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7th March 2014

Our Ref.: 14150/SoakRes/SL

RE: Soakaway Testing – Land at Ranelagh Road, Havant

Dear Nick,

We are writing with regard to the infiltration tests undertaken at the above named site on 4th March 2014.

General

Site works were undertaken on the 4th March 2014 and comprised the excavation of five trial holes using an excavator to a maximum depth of 3.00m bgl with infiltration testing carried out with S4, S5 and also S6. The location of the trial holes was determined through discussion between the Soils Limited Engineer and the Client, targeting anticipated soakage areas.

Ground Conditions Encountered

Ground conditions were consistent with those encountered during the earlier phase of investigation (14099/GIR, February 2014) and were found to comprise a covering of Topsoil or Made Ground over typically cohesive soils (sandy silty CLAY with occasional fine gravel) of the Head Deposits. The Lewes Nodular Chalk Formation was not encountered in any of the trial pits due to the restricted depths, however it was encountered during the earlier phase of investigation (14099/GIR, February 2014) at depths of between 2.00m and 2.80m bgl.

Groundwater was not encountered within S4-6.

Logs of the ground conditions encountered within each trial pit are presented within Appendix A.

Infiltration Tests

Infiltration tests were undertaken within the trial pits (--S4, S5 and S6--), within the Head Deposits, following the principles of BRE Digest 365 Soakaway design: 1991. BRE 365 states that for an accurate infiltration rate to be obtained a soakage pit needs to be filled three

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times in quick succession. Each test can only be ended once 75% of the water present has drained away. Infiltration tests were not repeated three times due to time restrictions.

Table 1 shows a précis of the results with full results shown in Appendix B.

Table 1 Soakage Results				
Test Location	Geology Targeted	Time (mins)	Water Loss (metres)	Infiltration rate (m/sec)
S4, Soak 1	Head Deposits	360	0.18	1.014 E - 05
S5, Soak 1	Head Deposits	230	0.61	1.879 E - 05
S6, Soak 1	Head Deposits	265	0.39	1.2096 E -05

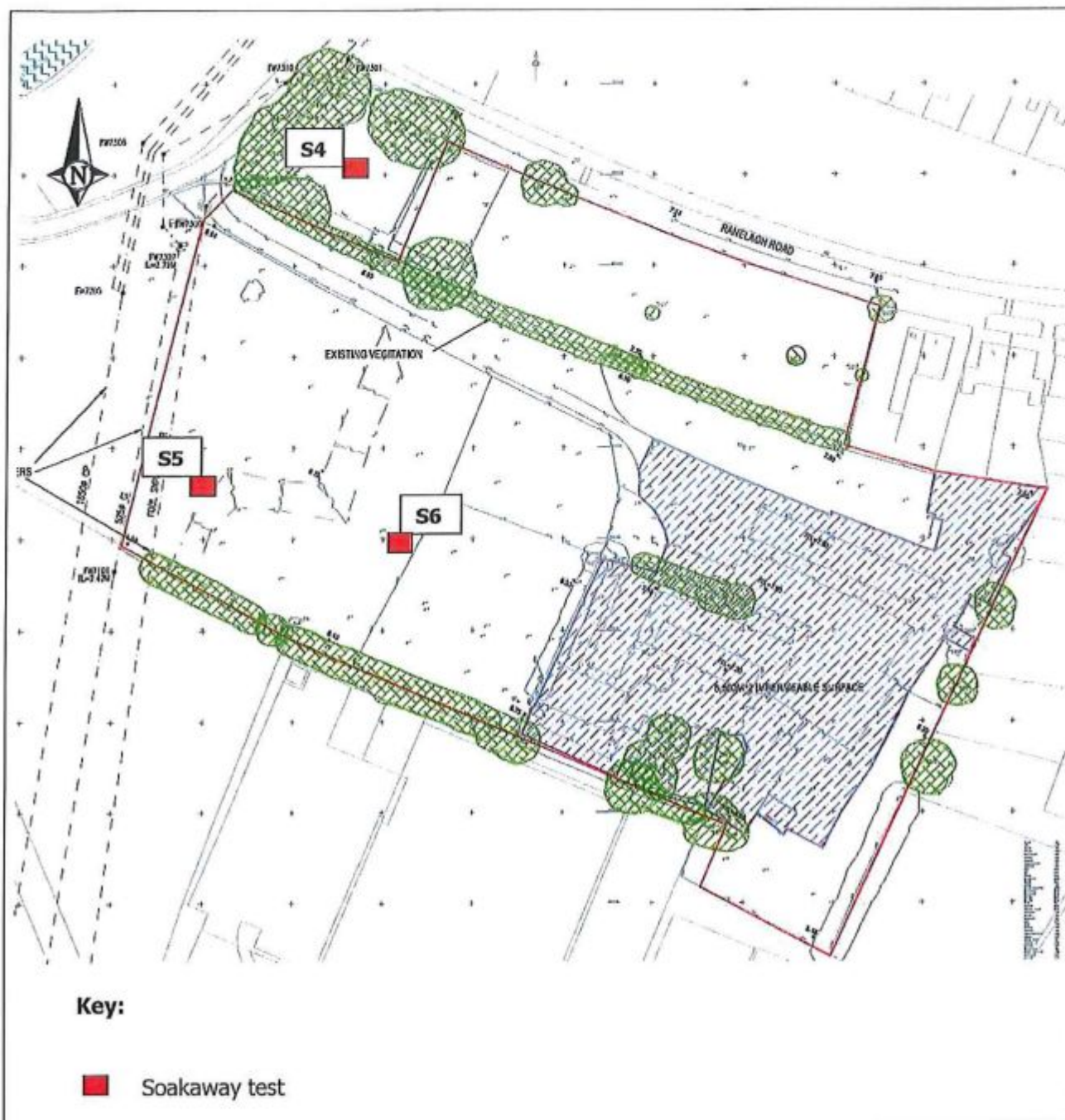
The results of the test showed that, soakaways are likely to function adequately for the removal of surface water.

Should you have any questions then please do not hesitate to contact

Yours sincerely

L. Howell

Lucy Howell BSc. (Hons) FGS



Project: Land south of Ranelagh Road, Havant, Hampshire		 <i>Geotechnical & Environmental Consultants</i>
Client: Orchard Homes Limited	Date: March 2014	
Figure 2: Trial Hole Layout Plan – 14150	Job Number: 14150	