

Fluid Engineering Consultancy Ltd  
1/6 Hynds Road  
Tauranga, 3112



**Date:** 23.05.2022

**Job Number:** FHD882

**Project:** 240 Kapiti Road

Attention: Nicola Todd

This report has been prepared to support an application to not comply with the permitted activity standard to provide a 10,000-litre water tank for each site regarding the 139-lot townhouse subdivision and land use consent at 240 Kapiti Road, Paraparaumu.

We have based the calculations on the following assumptions:

- The lawn and garden areas will need 5L per M2 of watering per day to maintain healthy colour as per *Yates Lawn Care Recommendations*<sup>1</sup>
- October – March will provide average 72mm of rain per month *based on (NIWA, Publications, Rainfall 3 months – East North Island)*<sup>2</sup>
- Total catchment area of 4800m<sup>2</sup>
- 345,560L/month total water catchment
- 11,520L/day total water catchment
- Total lawn and garden area of 2025m<sup>2</sup>

With the information provided we recommend the following:

- 15 days watering per month. This would use 151,875L/month
- Two weeks or 80m<sup>3</sup> of storage to be held on site. This can be via 2-4 Promax tanks or similar

In conclusion, we believe the two weeks of storage will provide sufficient water to keep the grounds in good condition in between rain during the summer months.

Kind Regards,

A handwritten signature in black ink, appearing to read "Kieran Rutherford", written over a horizontal line.

Kieran Rutherford  
Senior Hydraulic Engineer

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<sup>1</sup><https://www.yates.co.nz/lawn/grow/watering-tips/>

<sup>2</sup> <https://niwa.co.nz/climate/information-and-resources/whats-average-in-my-region>