

7 March 2019

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Issued via email to:

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Two Road Woodend – Technical Category Classification Confirmation

1 Introduction

GW Woodend Ltd is in the process of developing the Two Roads subdivision in Woodend. This letter provides recommendations for Technical Category Classification on a lot-by-lot basis. The technical category recommendations are updated from the original geotechnical report considering the revised subdivision layout, earthworks and ground remediation undertaken at the site since the original 2015 investigation.

2 Previous Investigations

Aurecon undertook a geotechnical site investigation across the wider 12.4ha Two Roads residential development site between July and August 2015 to support a residential subdivision application. This investigation is described in the Aurecon report *Gladstone Road Subdivision, Woodend* – dated 28 August 2015, prepared from GW Woodend Ltd.

3 Technical Category Classification

Based upon our geotechnical site investigations and the ground remediation work completed as detailed in *248126 Two Roads – Geotechnical Sign Off Letter Lots 34, 35, 49-51, 163-165 Rev3*, we consider the subdivision to comprise of Technical Category 1 and Technical Category 2 lots. The classification for each lot is shown on the attached figure.

As part of the subdivision construction ground remediation has been undertaken to Lots 49 to 51, and Lots 163 to 165, which originally showed TC3 ground performance characteristics. The remediation works completed have been detailed in Aurecon's letter, *248126 Two Roads – Geotechnical Sign Off Letter Lots 34, 35, 49-51, 163-165 Rev3*, dated 11 August 2017, and the lots are now suitable for TC2 type foundations.

4 Foundation Recommendations

Within lots classified as Technical Category 2, enhanced TC2 foundation are required as outlined in Section 5 of the MBIE Guidelines (2012). On lots classified as Technical Category 1, typical NZS3604 foundations can be used provided the requirements for 'good ground' within the Standard are met.

In accordance with the MBIE Guidelines (2012) specific shallow geotechnical investigations shall be required for each house to assess the specific ground conditions and foundation bearing capacity. This assessment should be undertaken by the foundation designer as it is outside the scope of our services. Further deep investigations are not considered necessary for standard light weight timber framed buildings.

5 Limitations

We have prepared this report in accordance with the brief as provided. The contents of the report are for the sole use of the Client and no responsibility or liability will be accepted to any third party. Data or opinions contained within the report may not be used in other contexts or for any other purposes without our prior review and agreement.

The recommendations in this report are based on data collected at specific locations and by using suitable investigation techniques. Only a finite amount of information has been collected to meet the specific financial and technical requirements of the Client's brief and this report does not purport to completely describe all the site characteristics and properties. The nature and continuity of the ground between test locations has been inferred using experience and judgement and it must be appreciated that actual conditions could vary from the assumed model.

Subsurface conditions relevant to construction works should be assessed by contractors who can make their own interpretation of the factual data provided. They should perform any additional tests as necessary for their own purposes.

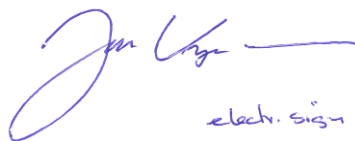
Subsurface conditions, such as groundwater levels, can change over time. This should be borne in mind, particularly if the report is used after a protracted delay.

This report is not to be reproduced either wholly or in part without our prior written permission.

The conclusions in this report draws on investigations, analysis and conclusions from various investigations stages and numerous reports. For specific details please refer to the above mentioned references or contact the writers.

If you have any queries regarding the content of this letter, please do not hesitate to contact the undersigned.

Yours faithfully



electr. sign

Dr Jan Kupec
Technical Director Ground Engineering

Enc: Technical Category Classification Plan

