

4415
10 February 2021

Selwyn District Council
PO Box 90
Rolleston

Attention: Jocelyn Lewes,



Dear Ms Lewes,

**RE: Plan Change 78
Urban Estates Ltd
Selwyn Road & Lincoln – Rolleston Road, Rolleston
Geotechnical Report Peer Review**

Geotech Consulting has been asked to carry out a peer review on the geotechnical report for the proposed plan change from Rural Inner Plains to Living Z. In particular the peer review is to ensure compliance with the MBIE guidelines for the geotechnical assessment of subdivisions.

The geotechnical report, which is specifically to support land use change, is:

- *Geotechnical Investigation, Multiple Sites, Southeast Rolleston*, dated 9 December 2020, by ENGEO Ltd, for Urban Estates Ltd

The site is essentially level and is made up of fifteen titles with a combined area of about 63.3 ha and frontages onto both Selwyn Road (548 – 582) and Lincoln Rolleston Road (127 & 391).

The report is based on 18 test pits up to 2.2m deep with associated scala penetrometer tests from across the site, but this is supplemented with sixteen well logs from the Ecan data base to between 28 and 90m depth, all either within the site or within a short distance of the site boundary. The site is essentially underlain with 0.0 – 0.3m of topsoil over a sandy silt to between 0.3m and 0.9m depth where sandy gravel is found. Although the tests on site do not extend far into the gravel the well logs all show gravel dominated soils to the extent of the logs at 28m to 90m depth. The water table is indicated at being at about 7.3m to 14.2m depth, with an average of 10.6m.

The liquefaction hazard is assessed as being low, given the gravel soils and the 10m depth to water table. The site is equivalent Foundation Technical Category TC1. Natural hazards have been considered but the site is unlikely to be subject to any of them, other than part of the area could be subject to flooding in extreme events. It appears that the majority of the site should fulfill the requirements of “good ground” as defined in NZS3604.

Dr. Mark Yetton E-mail myetton@geotech.co.nz
Nick Traylen E-mail ntraylen@geotech.co.nz
Ian McCahon E-mail mccahon@geotech.co.nz

Tel (03) 9822 538
Fax (03) 3257 555
PO Box 130 122
4 / 6 Raycroft Street
Christchurch 8141 New Zealand

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Conclusions

We agree that there is minimal to no liquefaction potential at the site. We agree with the conclusion that the site is equivalent TC1 Technical Land classification.

The extent of work reported complies with the intent of the MBIE Subdivision Guidance for a site subject to plan change, in our opinion, given the consistency of the ground conditions identified. The report is sufficient for subdivision consent, although further geotechnical investigations may be needed for subdivision design. Site specific shallow testing may be needed on each house site at building consent stage.

Yours faithfully

Geotech Consulting Limited

A handwritten signature in dark ink, appearing to read 'I. McCahon'.

Ian McCahon