

**BEFORE THE HEARINGS PANEL**

**IN THE MATTER** of the Resource Management  
Act 1991

**AND**

**IN THE MATTER** of the Proposed District Plan  
for Waimakariri District

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**HEARING STREAM 12C: LARGE LOT RESIDENTIAL ZONING**  
**SUMMARY STATEMENT OF EVIDENCE OF JAMES MATTHEW PHELPS**  
**HOPKINS**  
**(CIVIL SERVICES)**  
**ON BEHALF OF**  
**RAINER AND URSULA HACK (SUBMITTER #201)**  
**12 JULY 2024**

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## **1. INTRODUCTION**

- 1.1 My name is James Matthew Phelps Hopkins. I have previously provided a statement of evidence (dated 5 March 2024) regarding civil services matters relating to the Submitter's request for the rezoning of their site at 110 Parsonage Road, Woodend.
- 1.2 As per the Hearing Panel's instruction, I have prepared this summary statement of evidence to provide an overview of my position, as outlined in my statement of evidence.
- 1.3 I confirm that this summary statement of evidence has been prepared in accordance with the Code of Conduct for expert witnesses contained in the Environment Court of New Zealand Practice Note 2023.

## **2. SUMMARY OF EVIDENCE IN CHIEF**

- 2.1 Matters addressed in my evidence dated 5 March 2024 included wastewater disposal, stormwater management, flooding, water supply and roading/access.
- 2.2 I understand that this hearing relates to Large Lot Residential Zones (LLRZ) only. While my evidence dated 5 March addressed a site design including a area of Medium Density Residential Zone (MRZ) it applies equally to the LLRZ area, and is summarised below.

### **Stormwater Management**

- 2.3 Stormwater Management requires stormwater quantity mitigation and stormwater quality control for the site.
- 2.4 The site is underlain with silts which will make stormwater discharge to ground impractical.
- 2.5 The site currently drains via overland flow to the roadside drain in Parsonage Road, which in turn discharges to the McIntosh Drain.
- 2.6 The site will require stormwater attenuation to ensure that the peak discharge to the McIntosh Drain is not increased.
- 2.7 It is proposed that stormwater attenuation is provided via "dry" stormwater pond(s), which typically fully drain within 48 hours of cessation of rain. Modelling shows that a pond with a volume of 636 m<sup>3</sup>, depth of 1.3m, a top area of 1,100 m<sup>2</sup> and with an orifice of 190mm is capable of attenuating the

flows from the whole site (i.e. both residential zone and LLRZ) for events up to and including 2% AEP.

- 2.8 The above solution can accommodate the whole site, Large Lot Residential Zone (LLRZ) lots could alternatively be managed via individual roof water tanks with restrictive orifices on each lot. This could be determined at the subdivision consent stage.
- 2.9 Stormwater quality from hardstand areas is proposed to be managed by low impact design solutions, such as rain gardens and swales. These will typically be located close to the source, i.e. beside the road or ROW and this would also apply to the LLRZ zone.
- 2.10 Stormwater discharge quality can easily be managed via modern best practice engineering design including low impact design solutions, for example rain gardens and swales.

### **Flooding**

- 2.1 The site is not subject to area wide flooding in ECan 1:200 flood modelling results.
- 2.2 Standard minor cut to fill operations associated with creating the stormwater management area, roads and allotments, combined with minimum floor levels 400 mm above the road would mitigate flooding risks.

### **Wastewater Disposal**

- 2.3 The site can be served by the existing wastewater pump station located approximately 200 m to the west, on Parsonage Road.
- 2.4 Connection to the pump station via gravity is practicable for the residential zone and this gravity network could be extended further to service the LLRZ.
- 2.5 It may prove to be more cost effective to service LLRZ lots via on-site low pressure pumps rather than gravity. This can be determined at the time of subdivision.
- 2.6 The estimated wastewater flows from the entire site are:

$$ADWF = 0.25 \text{ L/s}$$

$$\text{Max Flow} = 2.5 \text{ L/s}$$

- 2.7 Given the extremely low flows relative to the existing pump station capacity. The need for an upgrade to the pump capacity at the pump station is unlikely, however if it was needed this could be identified and addressed at the time of subdivision.

The LLRZ zone which comprises 6 of the 32 lots accounts for just over 5% of this flow, i.e:ADWF = 0.047 L/s and Max flow 0.47 L/s.

### **Water Supply**

- 2.8 There is no existing reticulated water at the road frontage of the site, but the existing water network could easily be extended approximately 450 m from the existing DN180 PE water main at the corner of McQuillan Avenue.
- 2.9 Extending this water main using DN180 PE pipe would delivered the required flows with acceptable pressure losses per metre of pipe length.

### **Roading and access**

- 2.10 Parsonage Road carriageway adjacent to the south of the site would need to be upgraded for approximately 130 m to the same standard as the recent upgrade for the adjacent subdivision (McQuillans Rd). The standard required would be the same whether the site was zoned as LLRZ or MRZ.
- 2.11 A new internal road and associated ROW's would be required to serve the residential zone land
- 2.12 . The existing access to the existing dwelling would be upgraded to a ROW, and a new ROW coming off this would serve the LLRZ site.
- 2.13 These upgrades can easily be detailed at subdivision consent/engineering design stage.

## **3. CONCLUSIONS**

- 3.1 I confirm my statements made in my original evidence dated 5 March 2024 apply to the LLRZ site and the site can be adequately serviced by standard best engineering practice solutions for water, wastewater, stormwater and roading/access.
- 3.2 Overall, I am able to support the requested rezoning to LLRZ from a civil services perspective.

**JAMES HOPKINS**

**12 July 2024**