

GEOSPHERE ENVIRONMENTAL

REPORT NUMBER:	3921,GI/GROUND/CS,SG,TP/21.06.19/V1
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SITE:	Land off Fir Covert Road, Taverham, Norfolk, NR8 6HL
DATE:	21/06/2019





DOCUMENT CONTROL SHEET

Report Number:	3921,GI/GROUND/CS,SG,TP/21.06.19/V1
Client:	M Scott Properties Limited
Project Name:	Land off Fir Covert Road, Taverham, Norfolk, NR8 6HL
Project Number:	3710,GI,SK
Report Type:	Phase 2 – Ground Investigation
Status	Final
Date of Issue:	21 June 2019

Issued By:

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Limit of Reliance:

This report is based on the site findings at the time of the associated walkover/site investigation works and information provided by the client at the time of writing. Should site conditions alter or development proposals alter, a reassessment of the enclosed findings should be undertaken. Refer to Appendix 1 for full details of report limitations.

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Revision:	Date: Revision Details:	Prepared By: Admin:



Executive Summary

Project	Geosphere Environmental Ltd was commissioned by M Scott Properties
Description	Limited, to undertake a Phase 2 Site Investigation at Land off Fir Covert Road, Taverham, Norfolk, NR8 6HL.
	At the time this report was prepared, it was understood that the proposed
	development comprised of residential properties with associated soft
	landscaped areas including private gardens and car parking facilities.
Site Location /	The site was located at Land off Fir Covert Road, Taverham, Norfolk, NR8 6HL
Description	situated approximately 1.5km to the north of the town centre of Taverham and
	may be located by National Grid Reference (NGR) TG 16031 15569.
Previous	The site formed part of a Phase 1 Desk Study undertaken by Geosphere
Investigation	Environmental Ltd, reference 3551, EC, AR, DS/DESK/LT, GF/28-11-18/V1 dated
	28 November 2018. The findings of the report indicated potential sources of
	contamination to include Made Ground associated with hardstanding tracks
	onsite; a strip of which exists in the north of the site, as well as the potential
	for Made Ground from offsite developments located beyond the eastern site
	boundary. Other sources have been discounted due to their relevance to the
	investigation site.
Site Works	Site works were carried out between 11 February 2019 and 22 May 2019 and
	comprised of the formation of twenty four windowless sampling boreholes,
	installation of seven 50mm ground gas monitoring wells, soil infiltration testing
	within seven machine excavated trial pits, four dynamic probe tests, single
	hand dug trial pit and associated soil logging, sampling and in situ strength
	testing.
Ground	The ground conditions were recorded to be consistent across the site,
Conditions	comprising of nominal amounts of Topsoil overlying superficial deposits of
	Sheringham Cliff Formation (Sand and Gravel). Groundwater level was
	encountered within WS203a and WS205a only during the intrusive works. The
	groundwater strikes were consistent with the thicknesses of clay and therefore
	the groundwater in these locations in considered to be perched.
Gas Monitoring	The results of the ground gas monitoring show no methane generation within
	soils, and limited generation of carbon dioxide. No significant gas flow was
	detected within the wells across the site. Based upon guidance given in CIRIA
	C665, the site is considered to fall within the NHBC green category for low-rise
	housing with underfloor voids, which requires no special protection measures.
Laboratory	Laboratory analysis identified no concentrations of contaminants which were
Results	above guidance threshold values for a residential development with plant
	uptake.



Advanced	Based upon the results of chemical analysis, a very low risk exists for the site
Conceptual Model	and therefore the site may be developed without the need for remediation.
Geotechnical	A minimum foundation depth of 0.75 is applicable within proven granular soils,
Considerations	however borehole location WS204a, encountered a significant thickness of cohesive soils at approximate formation depths and therefore a minimum foundation depth of 1.0mbgl is applicable. Foundations in this area should also be designed to the requirements of NHBC guidance, given the presence of trees.
	Recommendations for soil infiltration and roadway design are provided within the relevant sections as these vary across the testing locations.

This Executive Summary only provides a summary of the site data and its assessment. It does not provide a definitive engineering analysis and is for guidance only. It is recommended that the reader reviews the report in its entirety and any material referenced therein.