## BEFORE THE HEARING PANEL APPOINTED BY KAIPARA DISTRICT COUNCIL

**Under the** Resource Management Act 1991

In the matter of the hearing of submissions on Proposed Private Plan

Change 83 by The Rise Limited  $\,$ 

# REBUTTAL EVIDENCE OF MELISSA PAMELA PARLANE ON BEHALF OF KAIPARA DISTRICT COUNCIL

(Water supply)

15 March 2024



#### 1. INTRODUCTION

- **1.1** My full name is Melissa Pamela Parlane
- 1.2 I prepared a memorandum provided in support of the section 42A Report in this matter addressing water supply infrastructure dated 26 January 2024.
- 1.3 I hold the position of Asset Management and Capital Services Delivery Manager at Kaipara District Council. I have a Bachelor of Science in Mechanical Engineering from the University of Alberta, Canada. I have 13 years working experience in Northland where I have held roles responsible for project management, infrastructure planning and asset management with a focus on water and wastewater assets.

## 2. CODE OF CONDUCT

2.1 Although I have set out my academic qualifications and experience above, I am presenting this evidence as a Kaipara District Council representative. To the extent that my evidence addressed matters in respect of which I have expertise, I confirm that I have read the Code of Conduct for Expert Witnesses contained in the Environment Court Practice Note 2023 and have complied with it in preparing this evidence. I confirm that the issues addressed in this evidence are within my area of expertise and I have not omitted material facts known to me that might alter or detract from my evidence.

## 3. SCOPE OF EVIDENCE

3.1 This statement of rebuttal evidence on behalf of Kaipara District Council responds to matters arising from the evidence of Mr Bredemeijer for the applicant, in relation to water supply and multi-unit development.

#### 4. EVIDENCE OF MR BREDEMEIJER

- 4.1 Mr Bredemeijer has prepared a primary statement of evidence on behalf of the applicant dated 23 February 2024. The focus of Mr Bredemeijer's evidence is on urban design matters. I am not an urban designer. However, Mr Bredemeijer in his evidence also addresses the issue of water supply and multi-unit developments stating 'In my opinion, subdivision into lots smaller than 600m² is appropriate from an urban design perspective, however I accept that a minimum 600m² lot size is necessary to accommodate an adequate onsite water supply'¹. While Mr Bredemeijer acknowledges the need for a minimum 600m² lot size for water supply purposes, he indicates his support for multi-unit development stating: 'Separate from the subdivision rules stipulating minimum lot sizes, the land use rules enable multi-unit development. From an urban design perspective, it is appropriate to provide for this option'.²
- 4.2 While Mr Bredemeijer may support multi-unit development on one site from an urban design perspective, I have the following technical concerns from a water supply perspective:
  - (a) Multi-unit development will necessarily involve smaller roof areas than conventional one storey development. Applying the table for calculating minimum storage volume (tank size) set out in Mr Rankin's evidence<sup>3</sup> I note that a 2-bedroom town house might have a roof area of only 50m2. It is my opinion that this size roof catchment is insufficient to harvest enough rainwater to supply the unit adequately, irrespective of the available tank volume. I query whether multi-unit development can be designed to adequately supply water from rainwater harvesting alone.

<sup>&</sup>lt;sup>1</sup> Evidence of Mr Bredemeijer, paragraph 6.10.

<sup>&</sup>lt;sup>2</sup> Evidence of Mr Bredemeijer, paragraph 6.11.

<sup>&</sup>lt;sup>3</sup> Evidence of Mr Rankin, Paragraph 5.3(f).

- (b) In addition, where the multi-units have a combined roof catchment, shared tank storage may be required. I query whether this is in the best long-term interests of residents: water usage per unit is inevitably variable and a shared storage has potential to create conflict between neighbours if top-ups are required from water carriers.
- (c) In light of these concerns, I understand that rainwater tanks were not considered to be feasible for town house development proposed as part of Mangawhai Central, and reticulated supply was considered to be needed.
- 4.3 I understand these matters will be addressed further, from a planning perspective by Mr Clease.

Melissa Parlane.

15 March 2024