

Before the Independent Commissioner  
Appointed by the Selwyn District Council

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Under the Resource Management Act 1991

In the matter of a hearing on Plan Change 79 to the Operative Selwyn District Plan

**Birchs Village Limited**

Applicant

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**Summary Statement of Simon Ian Marshall**

2 May 2023

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**anderson  
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## **Summary of Evidence**

- 1 My name is Simon Ian Marshall
- 2 I prepared a statement of evidence dated 17 April 2023 regarding the infrastructure servicing for Plan Change 79 (**PC79**). The scope of the infrastructure servicing considered includes stormwater, wastewater, and water supply.
- 3 My qualifications and experience are set out in my statement of evidence.
- 4 While this is not a hearing before the Environment Court, I confirm I have read the Code of Conduct for expert witnesses contained in the Environment Court of New Zealand Practice Note 2023 and I have complied with it when preparing my evidence. Other than when I state I am relying on the advice of another person, this evidence is within my area of expertise. I have not omitted to consider material facts known to me that might alter or detract from the opinions that I express.

## **Stormwater**

- 5 Primary stormwater disposal can be managed on the Site with soakage to ground. Groundwater was found to be at a sufficient depth to dispose of the stormwater to ground. This is supported by both Tetra Tech Coffey's groundwater monitoring that was undertaken in April 2022 and the well records from Canterbury Maps.
- 6 Flood mapping was undertaken by Selwyn District Council (**SDC**) indicating areas of inundation and overland flow on the Site for the 1 in 500-year event. Submissions also have raised concerns about flooding on the Site.
- 7 The ponding from the secondary runoff can be managed on the Site through earthworks typically associated with subdivision projects. This includes forming the roads with the subdivided sections elevated above road level. This allows stormwater runoff to be directed away from houses, towards the roads and overland flow paths and stormwater management areas.
- 8 Stormwater attenuation can be provided in a reserve area for stormwater management at the southern corner of the Site. This area can be sized to accommodate options for stormwater attenuation and treatment during the subdivision consent process.

## **Wastewater**

- 9 Wastewater from the PC79 area would be collected in a new sewer network for treatment and disposal at the Pines Wastewater Treatment Plant in Rolleston. This treatment plant has capacity to serve the Site with Selwyn District Council's plans to expand the capacity of the plant.

- 10 There is a capacity constraint that has been identified for the transmission of wastewater from Prebbleton to the Pines Wastewater Treatment Plant through the Prebbleton Terminal Pump Station. Selwyn District Council anticipates that the wastewater transmission capacity in the pump station will be reached between the years 2030 and 2036.
- 11 The wastewater capacity is currently allocated on a first come first serve basis with the expectation that 400 dwellings from PC79 could be accommodated with upgrades to the Prebbleton Terminal Pump Station proposed by Plan Changes 68 and 72. This would enable a realistic development of one dwelling per lot to proceed up to the point where the capacity in the pump station has been fully utilised.
- 12 Incorporation of the PC79 area would help inform solutions to Prebbleton's wastewater transmission capacity when this is addressed in the future.
- 13 Wastewater solutions can also be provided within the PC79 area to minimise the impact on the pump station capacity. This could include low pressure sewer and/or wastewater storage and flow management to the pump station.
- 14 Alternatively, a new terminal pump station and rising main conveying wastewater to the Pines Wastewater Treatment Plant could be provided for the PC79 area. There is also the potential for coordination with adjacent developments. A new pump station could also provide additional capacity that SDC is expected to need in the future so there is also the potential for a cost sharing arrangement to accommodate this. The applicant is willing to work with SDC and adjacent developers to provide wastewater infrastructure upgrades to serve the PC79 and surrounding area.
- 15 Therefore, I have concluded there are a range of options to ensure the future development on the Site can be appropriately serviced for wastewater.

### **Water Supply**

- 16 The existing water reticulation in Prebbleton can be extended to provide water supply to the Site for the realistic development of one dwelling per lot. The water supply network can also be designed to ensure that the required firefighting flows and pressures are available.
- 17 Selwyn District Council are also proposing to upgrade the water supply network in the vicinity of the Site which would accommodate additional growth in the future.
- 18 The realistic development of one dwelling per lot on the Site can be accommodated within the existing consented water take for Prebbleton. Should additional

development take place further in the future this can be accommodated either by the provision of additional water sources or storage to buffer peak flows.

### **Submissions**

- 19 Submissions have indicated concerns around high groundwater levels and ponding after storm events. The groundwater measurements taken by Tetra Tech Coffey and provided by Canterbury Maps indicate the groundwater levels within the Site are sufficiently deep.
- 20 Submissions indicate that flooding occurs during and after storm events. I agree that this occurs however it can be managed as part of the development of the Site by providing stormwater management areas and secondary flowpaths.
- 21 Submissions have mentioned concerns regarding infrastructure servicing. It is my opinion that the PC79 area can be serviced with upgrades and/or additions to the existing infrastructure.

### **Conclusion**

- 22 I conclude that, with respect to stormwater, wastewater and water supply services it will be practicable to develop the PC79 Site in accordance with the proposed Living Medium Density Prebbleton and Business 1 zoning. Water supply, wastewater disposal and stormwater disposal solutions exist that will not generate adverse effects on the receiving environment and any new infrastructure upgrades can be identified during the detailed design of any future subdivision and through the subdivision resource consent process.

**Simon Ian Marshall**

Dated this 2nd day of May 2023