BEFORE THE HEARING PANEL ON PROPOSED PLAN CHANGE 17 TO THE WAIPA DISTRICT PLAN

 IN THE MATTER
 of the Resource management Act 1991 (the Act)

 AND
 IN THE MATTER

 of proposed Plan Change 17 to the Waipa District Plan

Evidence of Mathew Philip Dickey on behalf of the Hautapu Landowners

Group

Dated: 26th May 2023

MAY IT PLEASE THE HEARING PANEL

INTRODUCTION

- My name is Mathew Philip Dickey. I am a Chartered Professional (CPEng) Civil and Waters Engineer, working at BTW Company Limited as a Director and Principal Civil and Three Waters Engineer.
- I am providing this supplementary statement of evidence for three waters engineering matters on behalf of the Hautapu Landowners Group (HLG) as submitters on proposed Plan Change 17 (PC17).
- My qualifications and experience are set out in my Evidence in Chief (EiC) dated 13 March 2023. I reaffirm my commitment to adhere to the Code of Conduct for Expert Witnesses contained in the Environment Court Practice Note 2023.
- 4. My supplementary evidence addresses the following matters, as a consequence of the additional timetabling for evidence exchange, which occurred since my EiC was submitted:
 - a) The Joint Witness Statement of Three Waters engineering experts.
 - b) Consideration of any further three waters effects assessment for live zoning the HLG area to Industrial.

CONCLUSION SUMMARY

5. My conclusion and opinion, based on my evidence and the agreed outcomes from the expert caucusing, is that there is no reason from a three waters perspective why the proposed rezoning of the HLG land to Deferred Industrial Zone cannot be confirmed as part of PC17. 6. Furthermore, it is my opinion that there is no reason from a three waters perspective why the proposed rezoning of the HLG land to a 'live' Industrial Zone cannot proceed, given the level of technical information now available and the proposed plan provisions described in the evidence of Mr Chrisp.

THE JOINT WITNESS STATEMENT (JWS) – STORMWATER

- 7. As outlined in my EiC, the two feasible stormwater management discharge approaches for the PC17 area (inclusive of the HLG land) are soakage to ground or constructed wetlands with a controlled discharge to the adjacent Mangaone Stream. Soakage only, stream discharge only, or an integrated combination including both discharge approaches are all feasible discharge options for the PC17 area (inclusive of the HLG land). The optimal solution (considering land use efficiency, ecological enhancement, and best practise stormwater management) is subject to future site investigation and design phases, which will include sitespecific geotechnical soakage testing across the site.
- 8. Following the submission of my EiC, initial engagement with the Waikato Regional Council was undertaken in early April to determine the feasibility of obtaining a stormwater discharge consent for the PC17 development area (inclusive of the HLG land) to the Mangaone Stream, and therefore to assess any initial consenting risk to this approach. In summary, officers considered that there were no technical obstacles to the proposal in gaining stormwater consent (using wetlands), subject to appropriate stormwater design in accordance with the WRC's guidelines, and the appropriate consideration of downstream effects in the Mangaone Stream.¹
- As summarised in the JWS (Three Waters), better stormwater management outcomes than the currently proposed PC17 solution can

¹ Email correspondence with Brian Richmond (WRC), on 11 April 2023.

be achieved through deferred (or potentially live) zoning of the HLG land as part of PC17.

10. As stated in Mr Chrisp's evidence, a key outcome from the three waters caucusing was confirmation that there would be no issues associated with a road passing through the area identified as Basin 4 on the Structure Plan, to provide roading access and a route for underground services (including water and wastewater services) to the HLG land.

THE JOINT WITNESS STATEMENT (JWS) - WATER

- 11. A result of the technical caucusing was that the industrial population to adopt for initial design purposes across the PC17 areas is 30 people per hectare², confirmed by the Waipā District Council. My EiC was completed based on a higher population of 45 people per hectare, which was a conservative selection. This lower design population reduces the water demands previously estimated for HLG, reducing the impact of industrial development across the HLG land on future Council water infrastructure.
- 12. The fire water classification servicing commitment to the current PC17 area was clarified by the Waipā District Council as FW2 only, which differs from the original modelling report produced for PC17³.
- 13. The technical caucusing outcome for water servicing of the HLG land aligned with my EiC, being that water demands of the HLG land are readily serviceable from connection to the planned Waipā District Council C8/C9 and PC17 water supply network.

² Light industrial and dry industry definition.

³ "Water Supply Hydraulic Assessment for Hautapu Industrial Kama Trust Plan Change", WSP Consultants, 12th July 2022

THE JOINT WITNESS STATEMENT (JWS) - WASTEWATER

- 14. Following technical caucusing, I have reviewed the feasibility of gravity pipe network conveyance of the furthest general extents of the HLG land to the currently proposed WWPS2 location^{4 & 5}. The Wastewater Pump Station 2 (WWPS2) depth required to achieve HLG gravity conveyance is initially estimated to be nominally 6 metres Below Existing Ground Level (BEGL) to service gravity pipe conveyance of the HLG land⁶. This depth estimate is deemed feasible, based on the depth of recently designed and constructed WWPS's in Cambridge⁷ and would facilitate the PC17 area being serviced by a single council WWPS⁸, which is desirable for all PC17 stakeholders from cost, land efficiency, and operation/maintenance perspectives.
- 15. As previous, a result of the technical caucusing was that the industrial design population to adopt for initial design purposes across the PC17 site is 30 people per hectare⁹, confirmed by the Waipā District Council. My EiC was completed based on a higher population of 45 people per hectare. This lower population estimate reduces the wastewater flows previously estimated for HLG, reducing the impact of the HLG land on the future Council wastewater infrastructure.
- 16. The technical caucusing outcome for wastewater servicing of the HLG land aligned with my EiC, being that wastewater flows of the HLG land are readily serviceable from connection to the planned Waipā District Council C8/C9 and PC17 wastewater network.

⁴ As outlined in the Section 32 Evaluation Report – Proposed Plan Change 17: Hautapu Industrial Zones, 30 September 2022, Waipā District Council.

⁵ Refer to the wastewater longsection in the additional drawing set attached to this supplementary statement of evidence.

⁶ Subject to detailed design and coordination with the wider growth cell areas.

⁷ Such as the recently commissioned C2 Growth Cell wastewater pump station

⁸ Subject to future engineering and earthworks levels design phases.

⁹ Light industrial and dry industry definition.

FURTHER THREE WATERS ASSESSMENT REQUIRED FOR LIVE ZONING HLG AREA TO INDUSTRIAL

17. In my opinion, there is no further three waters assessment required to support a live zoning of the HLG area, and this could be live zoned as part of PC17 if that outcome is available to the hearing panel, and would be subject to the planning provisions and amended draft Structure Plan proposed in the evidence of Mr Chrisp and as shown in Figure 1 below.



Figure 1: Proposed Area 6 and Area 7 Hautapu Structure Plan

- A larger version of Figure 1 is included as Attachment 1 to my evidence, and a more detailed drawing set showing preliminary wastewater long sections is also included as Attachment 2.
- 19. I consider that there are likely stormwater management and ecological enhancement design advantages in live zoning the HLG land. For example, live zoning would encourage the PC17 stormwater management design to become integrated with the Mangaone Stream and allow for earlier establishment of riparian and wetland planting/ This would likely provide an acoustic and visual barrier between rural

and industrial zoned land, whilst providing additional ecological enhancement opportunities, as described in Item 12 of my EiC.

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Mathew Dickey 26 May 2023 ATTACHMENT 1

ATTACHMENT 2