

Summary Statement on Plan Change 74 to the Selwyn District Plan – Three Waters Infrastructure

Prepared for: Craig Friedel, Harrison Grierson

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Prepared by: Shane Bishop, Principal Engineer

Introduction

- My name is Shane David Stephen Bishop. I have prepared a Statement of Evidence as an advisor to Selwyn District Council with respect to Plan Change 74 to the Selwyn District Plan. My qualifications and experience are set out in that statement.
- 2. I have considered the plan change application (Plan Change 74) in relation to the water supply, wastewater system and stormwater network operated by Council which might be impacted by this plan change.
- 3. The potential impacts of this plan change have been considered in the context of ultimately servicing the three waters demands of the current community and other West Melton area plan changes currently submitted (namely Plan Change 67 and Plan Change 77 in addition to Plan Change 74).
- 4. I have read in particular the May 2021 Infrastructure Report by Davie Lovell Smith included in the Plan Change Application, the Statement of Evidence of Mr Jamie Verstappen for Infrastructure dated 13 March 2021, the Statement of Evidence of Mr Marcus Langman on behalf of The Canterbury Regional Council and Christchurch City Council dated 20 March 2023 and supplementary information provided in preparation of my evidence. The following paragraphs summarise my observations and conclusions.

Water Supply

- 5. Currently the physical water supply infrastructure (those assets which abstract, treat, store and pump potable water) has capacity to meet existing demands and part of planned / proposed future growth requirements. Upgrades are required to accommodate additional growth.
- The Council 2021 31 Long Term Plan includes budget for further upgrades on the West Melton water supply to address capacity constraints including new reservoirs (to offset periods of peak demand), new water sources and pipelines to service growth.
- 7. The Applicant has confirmed that the water supply will be designed "to meet firefighting demand as required by the SDC Engineering Code of Practice and SNZ PAS 4509:2008 New Zealand Fire Service Firefighting Water Supplies Code of Practice".

8. I consider that although additional capacity within the network to fully service this and other West Melton plan changes currently submitted is not currently available, capacity upgrades are proposed and planned for, and therefore future water demand from the proposed plan change can be met.

Wastewater

- 9. While the intended servicing plan presented by the Applicant for wastewater within the Plan Change Area could include Local Pressure Sewer (as per Section 5.2 of the evidence of Mr Verstappen), the ultimate configuration would be subject to SDC engineering approval. A case will need to be made as to variance from installation of the gravity collection system. Should Local Pressure Sewer be progressed then mechanisms for monitoring and controls will need to be agreed with Council.
- 10. I accept the conclusion from the Infrastructure Report that the system has capacity to accept and convey flows from the existing catchment and proposed flows from this plan change to the main Rossington Drive pump station and conveyed via a discharge pressure to the Rolleston Wastewater network.
- 11. In response to the evidence of Mr Langman (Paragraph 132) and to provide greater clarity, the wastewater network modelling completed by WSP in December 2020 identified the capacity to accommodate 2,000 lots without modification and up to 2,500 lots with some alterations to the operational philosophy. The combined number of lots including existing connections and projected connections for the proposed plan changes equate to 1,735 lots. The wastewater network would have the capacity to accommodate an additional 265 lots from West Melton without modification.
- 12. The Pines WwTP, which treats the effluent conveyed from West Melton, is designed to be progressively upgraded to accommodate up to 60,000 person equivalents (PE) of incoming flow, with plans to increase the treatment capacity up to 120,000 PE being prepared. The current connected catchment (2023) has a population equivalent of approximately 45,000 PE. Since the preparation of my evidence in December 2022, the installed capacity of the Pines WwTP has been increased to 52,500 PE with the addition of a new Clarifier and planned works in the current calendar year will complete the staged development of the site to 60,000 PE. These upgrades were consulted upon within the 2021/2022 LTP, are planned and budgeted for within the Selwyn District Council 2021-2031 Long Term Plan. Consequently, I consider there is a viable means to treat and dispose of wastewater for this plan change area.
- 13. In response to the evidence of Mr Langman (Paragraph 136) the capacity and timing of upgrades for the Pines WwTP has been assessed with consideration of the wider connected catchment and projected population figures for each community. The design philosophy for the Pines WwTP is the development of treatment components in modules to be installed to meet the increasing demands within the Selwyn Sewerage Scheme. An assessment of treatment and conveyance components has been completed as part of the Council submissions to the Long-Term plan and is currently being modelled to confirm the sizing of the various components and confirm the configuration of an

expanded treatment facility. The initial phases of development are planned and budgeted for within the Selwyn District Council 2021-2031 Long Term Plan.

Stormwater

14. As per Section 4 of the evidence of Mr Verstappen, the Applicant has proposed that stormwater would discharge to ground via soakholes for public areas and roads, and soakholes on private properties / individual sites. This approach is consistent with the surrounding urban development areas. I consider there is a viable means to dispose of stormwater for this plan change area. I would recommend that a stormwater consent is obtained from Environment Canterbury prior to resource consent being applied for from Selwyn District Council.

Overall Conclusion

15. As presented in the evidence of Mr Verstappen, and on assessment of supporting information, there are viable means to provide drinking water, to manage wastewater and to discharge stormwater. On this basis, I support proposed Plan Change 74.