BEFORE THE HEARING PANEL

IN THE MATTER of the Resource Management Act 1991

AND

IN THE MATTER of Proposed Plan Change 9 to the Operative Hamilton

City District Plan

STATEMENT OF REBUTTAL EVIDENCE OF JOHN KINROSS MCKENSEY

(Lighting - Significant Natural Areas)

Dated 12 May 2023

LACHLAN MULDOWNEY

BARRISTER

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INTRODUCTION

- 1. My full name is John Kinross Mckensey.
- 2. My qualifications and experience are as set out in paragraphs 3 to 6 of my primary statement of evidence dated 14 April 2023 (**primary evidence**).
- I reconfirm that I have read and am familiar with the Code of Conduct for Expert Witnesses in the Environment Court Practice Note 2023 and I agree to comply with it.

PURPOSE AND SCOPE OF EVIDENCE

- 4. The purpose of this rebuttal statement of evidence, provided on behalf of Hamilton City Council as Plan Change 9 proponent, is to address the submitter evidence prepared by Ms Ashiley Sycamore, Planner for the Director-General of Conservation (**DOC**) and Dr Kerry Borkin, Ecologist for DOC, in relation to lighting matters.
- 5. I note that neither Ms Sycamore nor Dr Borkin profess expertise in lighting.

EXECUTIVE SUMMARY

6. I agree that any added outdoor lighting should have a colour temperature of 2700K but disagree with the proposed change to timer duration for security lighting from 5 minutes to 1 minute.

RESPONSE TO MS ASHILEY SYCAMORE

Paragraph 24: I agree with 2700K for lighting colour temperature and this
is consistent with my primary evidence. I disagree with a timer duration of
1 minute and recommend 5 minutes for reasons discussed in my primary
evidence.

8. Paragraph 25: The wording I proposed for rule 25.6.4.X at paragraph 46 of my primary evidence is the same as proposed at Ms Sycamore's paragraph 24, other than the timer duration for security lighting. In my opinion, the rule as worded in my primary evidence is sufficient without the need for further measures.

RESPONSE TO DR KERRY BORKIN

- 9. Paragraph 16.2: I disagree. While setbacks of 50m or more may be possible in a greenfield area, they are not achievable in an existing built area. In addition, the present level of activity of the NZ long-tailed bat in such locations is so with the present building setbacks and spill light, which are estimated to be similar to that proposed by the examples provided in my primary evidence.
- 10. Paragraph 16.3: I agree that 0.1 lux would be a preferable limit to 0.3 lux, but in my opinion, it is impractical in an existing built environment. In fact, any limit is impractical to mandate in a location where a development already exists by right and could potentially exceed any such limit. Hence, no such limit has been proposed, but instead, mitigation measures are proposed to achieve the minimum light spill practical.
- 11. Paragraph 16.4: I agree in principle that other methods should ideally be considered if lower lux or greater setbacks cannot achieve lower light levels in a SNA, but I consider that the proposed measures are impractical to implement in existing built areas.
- 12. Paragraph 17: I agree with Dr Borkin's discussion about colour temperature in principle and rule 25.6.4.X addresses these principles as far as reasonably practicable in my opinion.

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13. Paragraph 18: There are matters stated in this paragraph with which I disagree, particularly the reference to products available on the Lighting Direct website. I replicated Dr Borkin's search and none of the 19 products that appeared were complete outdoor light fixtures. They were all bare lamps for use inside a light fixture or in 2 cases they were indoor downlights. Reviewing each of their outdoor fully down facing security lights, all were listed as 3000K or 4000K. However, any such issues are irrelevant since Dr Borkin's recommendation for 2700K lighting is consistent with the recommendations in my primary evidence at paragraphs 26 and 46.

CONCLUSION

14. I agree with the submitter's recommendation to use 2700K lighting and note that this is consistent with the recommendations in my primary evidence.

15. I disagree with the proposal to use a security light time of 1 minute in lieu of 5 minutes as recommended in my primary evidence.

John Kinross Mckensey

12 May 2023