

Our Ref: MH/JK/EL/JN1937



18th October 2024

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ST Consult is a regional office of Southern Testing Laboratories Ltd
Regional Director Dr J Kelly BSc PhD DIC

For the attention of Bhavash Vashi

Dear Bhavash,

Re: Borehole Soakaway Test at: Node Court, Codicote

We were requested to drill a 20m borehole and complete a constant head soakage test, to investigate if borehole soakaways were viable for the site. As with any site, there may be differences between trial hole locations. A desk study and wider Phase II investigation were outside the requested scope.

The borehole was drilled to 20m using cable percussion techniques. As expected, groundwater was not encountered during drilling. Upon completion of the drilling, the borehole was tested by way of a constant head test using a 2500l bowser. Upon completion of the test, the borehole was backfilled with arising was per the specification.

Please find herewith the borehole logs (with driller's descriptions), soakage test results and an annotated site plan showing the borehole location (see figure 1).

The constant head tests were conducted using a 2500 litre water bowser, discharging via a 2 inch tap. The aim is to discharge the water into the installation pipe at a rate which maintains a head of water at around 2.0m depth (near the base of a typical soakaway head chamber and therefore at the maximum head height and maximum discharge rate).

The results of the tests and installation details are provided in the table below.

Borehole	Depth Drilled (m bgl)	Test (l/min)	Maintained head of water (mbgl)	Comments
BH1	20.0m	280	2.0m	Following the constant head test the water was monitored as a falling head test providing rates of 1×10^{-4} m/second.

Generally speaking the result was good, suggesting that boreholes soakaways are a viable method for surface water drainage for the site.



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

Yours faithfully,

Morgan Howcutt BSc FGS

For and on behalf of ST Consult

DDI: 01604 500022

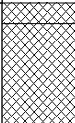
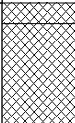
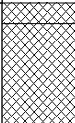
Email: mhowcutt@stconsult.co.uk

FIELDWORK LOCATION PLAN



Site:	Node Court, Codicote	Project Id:	JN1937
Figure 2	Site Location Plan	Date:	14/10/24

BH1 LOG

				Start - End Date:		Project ID:	Hole Type:	BH1																																																																																																																																																						
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<table><tr><td rowspan="2">Well</td><td rowspan="2">Water Strikes</td><td colspan="3">Samples and Insitu Testing</td><td rowspan="2">Level (m AOD)</td><td rowspan="2">Thickness (m)</td><td rowspan="2">Legend</td><td rowspan="2">Depth (m bgl)</td><td rowspan="2">Stratum Description</td><td rowspan="2"></td></tr><tr><td>Depth (m bgl)</td><td>Type</td><td>Results</td></tr><tr><td rowspan="4"></td><td rowspan="4"></td><td></td><td></td><td></td><td></td><td>(0.15)</td><td rowspan="2"></td><td>0.15</td><td>Dense GRAVEL. (Drillers Description)</td><td></td></tr><tr><td></td><td></td><td></td><td></td><td>(0.75)</td><td>MADE GROUND composed of clayey brick GRAVEL. (Drillers Description)</td><td></td></tr><tr><td></td><td></td><td></td><td></td><td>(0.70)</td><td rowspan="2"></td><td>0.90</td><td>Stiff brown silty sandy gravelly CLAY. Gravels consist of flint. (Drillers Description)</td><td>1</td></tr><tr><td></td><td></td><td></td><td></td><td></td><td>1.60</td><td>CHALK blocky and putty with rare flints. (Drillers Description)</td><td>2</td></tr><tr><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>3</td></tr><tr><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>4</td></tr><tr><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>5</td></tr><tr><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>6</td></tr><tr><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>7</td></tr><tr><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>8</td></tr><tr><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>9</td></tr><tr><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>10</td></tr><tr><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>11</td></tr><tr><td></td><td></td><td></td><td></td><td></td><td></td><td>(18.40)</td><td></td><td></td><td></td></tr></table>										Well	Water Strikes	Samples and Insitu Testing			Level (m AOD)	Thickness (m)	Legend	Depth (m bgl)	Stratum Description		Depth (m bgl)	Type	Results							(0.15)		0.15	Dense GRAVEL. (Drillers Description)						(0.75)	MADE GROUND composed of clayey brick GRAVEL. (Drillers Description)						(0.70)		0.90	Stiff brown silty sandy gravelly CLAY. Gravels consist of flint. (Drillers Description)	1						1.60	CHALK blocky and putty with rare flints. (Drillers Description)	2										3										4										5										6										7										8										9										10										11							(18.40)			
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					11/10/2024		JN1937		CP		Sheet 2 of 2	
Client:		BVA Planning					Co-ordinates:		Level (m AOD)		Logger:	
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Name:		Node Court					Location:		Node Court, Codicote			
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