

Our ref 11336/HA/Soakaway\_Testing\_Letter

Matthew Utting  
7 Siskin Gate  
Bracknell  
Berkshire  
RG12 8BF

22 December 2022

Dear Matthew,

**SOAKAWAY TESTING  
JANES COTTAGE, DOGMERSFIELD, HOOK**

Further to your recent instruction Patrick Parsons (PP) have undertaken soakaway testing at the above site to assess the viability of a soakaway drainage strategy for the proposed septic tank.

A Soakaway test was undertaken at one location on site (TP01) over the area of the proposed septic tank / soakaway, an additional two machine excavated trial holes were undertaken across the red line boundary area to confirm the variability of the on-site geology. An exploratory hole location plan of the three locations is attached to this letter.

Each trial pit was excavated using a small, tracked excavator to a depth of between 1.50m below existing ground level (begl) (TP01) and 1.80m begl (TP02 & TP03) into the underlying superficial Alluvium deposits comprising variable grey, brown and reddish brown gravelly sandy silt, gravelly sand and sandy / gravelly clay, the Engineers logs for the test pits are enclosed for reference.

The testing was undertaken using an IBC tank with a wide diameter valve to rapidly fill the test pit with water, once filled with a minimum of 1.00m head of water the drop in water level was recorded over time. The tests did not reach the required infiltration depth during the test period (dropping from 75% to 25% filled depth) and therefore an infiltration rate cannot be calculated and is considered to be "failed" test.

The soakaway results have returned the indicative infiltration rates shown below.

Soakaway Location	Test 01	Test depth range (m begl)
SA01	FAILED	0.49-1.50

The soakaway calculation sheet is enclosed for reference. Based on the results obtained from the testing it is considered that as minimal infiltration occurred that this area of the site will not be suitable for adoption of a soakaway drainage strategy and an alternative drainage strategy will be required.

It is hoped that we have fully understood your requirements. Should you require any clarification of the any of the points raised please do not hesitate to contact us.

Yours sincerely

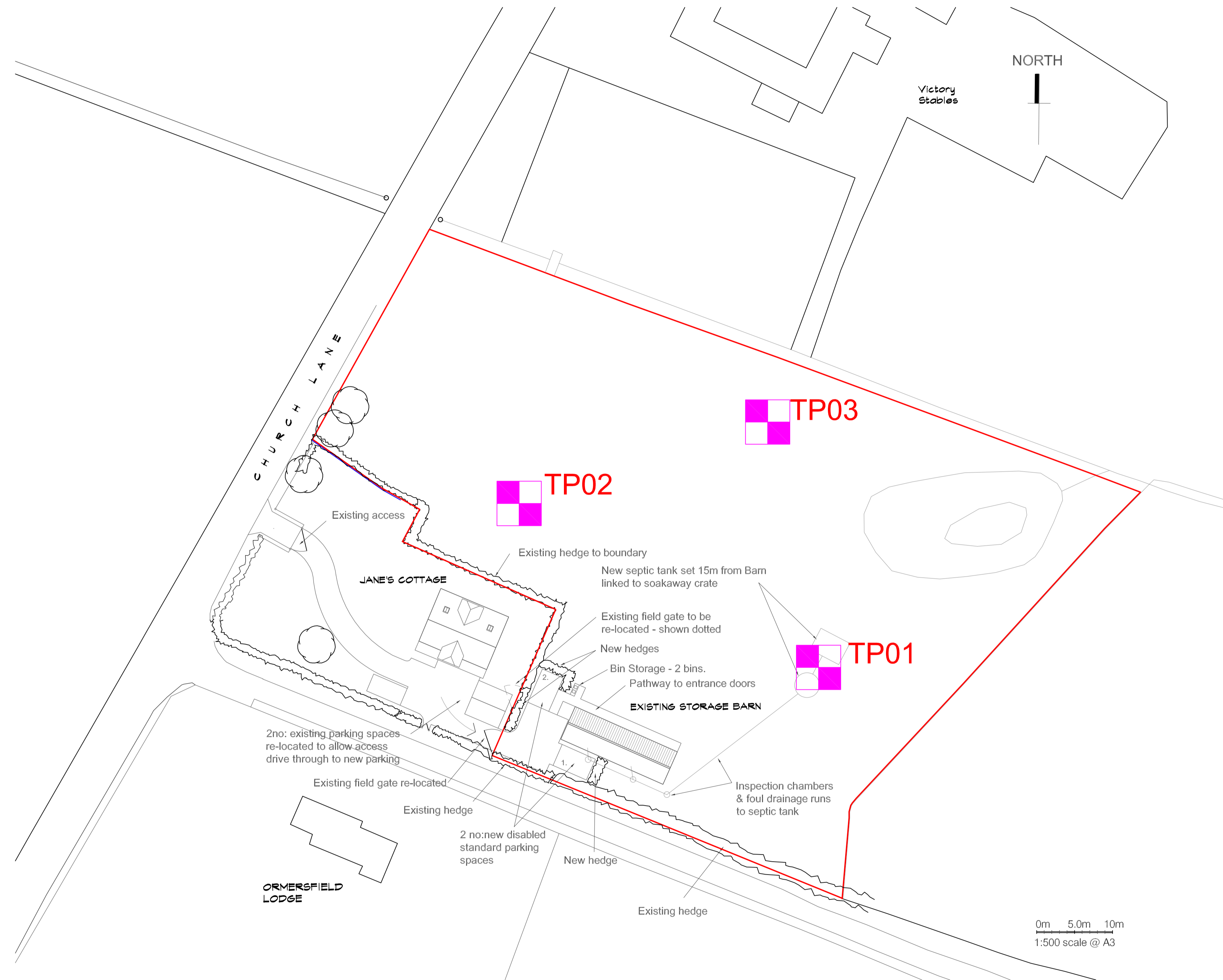


**Hugh Alder**  
Senior Engineer  
For and on behalf PPCP Limited t/a Patrick Parsons, 12405519

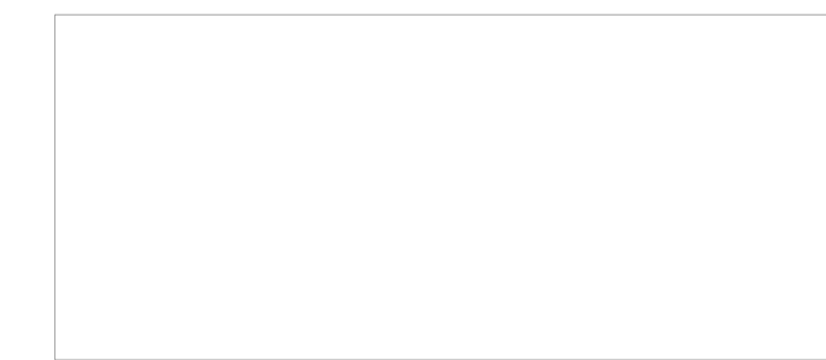
Enc. 11336 Soakaway Test Location Plan  
11336 Soakaway Pit Logs  
11336 Soakaway Calculation Sheets

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GENERAL NOTES  
 1.1. THIS DRAWING IS COPYRIGHT AND SHOULD NOT BE REPRODUCED IN WHOLE OR PART WITHOUT THE WRITTEN CONSENT OF PATRICK PARSONS LTD.  
 1.2. DO NOT SCALE FROM THIS DRAWING.



- D Bin Storage shown. OCT. 22
- C Location plan removed SEPT 22
- B Notes & drainage info. added. SEPT 22
- A Note added regarding replacement barn footprint to match existing footprint. DEC. 20



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project  
 STORAGE BARN  
 JANE'S COTTAGE  
 CHURCH LANE, DOGMERSFIELD  
 RG21 8TA

drawing

PROPOSED BLOCK PLAN

scale	date	job no.	dwg no.	rev.
1:500 @A3	SEPT. 22	2009	2.04	D

Rev.	Amendments	Date	Drg	Chk
Revisions				



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Client  
**Jeremy Cooks**

Project  
**11336 - Dogmersfield, Hook.**

Drawing  
**Exploratory Hole Location Plan**

Scales NTS At original size A1

Date 23/12/22 Drawn by ZC Checked by

Status **Draft**

Drawing No. **11336-704** Rev.

Project Name: Dogmersfield, Hook      Project No. 11336      Co-ords: -  
Level:      Date 12/12/2022

Location:      Dimensions (m): 1.50  
Depth 1.50      Scale 1:25  
Client: Jeremy Cook      Logged ZC

Water Strike	Samples & In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
	Depth	Type	Results				
▼				0.30			GRASS OVER MADE GROUND: Dark yellowish brown slightly sandy gravelly clay with a low subrounded cobble content of wood and brick fragments. Gravel is subangular to subrounded fine to coarse of flint, mudstone and brick fragments.
				0.90			Dark grey slightly gravelly sandy SILT. Gravel is subangular to subrounded fine to coarse of mudstone and sandstone.
				1.20			Light reddish brown gravelly fine to coarse SAND with a medium subrounded cobble content of sandstone. Gravel is subangular to subrounded fine to coarse of sandstone.
				1.35			Soft dark grey sandy CLAY with frequent bands of decaying plant matter.
				1.50			Soft dark grey mottled light grey sandy slightly gravelly CLAY. Gravel is rounded medium to coarse of mudstone and flint.
							End of Pit at 1.50m


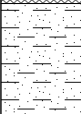


Remarks: 1) Location CAT scanned prior to excavation. 2) Groundwater seepage encountered at 1.30m begl during excavation.  
3) Infiltration test undertaken after excavation; see separate sheet for results.

Stability: Stable



Project Name: Dogmersfield, Hook      Project No. 11336      Co-ords: -  
Level:      Date 12/12/2022

Location:      Dimensions (m): 1.00  
Depth 1.80      0.30       Scale 1:25  
Client: Jeremy Cook      Logged ZC

Water Strike	Samples & In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
	Depth	Type	Results				
▼							GRASS OVER MADE GROUND: Dark orangish brown slightly sandy gravelly CLAY with a medium subangular cobble content of concrete and brick fragments. Gravel is subangular to subrounded fine to coarse of limestone, flint, mudstone, chalk and brick fragments.
				0.90			Soft dark grey mottled dark orangish brown slightly sandy CLAY with frequent bands of light grey silt. Occasional rootlets.
				1.30			Firm light brown mottled light grey mottled orangish brown slightly sandy slightly gravelly CLAY. <i>Below 1.40m, gravelly.</i>
				1.60			Light orangish brown mottled dark grey slightly sandy clayey GRAVEL. Gravel is subangular to subrounded fine to coarse of flint, mudstone and coal.
			1.80				End of Pit at 1.80m


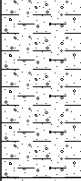

Remarks: 1) Location CAT scanned prior to excavation. 2) Groundwater encountered at 1.75m begl during excavation.

Stability: Stable



Project Name: Dogmersfield, Hook      Project No. 11336      Co-ords: -  
Level:      Date 12/12/2022

Location:      Dimensions (m): 1.00  
Depth 1.80      0.30       Scale 1:25  
Client: Jeremy Cook      Logged ZC

Water Strike	Samples & In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
	Depth	Type	Results				
▼  ▼				0.80			GRASS OVER MADE GROUND: Dark orangish brown slightly sandy gravelly CLAY with a medium subrounded cobble content of brick fragments. Gravel is subangular to subrounded fine to coarse of flint , limestone and brick fragments.
				1.40			Soft dark brown mottled dark grey slightly sandy slightly gravelly CLAY. Gravel is subrounded to rounded fine to coarse of chalk. <i>Below 1.10m, occasional bands of light grey silt.</i>
				1.80			Soft light orangish brown mottled dark grey slightly sandy CLAY . Occasional pockets of light grey sandy silt.
							End of Pit at 1.80m

Remarks: 1) Location CAT scanned prior to excavation. 2) Groundwater encountered at 1.10m begl and 1.80m begl during excavation.

Stability: Stable



**INFILTRATION RATE IN ACCORDANCE WITH BRE DIGEST 365: 2007**

Client: Jeremy Cook

Site: Dogmersfield, Hook

Job No: 11336 Test No: SA01 Test 1

**CALCULATION OF SOIL INFILTRATION RATE**

Time (min)	Depth (m)
0	0.49
1	0.50
2	0.50
3	0.50
4	0.50
5	0.50
6	0.51
7	0.51
8	0.51
9	0.51
10	0.51
15	0.51
20	0.51
25	0.51
30	0.52
35	0.52
45	0.52
60	0.53
90	0.53
120	0.53

Gravel Filled

Depth at start of test (m bgl) =

Depth at end of test (m bgl) =

Depth of Loss in test (m)

75% level = 0.74

50% level = 1.00

25% level = 1.25

Base area of pit (m<sup>2</sup>) =

ap<sub>50</sub>, area of loss (m<sup>2</sup>) =

Volume outflow 75 - 25% (m<sup>3</sup>) =

Y/N Y

0.49

0.53

0.04

Size of Soakaway		Depth of Water
Pit Dimensions		
Length (m) =	1.50	1.01
Width (m) =	0.50	
Depth (m) =	1.50	

From the graph:	
tp 75 (min) =	
tp 25 (min) =	

Soil infiltration rate, f, (m/s) =

Test Type

#DIV/0!

Input: ZC

Checked:

Date: 12/12/2022

