

4415
15 January 2021

Selwyn District Council
PO Box 90
Rolleston

Attention: Jocelyn Lewes,



Dear Ms Lewes,

RE: Plan Change 75
Yoursection Ltd
151-153 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 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 reports is:

- *Geotechnical Report for Proposed Plan Change, Falcons Subdivision Proposed Extension*, dated 25 November 2020, by Miyomoto International NZ Ltd, for Yoursection Ltd

The reports is specifically to support land use change.

The site is essentially level and is made up of titles Lot 1 DP 50631 Blks III IV Leeston SD & Lot 1 DP 357634, at 151 & 153 Lincoln Rolleston Road, with an area of about 24.7 ha.

The report is based on 27 test pits with associated scala penetrometer tests from across the site, but this is supplemented with a further 12 test pits to between 1.6m and 2.6m depth, two hand auger bores to 0.8m & 3m depth, and four well logs from the Ecan data base, all within a short distance of the site boundary. The site is essentially underlain with 0.2 – 0.4m of topsoil over a sandy silt to between 0.3m and 1.1m depth where gravelly sand grading into sandy gravel is found. Although the tests on site do not extend far into the gravel, some of the test pits on adjacent land do, and the well logs all show gravel dominated soils to the extent of the logs at 37m to 48m depth. The water table is indicated at being at about 10m to 13m depth, with shallowest nearby level recorded at about 6m depth.

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. It appears that the majority of the site should fulfill the requirements of “good ground” as defined in NZS3604.

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Conclusions

We agree that there is minimal to no liquefaction potential at the site. We note that although the report describes the soils as Holocene aged, the gravels at more than a few metres depth will be of older Pleistocene age and therefore much less susceptible to any seismic consolidation effects. 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



Ian McCahon