

BEFORE THE WAIPĀ DISTRICT COUNCIL

IN THE MATTER of the Resource Management Act 1991

AND

IN THE MATTER of Proposed Plan Change 20 – Airport Northern
Precinct Extension to the Operative Waipā
District Plan

SUMMARY STATEMENT OF EVIDENCE OF SCOTT DEAN KING

THREE WATERS INFRASTRUCTURE

14 March 2023

1. My name is Scott Dean King.
2. I am the Regional Engineering Manager at Harrison Grierson, based in Hamilton. My qualifications and experience are set out in my Primary Statement of Evidence.
3. The 3 Waters Infrastructure Assessment Report for the Northern Precinct which I authored in support of the PC20 plan change request demonstrated that there are adequate and appropriate options to service the Northern Precinct from a 3 waters infrastructure perspective.

Stormwater Management

4. A solution has been provided for managing stormwater within the Northern Precinct site that demonstrates that an appropriate stormwater management outcome for the Northern Precinct can be achieved. Stormwater will be managed with a combination of road soakage swales and on-lot soakage systems for storm events up to and including a 10-year storm. Larger storm events, up to and including the 100-year storm, can be attenuated within communal detention areas (including within the multi-use bat habitat area), with controlled discharge points to the Nukuhau Stream network to the west, and the existing drain along Raynes Road to the east (prior to eventual discharge into the Waikato River).
5. The solution outlined for stormwater management will see the site self-managing stormwater effects within its boundaries, mitigating any effects on the downstream receiving catchments. In addition, due to the provision of pre-treatment for any stormwater runoff, combined with at-source soakage, I consider that the proposed stormwater solution for the site will provide an overall improvement with regards to the quality of stormwater discharge from site when compared to the potential stormwater runoff quality that could occur from the site in rural/pastoral use (e.g. runoff that has been in contact with on-surface cattle excrement).
6. The final design will be refined with modelling at detailed design stage, which might lead to changes in the final basin sizes and configurations that have been indicated to date as part of the conservative assessment done to support PC20.

Water Supply

7. Liaison with Waipa District Council with regard to water supply has established that the predicted water demand for the Northern Precinct can be supplied from the Pukerimu Water Supply scheme. Ultimately the Northern Precinct will be connected to the existing Waipa District Council water supply network in the Western Precinct, Southern, Central and Raynes Precincts.
8. Provision of a water supply ring main linking all the Airport Business zone Precincts together will benefit the area by improving resilience for the wider area. Initial stages of the Northern Precinct development would be supplied by a single line extended into the site from one adjacent existing Precinct. If required for pressure and supply purposes (potable and firefighting), then a reservoir and pump station would be included as part of works to develop the initial stages. This will be investigated further during the detailed design process.
9. The water mains, and associated water supply infrastructure, within Northern Precinct will be sized at the time of detailed design to provide at least an FW3 Level of Service, and to meet the Regional Infrastructure Technical Specification (RITS) and the NZ Fire Service Fire-Fighting Water Supply Code of Practice (SNZ PAS 4509:2008).
10. A key element of an FW3 Level of Service is that it provides sufficient water pressure and flows to enable building owners the option of incorporating fire protection sprinkler systems in their buildings.

Wastewater

11. Liaison with Waipa District Council has established the preferred method of wastewater servicing for Northern Precinct is to connect to the proposed Metro Wastewater Treatment Plant scheme.
12. Wastewater from the Northern Precinct can be serviced via a low-pressure wastewater system discharging to a central collection manhole and pump station, connected via pumped rising mains to the Metro wastewater scheme that is intended to cater for the long-term wastewater servicing of the area.
13. In advance of the availability of the Metro wastewater scheme, untreated wastewater can be pumped from the central collection chamber and trucked to the Cambridge Wastewater Treatment Plant (an arrangement that is already in place and operating on the adjacent Southern and Central Precincts).

14. In the situation of significant delay (or abandonment) of the provision of the Metro wastewater scheme, the alternative long-term solution for wastewater would be to provide the wastewater collection chambers with on-site package treatment plants discharging to on-site land disposal beds. It is noted that resource consents are already in place for a similar solution for the adjacent Southern and Central Precincts.
15. The provision of a central pump station in the Northern Precinct, connected to the Metro wastewater scheme, also provides the potential for other Precincts to be connected into the Northern Precinct pump station, and thus the Metro wastewater scheme.

Rebuttal Evidence

16. In my statement of rebuttal evidence, I responded to the evidence of:
 - (a) Mr Bruce Cuff on behalf of Joan and Robin Cuff.
 - (b) Denzil Govender on behalf of Hamilton City Council.
17. In Mr Cuff's statement of evidence, he raised a number of points directly related to the proposed 3 waters infrastructure servicing of the Northern Precinct site. My Primary Statement of evidence responded to the initial general concerns raised in the Cuff submission, however I expanded in my rebuttal statement on some specific stormwater servicing concerns raised in Mr Cuff's evidence.
18. In Mr Govender's statement of evidence on behalf of Hamilton City Council, he noted that there are indications within the PC20 documentation that the Airport and surrounding precincts are committed to connecting to the future proposed Metro wastewater scheme when it is available. Mr Govender then stated that he considers that these commitments need to be strengthened, and that the Northern Precinct development should be staged, with 'triggers' added to the plan regarding the requirement to connect to a public wastewater treatment solution.
19. My Primary Statement of evidence addressed this point as it was raised in the original Hamilton City Council submission. In my rebuttal evidence, I reconfirmed that, whilst servicing the Northern Precinct with a public wastewater solution (namely connection to the Metro wastewater scheme) is the preferred outcome, it has also been demonstrated – with specific reference to the existing scenarios for the adjacent Southern and Central Precincts – that until a public wastewater solution is available (or in the absence of one) suitable alternative non-public wastewater solutions are able to service the site.

20. As such, there are no wastewater infrastructure reasons why development of the Northern Precinct needs to, or should be, conditioned or staged on the availability of the future proposed Metro wastewater scheme.

Additional Rebuttal Evidence

21. After the period for rebuttal evidence closed, Mr Hickey filed a statement of evidence, which I respond to below.
22. My Primary Statement of evidence responded to the initial general concerns raised in Mr Hickey's submission, however I expand below on some specific additional concerns raised in Mr Hickey's evidence that I had not previously addressed.
23. Mr Hickey's evidence raised concerns over stormwater management across the site, and recommends the stormwater ponds be part of the development.
24. As set out in my Primary Statement of Evidence, the design proposal already provides for stormwater detention basins on the site in addition to at-source soakage systems with pre-treatment. These basins will collect, store and slowly release flows to the existing offsite watercourses that surround the site, at a controlled rate that doesn't exceed the existing situation.
25. In addition, Mr Hickey's evidence raised concerns over the potential for spillages of chemicals once the site has been developed and occupied. Mr Hickey recommends implementing specific planning tools in relation to this.
26. Whilst concerns around the potential for such spillages are appreciated, the issues and protocols around the use of hazardous chemicals in the workplace are already well covered in the Health and Safety at Work (Hazardous Substances) Regulations 2017. As such, I do not consider that additional provisions are required to PC20 to cover this matter.

Scott Dean King
Harrison Grierson

14 March 2023