



Corby Borough Council

Ground Investigation

**Oakley Valley Railway Halt
Cheltenham Road
CORBY
Northamptonshire
NN18 8QS**

**Report No: 17.07.024
October 2017**

DOCUMENT RECORD

Report Title Ground Investigation Report
 Project Title New Residential Development
 Project Address Oakley Valley Railway Halt, Cheltenham Road, Corby, Northants, NN18 8QS
 Project Number 17.07.024
 Client Corby Borough Council

Prepared By


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For and on behalf of ListersGeo, trading name of Listers Geotechnical Consultants Ltd

Issue No	Date	Status
1	12 th October 2017	Draft
2	11 th October 2019	Final

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EXECUTIVE SUMMARY

Project Reference	17.07.024
Site Location	Oakley Valley Railway Halt, Cheltenham Road, Corby, Northants, NN18 8QS
OS Grid Reference	488320, 286060
Development Proposals	Residential properties with potential external car parking, gardens and surrounding soft landscaping.
Existing Buildings	None present.
Topography	The site is essentially flat lying with a gentle downward gradient to the northeast.
Vegetation	No significant vegetation across the site itself; a row of semi-mature and mature trees along the eastern and south-eastern site boundaries.
Published Geology	The site is recorded to be directly underlain by the Oadby Member, further underlain by the Rutland Formation.
Site History	Undeveloped land to the present day. Neighbouring development of land to the northwest and west between 2006 and the present day.
Hydrology	The nearest surface feature is a balancing pond located approximately 20m to the northeast of the site.
Hydrogeology	The Oadby Member is classified as a Secondary Aquifer (Undifferentiated)
Geotechnical Hazards	Principal risks comprise shrinking and swelling clays relating to the Oadby Member.
Ground Conditions Encountered	Site wide Made Ground to typically 0.43m, onto the Oadby Member, which was proved to 3.20m bgl. No evidence of desiccation was encountered on the site.
Groundwater Encountered	Groundwater was not encountered to a depth of 3.20m bgl.
Ground Contamination	No significant contamination recorded.
Groundwater Contamination	No significant contamination recorded.
Site Remediation Required	None is required on the basis of the works conducted.
Foundations	Traditional spread foundations are considered suitable for lighter loads at a minimum depth of 1.0m bgl where a safe bearing pressure of 100kPa can be adopted, increasing to 125kPa at depths in excess of 1.5m below existing ground level.
Floor Slabs	Ground bearing provided the Made Ground is removed.
Soil Gases	None affecting the site
Waste Soil Classification	Made Ground and Oadby Member – classified as Inert.
Chemical Attack on Buried Concrete	Design Sulphate Class DS-1 ACEC Class AC-1s
Roads & Hard Standing Design	Oadby Member - CBR value of 2.2%.
Infiltration Measures	Soakaways are not considered feasible at the site due to the impermeable nature of the Oadby Member.
Recommendations	Should ground conditions vary noticeably from our Ground Model, then we recommend further assessment by a suitably qualified person. Should a pile foundation solution be adopted then we recommend that further ground investigation be undertaken, in the form of deep boreholes to provide a soil profile and pile parameters. Additional chemical testing to allow assessment of concrete aggression of the deeper soils should also be undertaken. The depth of borehole required should be informed by details of the likely loadings.

This executive summary should be read in conjunction with the main report.