

OUR REF: R0273

17th October 2019

Mr. D Alder

c/o Foxley Tagg Planning Ltd

Dear Mr. Alder,

Land adjacent to Berrywood Lane, Bradley, SO24 9RY Soakaway Testing

Further to completion of the soakaway testing at the above site, our letter report is as follows:

Introduction

In-situ soakaway testing has been commissioned by Foxley Tagg Planning Ltd on behalf of Mr Alder (the Client) to confirm if soakaway drainage will be suitable for a detached residential dwelling in Bradley, Alresford.

The Site

The site is located adjacent to Berrywood Lane, Bradley. The soakaway testing was carried out in two trial pits located within the north centre and south centre of the site.

According to the British Geological Survey (BGS) the site is directly underlain by the Seaford Chalk Formation of Cretaceous Age.

The Seaford Chalk Formation is described as a firm, white chalk with semi-continuous nodular and tabular flint seams.

Site Works & results of Soakaway Testing

The site work was carried out by EEGSL on 15th October 2019 and comprised of soakaway testing in two trial pits, in accordance with the methods described in BRE Digest 365⁽²⁰⁰⁷⁾.

The location of the trial pits were selected by EEGSL prior to arrival on site and considered the current proposed siting of the development. Each trial pit was excavated using a tracked excavator and both pits were taken down to an approximate depth of 1.5m (into the underlying chalk).

The trial pit details and results of soakaway testing are attached to this letter report.

As can be seen form the results of the soakaway testing, soil infiltration rates varied between the two locations. An infiltration rate of 1.65x10-5 was recorded within SW01 and an infiltration rate of 4.35x10-6 was obtained at SW02.

Conclusions

- 1. Based on the near surface ground conditions and results of soakaway testing, soakaway drainage is likely to be suitable in the shallow weathered Chalk strata within the area of SW01 (at a depth of 1.50mbgl).
- 2. It is recommended that further infiltration testing is completed once a detailed drainage design has been produced to ensure the infiltration rates required can be achieve at the specific locations on site.



---- END OF LETTER REPORT ----

If you have any queries, or require any further information, please do not hesitate to contact the undersigned.

Yours Sincerely,



John Grace Regional Director For and on behalf of Earth Environmental & Geotechnical (Southern) Ltd

Encl. Trial Pit Logs

Soakaway Test Results Investigation Location Plan



ENCLOSURE 1

TRIAL PIT LOGS



rojec	t Name:	Berryw	ood L	.ane		Client: Foxley T	agg Plar	nning Ltd		Date:				
.ocati	on: Brac	dley				Contractor:				Co-ords: E463	564.17 N	N141492	2.30	
rojec	t No. : F	R0273				Crew Name:				Equipment:				
Loc	ation No				on Type ГР	Level		Logg	jed By	Scale 1:25			ge Numb neet 1 of	
Well	Water Strikes	San Depth	- 50	Type	Situ Testing Results		Level (m)	Legend		Stratum De	escription	n		
		Бери	(111)	Туре	Nesuits	0.20				r brown sandy grav				-
						0.80			angular to	n gravelly CLAY. G sub-angular of cha	alk and fli	nt.		-
									gravels of	flint. (Dm)				1 -
						1.50								2 -
														-
														3
														4
														-
														5 -
	Dime	ensions				Trench	n Support	and Comm	ent			Pumpir	ng Data	
Pit	Length	Pit	Width]	Pit Stability	Shoring Used			Remarks		Date	Rate	Rema	ırks
Rema	arks													

EARTH ENVIRONMENTAL & GEOTECHNICAL



										T				
Projec	ct Name:	Berryw	ood L	ane.		Client: Foxley T	agg Pla	nning Ltd		Date:				
	ion: Brac					Contractor:				Co-ords: E4635	44.54 N	N141465	5.57	
	ct No. : F		T			Crew Name:		,		Equipment:				
Loc	cation Nu SW02				on Type ГР	Level		Logg	ed By	Scale 1:25			ge Number neet 1 of 1	
Well	Water Strikes	San		and In	Situ Testinç	7	Level (m)	Legend		Stratum Des	scription			
	Otrikos	Depth	(m)	Туре	Results	(111)	(iii)		Grass over	brown sandy grav	elly TOP	SOIL		_
						0.20			Dark brown angular to s	and structureless lint. (Dm)	avels ar k and fli	e fine to o		3 -
						-				7				5 -
Pit	Dime Length	ensions Pit	Width	j	Pit Stability	Trench Shoring Used	Support	and Comm	ent Remarks		Date	Pumpir Rate	ng Data Rema	rks
Rema	arks													
												4	EARTH ENVIR	RONMENTAL IICAL



		1												
Project Name:	Berrywo	od La	ane		Client: Foxle	ey Ta	igg Plani	ning Ltd		Date:				
ocation: Brad	ley				Contractor:					Co-ords: E4635	548.91 N	N141500	0.94	
Project No. : R	0273				Crew Name):				Equipment:				
Location Nu TP01	ımber	ı		on Type ΓΡ	Lev	vel		Logg	ed By	Scale 1:25			ge Numb	
Well Water				Situ Testing		h	Level	Legend		Stratum De	scriptior	1		
Well Water Strikes	Sam Depth (Type	Results			Level (m)	Legend	Dark brown angular to s	brown sandy grav	relly TOP ravels an Ik and fli	SOIL e fine to nt.		2 -
Dime	nsions	Ve Jor		D# 04 1-72	Tre	ench S	Support a	ind Comme	ent				ng Data	ale:
Pit Length	Pit V	Vidth		Pit Stability	Shoring Use	ed			Remarks		Date	Rate	Rema	rks
Remarks	1		- I		1					J.			li .	

EARTH ENVIRONMENTAL & GEOTECHNICAL



Project Nar	ne: E	Berryw	ood L	ane		Clien	t: Foxley T	agg Plan	ning Ltd		Date:				
_ocation: B	radle	y				Cont	ractor:				Co-ords: E4635	o-ords: E463558.67 N141475.92			
Project No.	: R0	273				Crew	/ Name:				Equipment:				
Location TP	Nun 202	nber			on Type ГР		Level		Logg	ged By	Scale 1:25			ige Numb heet 1 of	
Well Strike			- 10		Situ Testing		Depth	Level	Legend		Stratum De	scriptior)		
Well Strike		San Depth	- 10	Type			Depth (m) 0.20 1.20	Level (m)	Legend	Orangish b coarse ang	rown gravelly CLA ular to sub-angula at base of clay and structureless	velly TOP Y. Grave r of chall	SOIL Is are fire	ıt.	2
	imen	sions					Trench	Support	and Comm	ent			Pumpi	ng Data	
Pit Length			Width		Pit Stability	Sho	ring Used	ppert		Remarks		Date	Rate	Rema	rks
Remarks								5,							
nemarks															

EARTH ENVIRONMENTAL & GEOTECHNICAL



	PATAMENT	0112-12-12-12-12-12-12-12-12-12-12-12-12-								
Project Name: Berrywood L	_ane	Client: Foxley T	agg Plar	nning Ltd		Date: Co-ords: E463531.67 N141474.99				
_ocation: Bradley		Contractor:				2.7	1.67 N1414	74.99		
Project No. : R0273		Crew Name:				Equipment:	<u> </u>			
Location Number TP03	Location Type TP	Level		Logg	ged By	Scale 1:25		Page Number Sheet 1 of 1		
Weter Sample:	and In Situ Testing	Depth	Level			1		Officer 1 of		
Well Strikes Depth (m)	Type Results	7	(m)	Legend		Stratum Desc	cription			
	Type Results	0.20			Orangish B coarse anging Flint band a Weathered gravels of fl	rown gravelly CLAY. ular to sub-angular of at base of clay and structureless gr lint. (Dm)	Gravels are of chalk and fi	K with	3 -	
Dimensions Pit Length Pit Width	Dit Stokility	Trench Shoring Used	Support	and Comm	ent			ping Data	rke	
Pit Length Pit Width	Pit Stability	Shoring Used			Remarks		Date Rate	EARTH ENVIL		



ENCLOSURE 2

SOAKAWAY TEST RESULTS



Job Number: R0273

Client: Foxley Tagg Planning Ltd Date of Test: 15/10/2019

Site: Berrywood Lane, Bradley

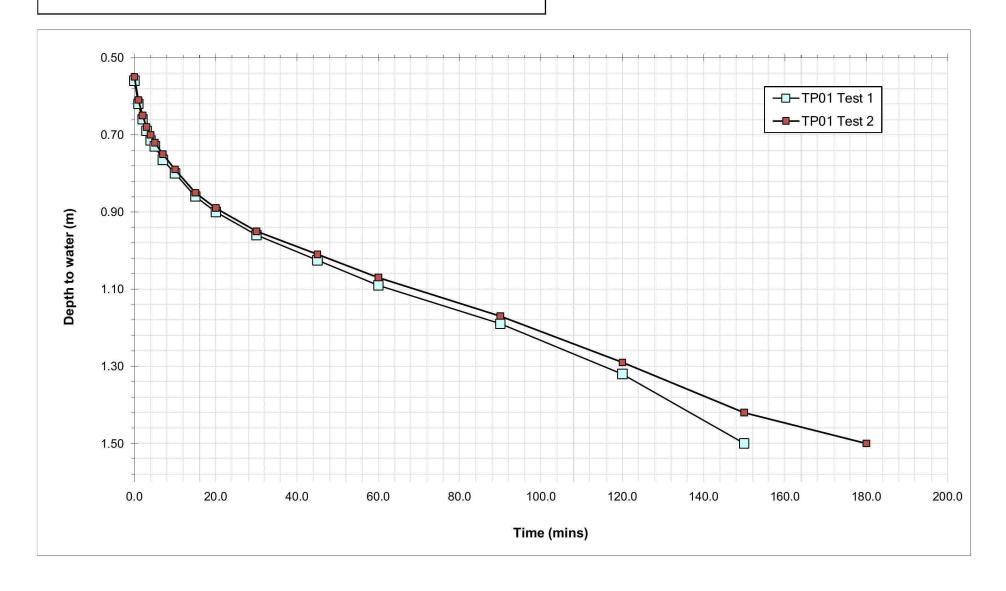
Trial Pit Number..... TP01 Length..... 1.50 m Width: 0.30 m Depth..... 1.50 m Groundwater Level..... m

SOIL INFILTRATION RATE TEST See B.R.E. Digest 365, 1991, Soakaway Design.

Remarks -			TEST 1		TEST 2	TEST 3			
TKOMANG -		Time(min)	Depth to Water (m)	Time(min)	Depth to Water (m)	Time(min)	Depth to Water (m)		
Pit Stable		0.0	0.56	0.0	0.55	0.0			
		1.0	0.62	1.0	0.61	1.0			
		2.0	0.66	2.0	0.65	2.0			
		3.0	0.69	3.0	0.68	3.0			
		4.0	0.72	4.0	0.70	4.0			
		5.0	0.73	5.0	0.72	5.0			
		7.0	0.77	7.0	0.75	7.0			
		10	0.80	10	0.79	10			
		15	0.86	15	0.85	15			
		20	0.90	20	0.89	20			
		30	0.96	30	0.95	30			
		45	1.03	45	1.01	45			
		60	1.09	60	1.07	60			
		90	1.19	90	1.17	90			
		120	1.32	120	1.29	120			
		150	1.50	150	1.42	180			
				180	1.50				
Effective Storage Depth	m		0.94		0.95				
75% Effective Storage Depth	m		0.71		0.71				
(i.e. depth below GL)	m		0.80		0.79				
25% Effective Storage Depth	m		0.24		0.24				
(i.e. depth below GL)	m		1.27		1.26				
Effective Storage Depth 75%-25%	m		0.47		0.48				
Time to fall to 75% effective depth	mins		10.00		10.00				
Time to fall to 25% effective depth	mins		110.00		112.00				
V (75%-25%)	m3		0.21		0.21				
a (50%)	m2		2.14		2.16				
t (75%-25%)	mins		100.00		102.00				
SOIL INFILTRATION RATE	m/s		1.65E-05						

DESIGN SOIL INFILTRATION RATE, f

1.65E-05





Site: Berrywood Lane, Bradley Job Number: R0273

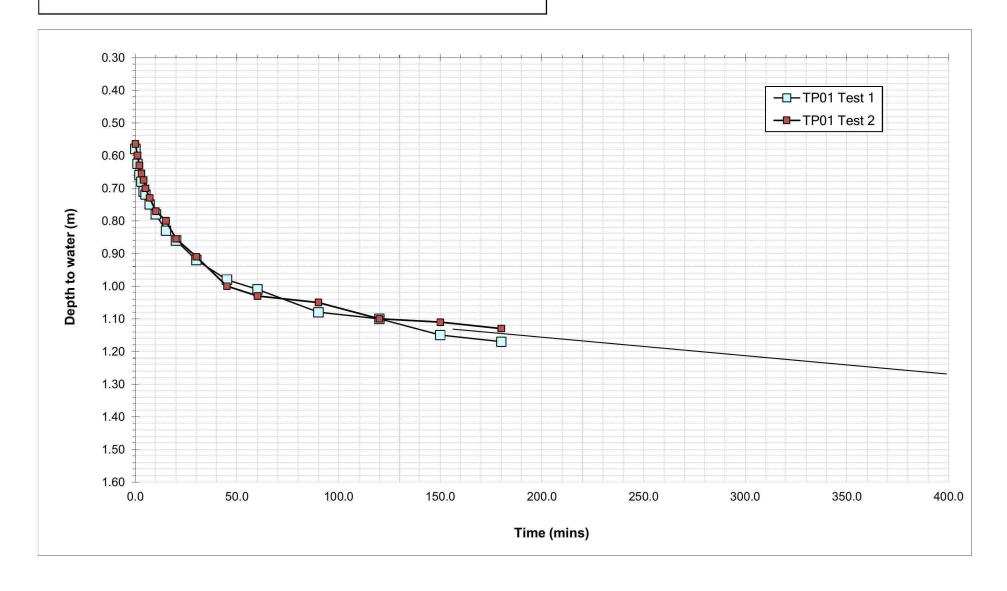
Client: Foxley Tagg Planning Ltd Date of Test: 15/10/2019

SOIL INFILTRATION RATE TEST

See B.R.E. Digest 365, 1991, S	oakaway Des	sign.						
Remarks -			TEST 1		TEST 2	TEST 3		
, terrialitie		Time(min)	Depth to Water (m)	Time(min)	Depth to Water (m)	Time(min)	Depth to Water (m)	
Slow Infiltration Rate, 25% effective de	pth not	0.0	0.58	0.0	0.57	0.0		
achieved.	·	1.0	0.63	1.0	0.60	1.0		
		2.0	0.66	2.0	0.63	2.0		
		3.0	0.68	3.0	0.66	3.0		
		4.0	0.71	4.0	0.68	4.0		
		5.0	0.72	5.0	0.70	5.0		
		7.0	0.75	7.0	0.73	7.0		
		10	0.78	10	0.77	10		
		15	0.83	15	0.80	15		
		20	0.86	20	0.86	20		
		30	0.92	30	0.91	30		
		45	0.98	45	1.00	45		
		60	1.01	60	1.03	60		
		90	1.08	90	1.05	90		
		120	1.10	120	1.10	120		
		150	1.15	150	1.11	180		
		180	1.17	180	1.13			
Effective Storage Depth	m		0.92		0.94			
75% Effective Storage Depth	m		0.69		0.70			
(i.e. depth below GL)	m		0.81		0.80			
25% Effective Storage Depth	m		0.23		0.23			
(i.e. depth below GL)	m		1.27		1.27			
Effective Storage Depth 75%-25%	m		0.46		0.47			
Time to fall to 75% effective depth	mins		13.00		15.00			
Time to fall to 25% effective depth	mins		390.00		390.00			
V (75%-25%)	m3		0.21		0.21			
a (50%)	m2		2.11		2.13			
t (75%-25%)	mins		377.00		375.00			
SOIL INFILTRATION RATE	m/s		4.35E-06					

DESIGN SOIL INFILTRATION RATE, f

4.35E-06





ENCLOSURE 3

INVESTIGATION LOCATION PLAN

