In The Matter	of the Resource Management Act 1991 ("the Act") And
In The Matter of	**Variation 2 Foodstuffs (South Island) Properties Limited, 157 Levi Road, Rolleston Plan Change**

SUMMARY STATEMENT OF HUGH BLAKE-MANSON

Variation 2 Foodstuffs (South Island) Properties Limited, 157 Levi Road, Rolleston

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Introduction

1 My full name is Hugh Maxwell Blake-Manson.

2 I am an Infrastructure Advisor at Waugh Infrastructure Management Limited (Waugh). I was previously employed by City Care Ltd as their Three Waters Contract Manager (2012-2021) and prior to that, Selwyn District Councils Asset Manager Utilities (2004-2012) covering water, wastewater, stormwater, land drainage and waterrace services for the Council (the Council).

3 I led Councils original consent application process for the Rolleston drinking water headworks in the IZONE commercial area and the Pines Rolleston wastewater treatment plant (**PWwTP**) land and air discharge consents.

4 I am authorised to provide evidence relating to water infrastructure on behalf of Selwyn District Council (**Council**).

Qualifications and Experience

5 My qualifications are Master of Water Resource Management, BE (Natural Resources) and I have Diplomas in Asset Management, Assessor (Drinking Water Networks) and Water Treatment (Operator). I am registered as a Chartered Engineer. These qualifications allow me to practice, design, manage and audit any of the following infrastructure: drinking water, wastewater, stormwater, land drainage and water race services.

Code of Conduct

6 I have read the Code of Conduct for Expert Witnesses set out in the Environment Court's Practice Note 2023. I have complied with the Code of Conduct in preparing my evidence and will continue to comply with it while giving oral evidence before the panel. My qualifications as an expert are set out above. Except where I state I rely on the evidence of another person, I confirm that the issues addressed in this statement of evidence are within my area of expertise, and I have not omitted to consider material facts known to me that might alter or detract from my expressed opinions.

Involvement with the Proposed District Plan

7 In 2023 I provided infrastructure evidence on Councils behalf in relation to Part A of the Intensification Planning Instrument (IPI) to the Proposed District Plan (PDP)- Rolleston.

8 With respect to that matter, I provided a summary statement for V1-0114 being CSI Property Limited (CSI) and Rolleston West Residential Limited (RWL).

9 In late 2024, I provided a statement of evidence covering CSI and RWRLs appeal.

Scope of Evidence

10 My statement of evidence covers the following matters:

10.1 Councils strategic, tactical and operations approach to delivery of its water services

10.2 The purpose of physical infrastructure and land including to meet community and environmental demands such as:

(i) levels of service requirements including quality, quantity, reliability and

(ii) efficient and effective utilisation as part of good physical asset management practice

10.3 The timing and importance of staged and managed discharges to Councils Burnham School Road (Rolleston) PWwTP.

11 In preparing my evidence I have considered international, national, regional and district sources including:

11.1 The International Infrastructure Management Manual 2020

11.2 The Councill Infrastructure Strategy 2024

11.3 The Council Waiora One Water Strategy

11.4 The Council Asset Management Policy

11.5 The appellants infrastructure advice particularly that of Mr R. Thielmann covering water, wastewater and stormwater servicing.

Background

12 Council plans for, constructs, maintains and operates, renews and replaces piped and naturalized network, treatment and disposal infrastructure across its territory. In this matter, the infrastructure concerned covers Rolleston's urban and industrial/commercial drinking water, wastewater and stormwater services.

13 This infrastructure is provided for the primary purpose of ensuring the connected consumers health is protected through treatment and delivery of safe to drink water, removal and appropriate treatment and disposal of wastes.

Wastewater

14 Rolleston receives raw wastewater from its own serviced area and Lincoln, Springston, Prebbleton, West Melton, Darfield, Kirwee.

15 Treatment and disposal are via a sequence of biological systems, with separation of liquid and solid waste streams. These are permitted by consents.

Physical Asset Management

16 Councils role as asset owner and manager requires that, for these complex three waters services:

16.1 Asset management principles are adhered to including **efficiency** e.g., assets are installed just in time for effective utilisation of existing capital investment, at the right location and scale and **effectiveness** e.g., to meet current and reasonably foreseeable demand

16.2 Whole of life operations and maintenance activities are minimised through the use of high quality, resilient materials, good work practices and processes and appropriately interlinked networked pumpstations.

17 The condition and performance of treatment infrastructure including land is maintained to the levels of service agreed with regulators and the community e.g., water pressure at the consumers property boundary, and standards for final treated effluent application to land are maintained

18 Council is required to produce infrastructure investment forecasts with underlying detailed rational supporting the request. This includes piped and treatment renewals and capital improvements. These are consulted on through Long Term Plan (LTP) processes. Most recently, Council has agreed on investments required for the ten year period covering 2024/2025 to 2034/2035.

19 The Wairoa One Water Strategy, co-designed with Rūnanga was adopted in December 2024, and reflects both European and te ao Māori social and cultural matters in providing these services

Levels of Service (LoS), Growth and Demand

20 Council has a number of regulatory and community responsibilities e.g., the Water Service Act 2021 requiring compliance with drinking water standards, resource consents to discharge wastewater to land and odours to air and achievement of the agreed community levels of service.

21 In the case of its drinking water supply, Councils objective is to maintain the pressure at the property point of connection of 310 kPa. It does not provide for firefighting Code of Practice requirements inside properties, for example fire water demand requirements in commercial and industrial facilities.

22 In the case of wastewater, Councils network related objective is to ensure that this does not surcharge outside the closed piped network and is treated and disposed of within specified consent conditions.

23 In the case of stormwater, it expects that the primary urban systems will manage 10% annual

exceedance probability rainfall events, and secondary systems must cater for over-design events and occasions when there are blockages in the primary drainage system (minimum 1% AEP rainfall event). The overall system must consider where flows will go when design is exceeded. Discharges arising from new developments must not exceed pre-development levels

Source:- Selwyn District Council Engineering Code of Practice, Section 8.2.2, Stormwater and Land Drainage Resource Constraints and Consents

Growth and Demand

24 Growth and associated demand are driving the need to determine the most effective and efficient methodologies for strategic investment in expansion of existing and new water sources, pipes, pumpstations and treatment plants.

Infrastructure Capacity for the Rezoning

25 Council has allowed for utilisation of this proposed land to accommodate medium density dwellings (MRZ), with a ceiling of 15 households per hectare (hhold/ha).

26 Capacity is available from the reticulated water supply and into the wastewater networks at this density. This is subject to engineering design and approval for connection of the lot at the MRZ density.

27 The basis for the allocation of 15 hhold/ha is outlined below.

Wastewater

28 Council is required to take a prudent approach to managing connections to its network in an orderly and prioritised manner, ensuring that PWwTP treatment and disposal comply with all consents.

29 This is due to the following key factors:

29.1 Access to the PWwTP is allocated to areas with existing networks including satellite townships in accordance with Councils treatment consolidation requirements.

29.2 There is a statutory requirement to provide services to fulfil demand from MRZ zoned land, including Lincoln, Prebbleton and Rolleston.

30 Councils wastewater master plan allows for a maximum density of 15 hhold/ha over the applicants land. This has an equivalent peak instantaneous discharge to its network of 0.34 litres per second pe ha. Staying within the density and equivalent discharge is critical, as receiving network pipes, pumping systems and the PWwTP treatment and disposal systems are designed against these factors.

31 I have expanded further on these key factors below.

32 Council has prioritised transfer of raw and partially treated wastewater from other locations to the PWwTP. From 2025/2026 Upper Selwyn Huts, Leeston, Southbridge and Doyleston's wastewater is

expected to be pumped to Rolleston. From 2027/2028, Tai Tapu wastewater will also be pumped to Lincoln and from there to Rolleston.

33 The current connected catchment (2023) is approximately 54,000 person equivalents (PE) and by end of 2025 is expected to reach 60,000 PE. Critical to the treatment are three bioreactors with combined treatment of 45,000 PE. Through optimisation these and other processes are currently able to manage the loads and flows, though best practice is to allow for a PE buffer to manage shock loading events.

34 There are proposals to increase the treatment capacity up to or beyond 120,000 PE. This will include expansion of the irrigation area to cover 302 ha (currently irrigating 189 ha). This equates to servicing for more than 120,000 PE, or more than 100,000 PE if the largest irrigator is not in operation.

35 Ultimately, additional areas within the 486 ha of land owned and designated by Council and consented in association with the PWwTP could be developed for land based disposal.

36 No significant additional physical works to increase treatment and disposal capacity up to 120,000 PE are planned at the PWwTP until consent variations including air discharge are secured. Depending on market conditions and the complexity of the work, it can take two to five years to complete these infrastructure works.

37 Based on the evidence provided, I am unable to determine what the applicants likely discharge would be, and am therefore unable to determine if this would be within the capacity allocated for the site, should it be developed as allowed for under the current MRZ zoning.

Drinking water

38 Council is required to take a prudent approach to managing connections to its water treatment plants, water network capacity and renewal works. This is to ensure that the water pressure in the network meets the agreed level of service.

39 A strategic review of water sources and treatment is underway, with a focus on obtaining the highest quality source water. This may mean future source water is not obtained within or adjacent to the Rolleston Township

40 The site is zoned for MDRS structures - being up to 11 metres above ground level.

41 Councils master plan allows for MRZ density in Rolleston, including the applicants land of 15 hhold/ha. This allows for a demand of approximately 0.23 litres per connection per hectare – refer Councils Engineering Code of Practice s7.4.1 and a minimum point of supply ‘at boundary’ pressure of 310 kPa.

42 Based on the evidence provided, I am unable to determine what the applicants likely demand for drinking water would be, and am therefore unable to determine if this would be within the capacity assumed for the site or at a pressure that it considered desirable in relation to the proposed rezoning.

Stormwater

43 Stormwater conveyance to and treatment prior to discharge to ground soakage is acceptable in Rolleston.

44 Council has an existing network discharge consent covering parts of Rolleston (CRC132527) though this does not currently cover the applicant's land.

45 The applicant has provided an ODP – see Appendix F. I am unable to determine from this ODP where stormwater will be conveyed, treated and discharged. Further, I am unable to determine the location of secondary flow paths and therefore any potential consequential capacity constraints in Councils network.

46 Developers will be required to obtain consents for construction and operational phase discharge and hold this for at least two years from issue of 224. If the discharge is compliant with both the developers consent and the conditions of Council's, which includes a risk assessment and demonstrated compliance with its network discharge consent, then Council may consider on application, if the discharge can be accepted under its consents.

47 All onsite infrastructure and associated operations, maintenance, renewals, compliance and reporting will remain the responsibility of the appellant.

Other Issues

48 I have been requested to review several submissions and particular points within these submissions relating to servicing. My responses are as follows:

48.1 **V2-06.6** (Canterbury Regional Council). Amongst other matters, the submission refers to protection of groundwater. Councils Engineering Code of Practice requires that the applicant install a sealed wastewater system, treat and dispose of stormwater in a manner that meets regional and Council consent requirements.

48.2 On the basis that wastewater system is installed to the Engineering Code of Practice and stormwater is treated and discharged within consent condition, I am satisfied that this will support protection of groundwater

48.3 **V2-18.1** (Te Ngai Tuahuriri Rūnanga and Te Taumutu Rūnanga). The submission refers to low impact design and management of stormwater. Councils Engineering Code of Practice requires amongst other matters that the applicant provide designs for, install, operate and maintain low impact stormwater systems for at least two years prior to requesting vesting with Council.

48.4 Further, the Waiora One Water Strategy provides strategic direction on this matter, therefore Council sees this as a matter of importance.

48.5 On the basis that the stormwater system complies with these requirements, I am satisfied it will deliver a low impact stormwater solution.

49 It should be noted that development contributions would be payable for development identified by the applicant should the rezoning be supported.

Impacts of the Rezoning on Provision of Infrastructure

50 I have identified previously that there are currently constraints on access to water and wastewater infrastructure in Rolleston. However, I note that an allocation can be attributed to this site, as it is presently zoned for residential purposes, at a maximum of 15 hhold/ha.

51 Councils 30 Year Infrastructure Plan lays out the infrastructure priorities using a risk based approach. It is based on advice to Council from specialist water and wastewater advisors.

Water Network

52 Council is able to currently provide water at a minimum of 310kPa and the property boundary.

Impacts on the Existing Water Network and Water Treatment Plants

53 The existing network and headworks including wells and treatment are currently able to meet the demand of up to an equivalent of a density of 15 hhold/ha. Water quality at the boundary is expected to be provided to Drinking Water Quality Assurance Rules levels. These are stated in the Rolleston Drinking Water Safety Plan.

54 The applicant has identified – refer Appendix M2, an appropriate location to connect to the Council water supply network.

Impacts on the Existing Wastewater Network and Wastewater Treatment Plant

55 The applicant has identified – refer Appendix M2, an appropriate location to connect to the Council wastewater network.

56 The applicant has not identified the potential or otherwise for Tradewaste discharges from the site.

57 Councils Tradewaste Bylaw describes the products and their concentrations that can received by the network and treated at the PWwTP. Any discharges must be in accordance with the Trade Waste Bylaw.

58 A Tradewaste application should be submitted with a building consent.

Conclusion

59 Councils 30 Year Infrastructure Plan lays out the three waters infrastructure priorities using a risk and priority based approach. It is based on advice to Council from specialist water and wastewater advisors, and drives the investment required to meet Councils level of service, growth and demand needs.

60 Priority access to the PWwTP has been provided to areas of satellite townships with appropriate zoning, such as Leeston and its contributing townships; Tai Tapu; those areas with a MRZ zoning enabling densification, and trade waste loads and flows.

61 To enable Rolleston and the connected satellite communities to develop, sufficient treatment infrastructure and land for treated wastewater and biosolids will be necessary.

62 While the applicant has identified there is to be commercial scale demand for water and associated discharge of wastewater and stomwater, they have not provided the order and rate of these discharges e.g., litres per second. Until further information is provided, I am unable to confirm whether there is sufficient capacity in Councils network such that no adverse effects on adjacent properties or the wider network will result.

63 Council has provided for access to a property boundary water supply and discharge of wastewater up to a density of 15 hhold/ha. Associated thresholds and requirements for these services are as follows:

63.1 Council is able to provide water supply to the property boundary at a minimum of 310 kPa but its network is not designed to provide for fire flows where water is extracted within properties.

63.2 Council has allowed for a discharge of wastewater to its network at a density of 15 hhold/ha which is equivalent to a peak instantaneous discharge rate of 0.34 L/s/ha.

64 Should the applicant be able to demonstrate that the commercial scale demand for water and associated discharge of wastewater would not exceed the demand planned for at 15hhold/ha, the point of supply location/s, method and timing of discharge, and other engineering matters can be addressed at the time of subdivision.

65 With respect to primary (internal site) stormwater management, I would expect that this can be achieved through accepted methods of engineering design and treatment. It is however important that the applicant demonstrate, at this time the location/s of stormwater secondary flow path/s along with the order and quality of these discharges.

66 Subject to approval of conditions by Councils, the applicant will be required to obtain stormwater consents and manage these for at least two years.

Hugh Blake-Manson

20 February 2025