RMA Submission Change 29 – John Higginbotham

Good morning and thank you for this chance to provide you a submission on Plan 29

As a Chartered Professional Engineer with 25 years development experience in the region, I would like to provide information to NCC on some of the limitations of the Geotechnical Hazards Maps being considered in the Plan Change. Though the Maps are useful tools, due to the limitations, I don't believe they should be attached to LIMs unless the Maps are calibrated and refined on a regular basis.

In regards to active faults which are mapped, I think they should only be included if they are published on GNS Science Geological Maps and included with New Zealand Active Faults Database. I have earlier provided a letter to NCC on this topic for a specific situation in Marsden Valley, which provides a good example of my concern. It is important that the Natural Hazard information provided by NCC is reasonably accurate and improved, as required, due to the potential negative effect on the public. This includes the effects on getting insurance and bank lending.

I was on the working group for the slope instability maps. Though I think the maps are an excellent tool, they are based mostly on the steepness of the slopes and generally don't acknowledge widespread engineered stabilisation measures, which have been undertaken under both building and resource consent, as required by NCC, to ensure a low risk of slope stability is achieved as part of the development. I would say there are hundreds of properties, or more, mapped as being susceptible to slope instability, which aren't, due to the great effort and cost undertaken to stabilise the slopes. These measures would include engineered earthworks, retaining walls, stormwater control and subsoil drainage.

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I have an example of an inaccuracy I noted on one of our projects – show plans and discuss.

The easiest way to improve the accuracy of the maps is to include a database of sections, where engineered slope stabilisation measures have been undertaken, under consent, and/or have geotechnical certification. This would include historic projects with good records –say consents back to 1990, or as recommended by a CPEng or another qualified professional. The maps would also be updated as hillside subdivision work is completed and certified.

There is a cost to this but the cost to Council would be much less that than the cost to the public, e.g. hiring a consultant to assess the accuracy of the hazard maps, and will avoid possible legal challenges.

I would also like to comment on daylight angles and shading:

Multiple units in traditional single family home zones would be OK as long as the current daylight angles are met. This would ensure passive solar heating can be achieved, as well as grid connected, residential rooftop solar array can be installed – the way of the future. I recommend you visit California sometime and see how common place it is.

And lastly. I believe that granny flats should be allowed by right as long as the current daylight angles are met.