recovered as structureless CHALK composed of silty subangular to subrounded, fine to medium GRAVEL. Gravel is extremely weak, low density and white. Occasional subangular to subrounded, fine to medium flint gravel. (SEAFORD CHALK FORMATION)	(0.50) 3.00	
						Recovered as structureless CHALK composed of silty, slightly sandy subangular to rounded GRAVEL. Gravel is weak, low density and white. (SEAFORD CHALK FORMATION)	(3.60)	
						Borehole terminated at 6.60m depth.	6.60	

Boring Progress and Water Observations						Chiselling / Slow Progress			General Remarks	
Date	Time	Borehole Depth	Casing Depth	Borehole Diameter (mm)	Water Depth	From	To	Duration (hh:mm)		
Method Used: Cable Percussion						Plant Used: Dando 2000			All dimensions in metres Scale: 1:50	
Drilled By: Mark Bass						Logged By: SFoschini			Checked By: MKR	

GINT LIBRARY_V8_06.GLB LibVersion: v8_06_015 ProjVersion: v8_06 - Core+Logs - 002 | Log COMPOSITE LOG - A4P | 28927_DOVER ROAD.GPJ - v8_06. | 20/02/17 - 14:25 | CM4

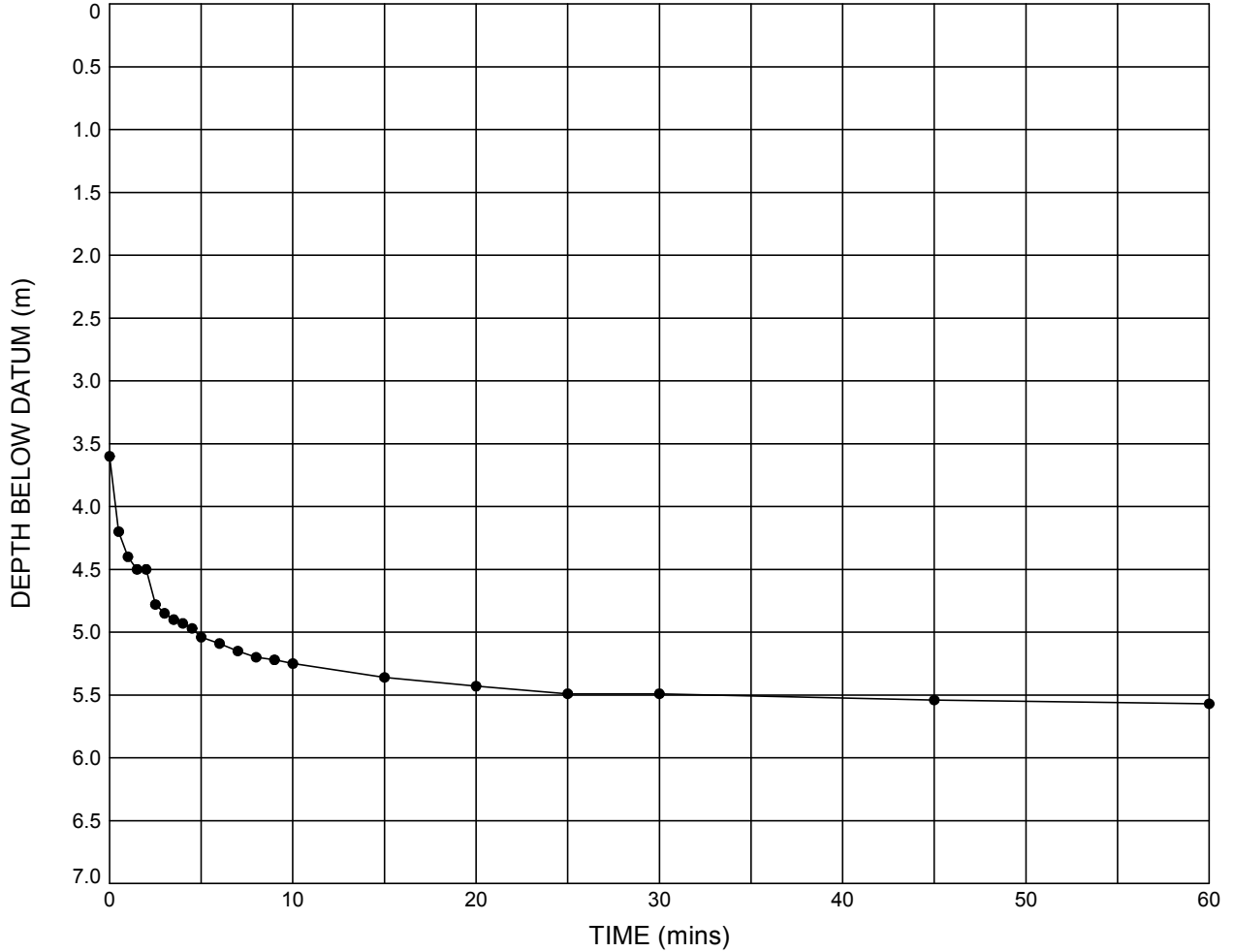
BOREHOLE SOAKAWAY TEST

Test position: BH1

Ground Level: 37.61

National Grid Co-ordinates: E:636803.0 N:149626.0

PLOT OF DEPTH OF WATER BELOW DATUM AGAINST TIME



Effective depth, D_e = **3.06** m

Effective storage volume, V_{p75-25} = **0.027037** m³

Surface area, a_{p50} = **0.738667** m²

Time, t_{p75-25} = **9035** secs

Infiltration coefficient, f = **4.05×10^{-6}** m/s

Test hole details:

Measurement datum was **GL**
 Hole depth at start of test: **6.66mBGL**
 Borehole diameter: **150mm**

Legend:

Test 1 (08/02/2017)

	Compiled By	Date	Checked By	Date
	<i>[Signature]</i>	27/02/17		16/02/17
Contract			Contract Ref:	
124 Dover Road			28927	

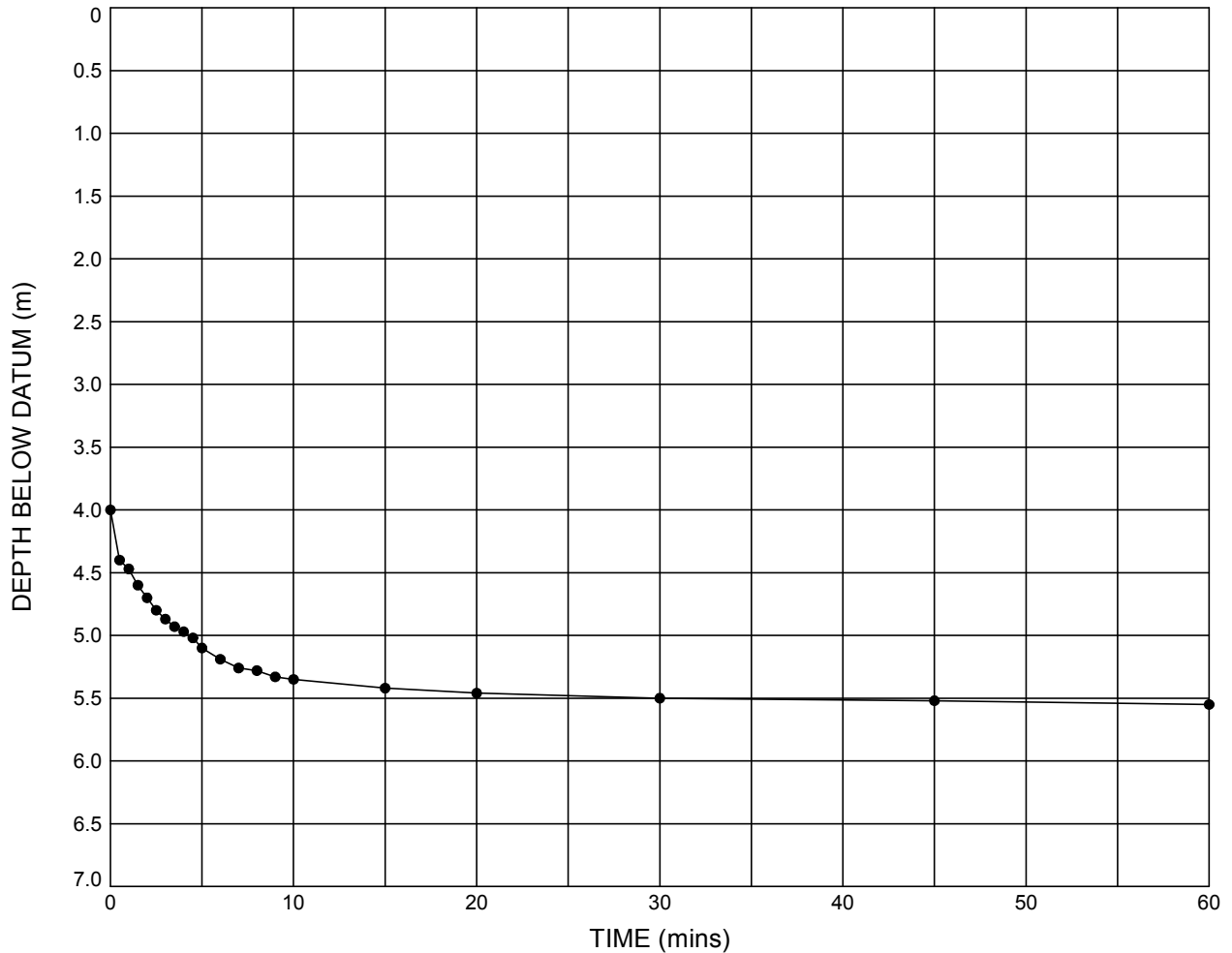
BOREHOLE SOAKAWAY TEST

Test position: BH1

Ground Level: 37.61

National Grid Co-ordinates: E:636803.0 N:149626.0

PLOT OF DEPTH OF WATER BELOW DATUM AGAINST TIME



Effective depth, D_e = **2.66** m

Effective storage volume, V_{p75-25} = **0.023503** m³

Surface area, a_{p50} = **0.644419** m²

Time, t_{p75-25} = **23966** secs

Infiltration coefficient, f = **1.52×10^{-6}** m/s

Test hole details:

Measurement datum was **GL**
 Hole depth at start of test: **6.66mBGL**
 Borehole diameter: **150mm**

Legend:

Test 2 (08/02/2017)

	Compiled By	Date	Checked By	Date
	<i>[Signature]</i>	27/02/17		27/02/17
Contract			Contract Ref:	
124 Dover Road			28927	