

**Before the Hearings Panel
At Wellington City Council**

Under the Resource Management Act 1991

In the matter of The resource consent application for Ryman Healthcare's Retirement Village at 26 Donald Street and 33 Campbell Street, Karori, Wellington

Between **Various**
Submitters

And **Wellington City Council**
Respondent

Statement of evidence of Ayoub Kasem Rimam on behalf of Wellington City Council - Geotechnical

Date: 02 Aug 2022

(ENGEO Ref: 17766, Rev 0)

INTRODUCTION

- 1 My full name is Ayoub Kasem Riman. I am employed as a Principal Geotechnical Engineer by ENGEO Ltd, based in Wellington.
- 2 I am authorised to provide this evidence on behalf of the Council.

QUALIFICATIONS AND EXPERIENCE

- 3 I hold the qualifications of Bachelor of Engineering (BE Civil) and Master of Engineering (ME Geotechnical).
- 4 I have over 19 years of experience in the design of geotechnical solutions for developments.
- 5 I am a Chartered Member of Engineering New Zealand, holding the qualification of Chartered Professional Engineer; an International Professional Engineer (NZ); and a Registered Professional Engineer of Queensland (Australia). I am an elected member on the managing committee of the New Zealand Geotechnical Society (NZGS).

CODE OF CONDUCT

- 6 I have read the Code of Conduct for Expert Witnesses set out in the Environment Court's Practice Note 2014. I have complied with the Code of Conduct in preparing my evidence and will continue to comply with it while giving oral evidence before the Environment Court.
- 7 My qualifications as an expert are set out above. Except where I state I rely on the evidence of another person, I confirm that the issues addressed in this statement of evidence are within my area of expertise, and I have not omitted to consider material facts known to me that might alter or detract from my expressed opinions.

SUMMARY

- 8 I have been asked by the Wellington City Council to provide geotechnical evidence in relation to the Proposed Ryman Healthcare's Retirement Village at 26 Donald Street and 33 Campbell Street, Karori, Wellington.
- 9 My statement of evidence addresses matters raised by the submissions, specifically if ground movement and instability during construction works could affect surrounding properties and structures.

EVIDENCE

- 10 I have reviewed the following geotechnical documents to form my evidence:
- 10.1 Tonkin and Taylor Letter (T+T Ref 30309.2000; Dated 13 November 2020).
 - 10.2 Tonkin and Taylor Report (T+T Ref 30309.2000; Dated 21 August 2020).
 - 10.3 ENGEO review letter (ENGEO Ref: 17766.000.000_02; Dated 1 December 2020).
- 11 My statement of evidence is about the identified geotechnical risks that could affect neighbouring properties during construction works: Ground movement, instability and subsidence due to excavations to enable basements construction and vibrations induced by installing foundations (piles, sheet piles, etc...).

- 12 In my opinion, the proposed development can be successfully constructed, if the potential geotechnical risks identified and discussed in the reviewed T+T 2020 report and letter are considered during the building consent and construction stage, with the below recommendations:
- 12.1 All temporary works, foundations and excavations to be assessed and designed by a Chartered Geotechnical Engineer.
 - 12.2 The maximum excavation heights on the earthwork's plans should be provided. It is recommended to include sketches illustrating the excavation sequence and stages at the most critical locations, identified by the Engineer.
 - 12.3 A ground movement monitoring plan should be specified by the design team to monitor induced ground displacements due to excavation and vibration in neighbouring properties prior, during and after completion of critical geotechnical and earthworks activities.
 - 12.4 The monitoring plan should be either prepared or reviewed by a Chartered Geotechnical Engineer.
 - 12.5 The monitoring results should be regularly checked against the temporary works design model to confirm acceptability. All instruments and survey points are recommended to be monitored against proposed "Alert", "Action", "Alarm" (AAA) levels, specified by the engineer. The Contractor shall develop contingency plans to respond to exceedance of "Action Values" and "Alarm Values".
- 13 On that basis, I have no geotechnical concerns that should preclude the proposed development of the site.

Date: 02/08/2022

A handwritten signature in black ink, consisting of a series of loops and strokes, located in the upper right quadrant of the page.