

**BEFORE THE HEARING PANEL**

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

**AND**

**IN THE MATTER** of an application for a  
proposed Private Plan Change (Private Plan  
Change 28) by CCKV Maitai Dev Co LP and  
Bayview Nelson Limited to the Nelson City  
Council associated with the rezoning of  
approximately 287-hectares of land located  
within Kaka Valley, along Botanical Hill and  
Malvern Hill on land at 7 Ralphine Way,  
Maitai Valley and Bayview Road as detailed  
within the application.

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**S42A SUMMARY REPORT TO THE COMMISSIONERS**

**MR GREG HILL (CHAIR), MS SHEENA TEPANIA, MS GILLIAN WRATT, AND MR NIGEL  
MARK-BROWN**

**SECTION 42A SUMMARY REPORT OF KATE PURTON – STORMWATER AND FLOOD  
RISK, BECA LIMITED, ON BEHALF OF THE NELSON CITY COUNCIL**

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**21 July 2022**

### **Introduction**

1. This summary provides an update for the commissioners based on the evidence heard within this PPC28 hearing to date. It provides summary of the key outstanding matters of concern and should be read in association with:
  - Section 42A Report, Appendix J – Stormwater and Flood Risk memo from Kate Purton to Gina Sweetman, dated 28 May 2022.
  - Section 42A Addendum, Appendix I - Addendum Stormwater and Flood Risk memo from Kate Purton to Gina Sweetman, dated 27 June 2022.
2. I note that my original Stormwater and Flood risk memo included in the Section 42A report was prepared before the applicant's evidence including the Stormwater Management Plan was provided.
3. My conclusions from my original memo and my addendum memo remain valid.

### **Areas of disagreement**

4. In my opinion the key areas of difference between the applicant's stormwater and flood risk experts and me are:
  - a. The sufficiency of the information provided.
  - b. The suitability of the proposed PPC28 plan provisions.

### **Information provided**

5. In my opinion, at plan change stage sufficient information is required to understand the stormwater and flood risk effects of future development of the site, the proposed stormwater and flood risk management system, and whether this is sufficient to mitigate these effects.
6. The Stormwater Management Plan (SMP) shows good progress in advancing the understanding of the stormwater and flood risk issues and their proposed management, however there are still gaps and inconsistencies in the information provided in the SMP and the applicant's evidence. For instance:

- a. The stormwater treatment and attenuation devices tabulated in the SMP Tables 5.3, 5.5 and 5.6 do not directly correlate with the stormwater treatment and attenuation device areas shown in Figures 2 and 4 of Appendix A of the SMP. There are also inconsistencies within Tables 5.5 and 5.6 that need to be resolved.
- b. The SMP text refers to off-line or on-line attenuation (detention) basins, Schedule X.9 item 11 refers to locating detention within the blue-green corridor, and the SMP Appendix A shows the two largest stormwater attenuation devices over the Kākā Stream (i.e. as on-line devices). During the hearing it has been clarified by Mr Farrant and Mr Markham in their responses to questions from the hearing panel that detention could be either off-line or on-line. This needs to be resolved before any development is undertaken. While off-line devices could be designed for a local sub-catchment, on-line devices would need to allow for future development in the upstream catchment. The related multi-disciplinary effects of such on-line devices also need to be addressed (e.g. habitat, natural character and geotechnical).
- c. There is limited information provided on the hydraulic modelling of the proposed stormwater attenuation devices. Some information on the hydrological modelling is provided. Clear information should be provided on the proposed attenuation option modelled, how this was modelled (including model assumptions and inputs), and the model results to demonstrate performance and therefore feasibility of the proposed attenuation system.
- d. The plans included in the SMP Appendix A and graphic attachments included Mr Milne's landscape evidence and rebuttal are inconsistent with regard to the layout of the Kākā stream realignment, riparian zone and stormwater treatment device adjacent to this. This needs to be resolved before any subdivision development in this area or in the area serviced by this stormwater treatment device is undertaken.
- e. There is limited information provided on the hydraulic modelling of the proposed Kākā Stream realignment. Some information on the hydrological modelling is provided. Clear information should be provided on how the realigned Kākā Stream has been modelled (including model assumptions and inputs), and the model results provided to demonstrate that the proposed footprint is feasible.

- f. There is limited information on the proposed stormwater and flood risk management approach for the Walters Bluff/Brooklands catchment (north of the ridge) and no information on the proposed stormwater and flood risk for the Maitai River sub-catchment to the west of the Kākā Stream.
- 7. The above list provides examples but is not exhaustive.
- 8. In my opinion, the stormwater design has not been developed sufficiently:
  - a. To demonstrate the feasibility of the proposed stormwater and flood risk management approach to mitigate the effects of future development of the site (including cumulative effects).
  - b. To provide certainty for future subdivision/development of any portion of the PPC28 area with regard to overall stormwater and flood risk management.
- 9. Refer to my addendum memo and original memo for further detail.

**Proposed plan provisions**

- 10. During the hearing there have been references to how the design will be advanced and the site developed by the applicant and their team. However, if the site is rezoned through PPC28, the future development of the site may be by the applicant and their current team or may be by others, and the development may be staged or piecemeal. The plan provisions need to be clear and robust and allow for all eventualities.
- 11. While much of the applicant's evidence refers to the Stormwater Management Plan, it is not currently clear how the current SMP (as included in the applicant's evidence) is incorporated into the proposed PPC28 plan provisions.
- 12. Schedule X.13 refers to a Stormwater Management Plan being submitted with any application for subdivision or development, however it is currently not clear what needs to be included in this and how this relates to the current SMP.
- 13. This needs to be resolved in a way that requires a site-wide SMP that provides clear and unambiguous over-arching requirements and also requires individual development/subdivisions to provide more detailed information for their area.

14. Schedule X.9 provides ecological outcomes or principles for stormwater management. While I am generally in agreement with these, they need to be translated into clear standards in the body of Schedule X which future development is required to achieve to mitigate stormwater and flood risk effects.
15. Without clear requirements in the PPC28 plan provisions, the Nelson Tasman Land Development Manual (NTLDM) would be the default standard under the current NRMP. However, many aspects of the applicant's proposed stormwater and flood risk management approach for PPC28 go beyond the requirements of the NTLDM (e.g. proposed stormwater treatment, retention and extended detention). The applicant's effects assessment is based on their proposed approach, but without appropriate rules future development could revert to the NTLDM requirements.
16. In addition to this there are site-specific issues which, in my opinion, need clear PPC28 provisions beyond the current NRMP provisions and NTLDM requirements (e.g. 1% AEP flood levels and minimum floor levels, effects of filling with the floodplain, cumulative downstream effects of detention storage in multiple sub-catchments, and the potential Kākā stream realignment).
17. In my opinion further work is required on the proposed plan provisions to clearly set out the stormwater and flood risk management requirements for the site, and how it shall be demonstrated that these have been met.
18. I have provided further detail and suggestions regarding the plan provisions in my original memo (paragraphs 70 to 76), in my addendum memo (paragraphs 31 and 33), and to Ms Sweetman to assist with her discussions with Mr Lile.

**DATED** this 21<sup>st</sup> day of July 2022



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**Kate Purton**