

4415  
30 March 2016

Selwyn District Council  
PO Box 90  
Rolleston



Attention: Craig Friedel

Dear Sir,

**RE: Plan Change – Stratford – 631 Shands Rd, Prebbleton, - PC 47**

**Geotechnical Report Peer Review**

Geotech Consulting Ltd carried out a peer review on the geotechnical report for the proposed plan change of the property at 631 Shands Road, as requested by yourself. This review dated 15 March 2016 had some reservations about details in the report and we understand that SDC subsequently requested further information from the applicant.

Soil & Rock Consultants Ltd have responded with a letter dated 23 March 2016, which was received today, along with additional well log data from the Ecan database, forwarded by Graham Fowler of Calibre Consulting today.

The ten Ecan well logs are all located between about 100m and 400m of the site boundary and are reasonably well distributed around the site. They are listed in table 1, together with the one well on the site itself. With one exception, they all show gravel at between 0.3m and 2.5m depth (average 1.4m). The one with a greater depth to gravel may reflect a buried channel or simply be poor logging.

Well	Location*	topsoil	Fine soil	Depth to gravel
3989	On site	0.3	-	0.3
5253	190m W		"topsoil, sand & clay"	6.0
20107	90m W	0.5	-	0.5
4087	230m N	0.3	clay	1.2
6808	110m N	0.3	clay	2.5
3770	130m E		"topsoil sandy clay"	1.7
4388	440m E	0.2	clay	0.8
4362	360m SE	0.5	clay	2.0
4746	320 SE	1.2	clay	2.1
8391	250m S	0.4	clay	2.0
3775	230m S	-	No log	<1.0

*\*Location is approximate direction from centre of site and distance from site boundary*

**Table 1 Ecan well logs around site**

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**GEOLOGICAL & ENGINEERING SERVICES**

The Soil & Rock letter of 23 March also appends a report for the adjacent land immediately to the southwest of the subject site. This report contains eight test pit logs (including 3 immediately over the subject site boundary) with gravel contacted at between 0.6m and 1.8m depth.

We note that the Ecan well logs and the test pits on the adjacent land all indicate a rather greater variation is likely in the thickness of the surficial finer grained soils than could be interpreted from the original geotechnical report, although this does not impact significantly on the conclusions.

The Ecan well logs confirms the consistency of the deeper gravel soils around and under the site as well as providing a greater assurance of the range in depth to gravel. The adjacent test pits compensate for the lack of any visual identification and shallow depth of testing across the west and southern parts of the site.

With this additional information, we are now satisfied that the ground characteristics are sufficiently well established at this plan change stage. This does not detract from the need to do more extensive testing at subdivision stage, which is regarded as essential should the plan change proceed. Additional testing will also be subsequently needed at building consent stage for each building.

Yours faithfully

**Geotech Consulting Limited**



Ian McCahon