



PROJECT NUMBER: P22-323
ADDRESS: 65 & 73 Ratanui Road, Paraparaumu

Preliminary Water Demand

Village Domestic Supply

Unit Type	No of units	Population per unit	Peak Occupancy	Daily demand l/p/day	Total l/day
Independent Living Units	260	1.3	338	350	118300
Assisted Living Suites / Serviced Apartments	40	1	40	350	14000
Memory Care Suites / Dementia Suites	20	1	20	350	7000
Care Facility (Suites / Beds)	30	1	30	350	10500
Guests (as per Waikanae)	45	1	45	50	2250
Staff (as per Waikanae)	40	1	40	50	2000
Total					154050
Average Demand (l/s)					1.78
Peak factor (NZS 4404 2010)					2.20
Peak domestic village demand (l/s)					3.92

Est. Residential Yield

235 dwellings
 2.5 ppl/dwelling
 250 L/person/day NZS 4404:2010 6.3.5.6(a)

146875 L/day

1.70 L/s Average daily demand
 2 Peak Daily Demand PF
 3.40

Village Fire Hydrant Demand

12.5l/s from 2 x hydrants (SNZ PAS 4509 FW2) (l/s)	25
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25

Main Building Sprinkler Demand (Dedicated fire main)

Estimated	25.0
Min residual pressure at valve house (kPa)	350

0

Potable (l/s) 3.92
 Fire +2/3 Peak (l/s) 52.62

3.40
 27.27

Notes

Daily demand and peak factor adopted from Waikanae. No allowance have been made for irrigation and outdoor taps.
 Population updated 2024.10.07 to match updated masterplan for Plan Change, Summerset Project 065 Drawing DD.011 Rev 6 dated 15/08/2024
 Sprinkler demand increased from 17L/s to 25L/s, on basis that RMB V2 is a new typology and sprinkler demands not yet well established