BEFORE THE HEARING COMMISSIONERS AWANUI

IN THE MATTER of the Resource Management Act 1991

(RMA or the Act)

AND

IN THE MATTER of the Proposed Far North District Plan

2022

STATEMENT OF REBUTTAL EVIDENCE OF MARK CHILD (GEOTECHNICAL) ON BEHALF OF WAIAUA BAY FARM LIMITED

11 AUGUST 2025



Mike Holm/Nicole Buxeda PO Box 1585 Shortland Street AUCKLAND 1140

INTRODUCTION

Qualifications and experience

- 1. My full name is Mark Wayne Child.
- 2. My qualifications and experience are set out in my Evidence in Chief (5 May 2025).
- 3. I confirm this rebuttal evidence complies with the Expert Witness Code of Conduct.

Conclusion

4. All considerations raised by the Council's peer reviewer will be, and are required to be, addressed at the resource consent stage. After the section 42A Report was published, the section 42A Report author provided email correspondence confirming the peer reviewer's opinion that "...the rezoning is supported and can be addressed by appropriate design at the consenting stage".

Rebuttal evidence

- 5. This rebuttal evidence is given in response to the Geotechnical Review (**Review**) by Edward Collings of Geologix Consulting Engineers and the s42A Report authored by Jerome Wyeth.
- 6. The Review raises questions regarding sites with steeper topography and concludes 1:

It is therefore expected that the masterplan would be feasible with further geotechnical stability assessment than the report details or the masterplan would require adaption to be able to meet the requirements of the T&T recommendations.

7. Section 4 of the T+T Geotechnical Desktop Assessment (Geotechnical Assessment) attached as Appendix A to my Evidence in Chief details the main geotechnical considerations at each development area located in the proposed Golf Living sub-zone. These considerations include the need to undertake further site-specific geotechnical investigation and design work, typical of that generally undertaken at the development design phase to support resource consent applications.

¹ Geologix Report pg 4.

- 8. Section 4 of the Geotechnical Assessment also details possible slope stability improvement measures that can be adopted to enhance the slope stability to meet the Factors of Safety that Council requires for residential development. The actual extent of investigation, design and stability improvement required at each site is not detailed in the Geotechnical Assessment, because these measures should be developed with consideration of the actual development proposal at each site, which will become known at resource consent stage.
- 9. I consider that with suitable geotechnical investigation and design, that there is ample room in the general vicinity of the proposed development areas to locate building platforms that meet Council's slope stability factor of safety requirements.
- 10. The Review also raises a question regarding whether steeper sloping bush clad areas and landslide features will have a zone around them that do not meet adequate factors of safety for development.² A further comment was made regarding further geotechnical assessment being required in terms of location suitability and development on slopes of up to and over 20 degrees and subject to natural hazards³.
- 11. Section 5 of the Geotechnical Assessment reinforces the need for site specific geotechnical investigation and design given that slope stability presents the biggest geotechnical risk to development, and achieving Council's required factor of safety for residential development presents the main geotechnical challenge in developing the site.
- 12. Section 5 also states my assessment that there are no obvious issues that cannot be resolved through engineered design solutions, and that the building platforms should be confirmed in collaboration with the Design Geotechnical Engineer as the understanding of the ground conditions is developed. I consider that there is ample room in the general vicinity of the proposed development areas to locate building platforms that meet Council's factor of safety requirements for slope stability. Alternatively, if this cannot be achieved and some building platforms extend into areas that currently do not meet Council requirements for slope stability, then the factor

³ Geologix Report pg 3.

² Geologix Report pg 4.

of safety for those building platforms could be enhanced by specific geotechnical investigation and the design and implementation of slope stability improvement measures.

- 13. These recommendations are provided as paragraphs 10(f) and 10(a) of my Evidence in Chief where I state that further geotechnical investigation and analysis should undertaken at future development design stages to assess slope stability and foundation requirements. Further, I state that stable building platforms can be achieved by implementing setbacks from steeper slopes or unstable areas, or by implementing slope stability improvement measures. This work is generally completed as more specific details of the proposed development become known durina development design phase when geotechnical reporting is produced to inform resource consenting processes.
- 14. I note that the consideration of geotechnical matters is required by standard KCZ-S1 and rule SUB-R3 for resource consent applications in the Kauri Cliffs Zone. These provisions appropriately ensure that the further geotechnical investigations and analyses I recommend must be considered in resource consenting processes.
- 15. I therefore consider that there are various solutions to deal with the matters that the Review raises, and subdivision and land use consent applications in the Kauri Cliffs Zone will have to present the preferred solutions to satisfy the assessment matters relating to geotechnical matters.
- 16. With respect to the Review comments on infrastructure and access roading, I refer to the evidence in chief of John Papesch.

Mark Child

11 August 2025