

BEFORE THE HEARING COMMISSIONER

IN THE MATTER of the Resource Management Act 1991

AND

IN THE MATTER of an application to Hamilton City Council for Private
Plan Change 7 to the Hamilton City District Plan by
Green Seed Consultants Limited

**SUMMARY STATEMENT OF CHRISTOPHER ALLINGTON HARDY
(WATER AND WASTEWATER INFRASTRUCTURE)
Dated 27 OCTOBER 2021**

INTRODUCTION

1. My full name is Christopher Allington Hardy.
2. I am a Chartered Engineer (CPEng) in New Zealand and hold the qualification of BE (Civil) from the University of Auckland, 2003, and NZCE (Civil) from the Waikato Polytechnic, 2000.
3. I am an Associate Director at AECOM Hamilton. I have held a position with AECOM since 2010. Prior to that I worked as a civil engineer with MWH NZ Ltd. I have 21 years of experience as a civil engineer working on stormwater, water and wastewater (three waters) networks.

CODE OF CONDUCT

4. I have read the Code of Conduct for Expert Witnesses contained in the Environment Court Practice Note 2014 and have complied with that practice note in preparation of this statement. I agree to comply with it in presenting evidence at this hearing. The evidence that I give is within my area of expertise, except where I have stated my reliance on other identified evidence. I have considered all material facts that are known to me that might alter or detract from the opinions that I express in this evidence.

SCOPE OF EVIDENCE

5. I have been retained by HCC to provide water supply and wastewater infrastructure and servicing advice relating to the Private Plan Change 7 application by Green Seed Limited (**the applicant**).
6. I have been involved in planning for development in the wider Rotokauri Structure Plan Area, including Rotokauri North, as part of the development of the Rotokauri Integrated Catchment Management Plan (**ICMP**) for Hamilton City Council (**HCC**).

7. I have also been involved in the development of the Hamilton City Wastewater Masterplan and the assessment of a number of individual development proposals for impact and suitability in association with the city Wastewater Network Hydraulic Model which AECOM operates and maintains on behalf of HCC.
8. The purpose of this statement of evidence is to address matters raised in the application relating to water supply and wastewater infrastructure and consideration of submissions in this regard.
9. In preparing this evidence I have reviewed the following:
 - a) Rotokauri North Sub-Catchment Integrated Catchment Management Plan, Green Seed Consultants Limited, September 2021 (**the ICMP**);
 - b) Rotokauri North Sub-catchment ICMP – Water and Wastewater System Report, Bloxam Burnett & Oliver, 30 July 2021 (**the System Report**);
 - c) Memorandum from Bloxam Burnett & Oliver to Jamie Sirl (Hamilton City Council, dated 3 August 2021) in response to a review by AECOM of the initial versions of the two documents listed above.
10. My summary statement covers the following:
 - a) Summary of my review of the ICMP and the System Report.
 - b) Plan change rule provisions.
 - c) Comment on the Applicants Evidence.
 - d) Response to submissions.
 - e) Conclusion.

REVIEW OF THE ICMP AND THE SYSTEM REPORT

11. I undertook a review of initial versions of the ICMP and the System Report in July 2021.
12. A meeting was held on 27 July 2021 between representatives of BBO and HCC to further discuss aspects of wastewater servicing. I did not attend the meeting but sought feedback from HCC in regard to the outcomes of the meeting which were relevant to my review.
13. I reviewed a second revision of the System Report in August 2021, with consideration of the outcome of the meeting held on 27 July 2021 between representatives of BBO and HCC. The outcome of the review was presented in a letter titled *Rotokauri North Plan Change - Water and Wastewater Review (Revision 2 technical report from BBO), 1 September 2021* which is included in Appendix D to the s 42A report.

RULE PROVISIONS

14. I confirm I was involved in the development of the proposed rule provisions. In my opinion the rule provisions adequately address the outcomes of my review, and the matters discussed at the 27 July 2021 meeting between representatives of BBO and HCC.
15. In my opinion the proposed rule provisions are appropriate and will ensure that further assessment and design is undertaken to the satisfaction of HCC.

APPLICANT EVIDENCE

16. I have reviewed the relevant water and wastewater section of the evidence of Mr Eugene Vodjansky.

17. Section 2.5 and Section 4.2 relate to water supply and state that *'a 450 mm bulk main and 250 mm trunk main will be extended from the intersection of Arthur Porter Drive and Roger Kauai Place, along the future East-West Arterial'*.
18. While the above statement is correct in concept, I note that the stated diameters are considered minimums to be confirmed in association with location and extent, following further assessment and detailed design in consultation with HCC as per the proposed rule provisions.
19. Sections 2.7, 5.1 and 5.3 relate to wastewater but incorrectly contain statements associated with water supply.
20. I note that the stated wastewater parameters are to be confirmed in association with location and extent, following further assessment and detailed design in consultation with HCC as per the proposed rule provisions.

SUBMISSIONS

Submission No.34 – Richard Ruske

21. The submission from Richard Ruske makes the following general statement regarding infrastructure:

There is a lack of clarity as to how the RNSP provides for connectivity of infrastructure to adjacent and/or upstream land, such as the subject site. There is insufficient information to determine if upsizing of infrastructure will cater for wider network growth which could be enabled by the RNSP. [underline added]

22. The subject site is bounded to the north-east by the RNSP area as stated in the submission. The western extent of the subject site is approximately along a ridgeline that roughly follows Burbush Road. The ridgeline represented the boundary between the northern and southern

development areas of Rotokauri in the Rotokauri ICMP for the purpose of wastewater servicing.

23. The subject site is in the southern area of Rotokauri and is not anticipated to be serviced by the wastewater network proposed within the RNSP. Gravity discharge from the subject site may or may not be across the eastern corner of the RNSP area and this will need to be confirmed in detailed assessment and design.

a) Rule provisions are included in the Rotokauri North Plan Change requiring that:

b) A report is prepared by a suitably experienced and qualified professional shall be submitted with any resource consent application for any development requiring wastewater infrastructure or connection to existing wastewater infrastructure.

c) The report shall identify the strategic infrastructure required to service the early development areas inclusive of capacity allowances to service other parts of the Rotokauri North sub-catchment area.

d) All permanent wastewater infrastructure required to service the development shall be constructed to the final size required to service future upstream areas identified in the assessment.

24. The assessment and reporting required by the rule provisions are intended to confirm the extent of the area serviced by the northern wastewater network, including in the vicinity of the subject site. The servicing of any part of the subject site will be confirmed as part of the assessment. The balance of the subject site will be serviced in the southern network as indicated in the Rotokauri ICMP.

25. The proposed trunk water network is a reticulated (looped) network that has been required by HCC based on network modelling and master planning. The proposed network can service all the Rotokauri Structure Plan Area (north and south) including the subject site. The final layout is subject to final design and approval by HCC with consideration of wider area requirements.

CONCLUSIONS

26. It is my opinion that Rotokauri North, including the area covered by PC7 can be adequately serviced regarding water supply and wastewater.
27. The proposed rule provisions are appropriate and will ensure that further assessment and design is undertaken to the satisfaction of Hamilton City Council.
28. Further assessment and design should address aspects including the servicing of the wider Rotokauri North structure plan area and uncertainty associated with the boundary of the respective northern and southern wastewater networks.

Christopher Allington Hardy

27 October 2021