

Geotechnical Considerations – Foundations on Deep Alluvial Soils

The Canterbury Earthquakes Royal Commission (the Commission) sought advice from Associate Professor Misko Cubrinovski of the University of Canterbury and Ian McCahon, Principal, Geotech Consulting Ltd about ground conditions in the Christchurch central business district (CBD), including:

- a general review of the alluvial soils found in the CBD and their performance and effects on building foundations in the recent Canterbury earthquake sequence;
- liquefaction and lateral spreading;
- general concepts that should be followed in the design of foundations for buildings on these soils.

The report entitled “Foundations on Deep Alluvial Soils” dated August 2011 is published on the Commission’s website: www.canterbury.royalcommission.govt.nz. It contains an Executive Summary which gives an overview of the content.

The authors note that the report, while containing technical information, describes the geotechnical phenomena, and their effects in non-technical language for a general audience.

The report will be peer reviewed by Professor Jonathan Bray of the University of California at Berkeley. The Commission will publish the peer review on its website when it is available.