IN THE MATTER OF the Resource Management Act 1991

AND

IN THE MATTER OF Proposed Private Plan Change 56 to the Matamata Piako District Plan by Lockerbie Estate Limited and Lockerbie Estate No.3 Limited to rezone approximately 78 hectares of land at 76 Taukoro Road, 182 Morrinsville-Tahuna Road and Lockerbie Street from a Rural Zone (with a Future Residential Policy Area Overlay) to a Residential and Medium Residential Zone with supporting Development Area Plan.

STATEMENT OF EVIDENCE OF RICHARD MONTGOMERIE

ECOLOGY

4 JULY 2022

INTRODUCTION

1. My name is Richard Montgomerie. I am the freshwater ecologist representing Lockerbie Estates Ltd and Lockerbie No.3 Limited ("Lockerbie") in their private plan change application to Matamata Piako District Council.

2. I hold the qualification of MSc from the University of Otago (1997). I am a member of the New Zealand Freshwater Sciences Society and have worked as a freshwater scientist and environmental consultant throughout New Zealand and in Europe since 1998. I specialise in monitoring and assessing the water quality and ecological effects associated with a wide range of activities including discharges to water, land use change, water takes, damming and diverting water.

3. I have managed a large number and diverse range of environmental effects assessment projects in the Waikato Region in the past 20 years, including industrial wastewater discharges, stormwater discharges, catchment flood protection related activities, hydro-electricity, landfill and mining related discharges and land development.

Code of Conduct for Expert Witnesses

4. I am familiar with the Code of Conduct for Expert Witnesses (Environment Court Consolidated Practice Note 2014) and although I note this is a Council hearing, I agree to comply with this code. The evidence I will present is within my area of expertise, expect where I state that I am relying on information provided by another party. I have not knowingly omitted facts or information that might alter or detract from opinions I express.

SCOPE OF EVIDENCE

5. My evidence is based on the reports my colleagues and I prepared in August 2021 for Lockerbie. titled "182 Studholme Street Plan Change Ecological Assessment" and November 2019 '162 Studholme Development Ecological Assessment. The assessment of ecological characteristics within the plan change area involved a review of relevant literature and ecological surveys to assess ecological values and effects of the proposed plan change.

6. I became involved in the assessment of the plan change area in 2019 when I was engaged by the Lockerbie to assess the ecological effects of the 162 Studholm Road portion of the plan change area. I visited the 182 Studholm Road portion of the plan change area on 16 June 2022, when this portion of the site was added into the plan change application. I have reviewed and had

input into the Development Area Plan and the draft stormwater management plan prepared by Maven Associates as part of the plan change application.

7. The land is currently zoned Rural within the Matamata Piako District Plan ("MPDP") and has been identified for future residential development through the Future Residential Policy Area Overlay that applies to the site. In this statement of evidence, I do not repeat the description of the site or the plan change and refer to the summary of the application in the evidence of Ms Kathryn Drew, Planner.

EXECUTIVE SUMMARY

8. The terrestrial and aquatic ecological values of the proposed plan change area and immediate environs reflect the highly-modified nature of the environment. The proposed plan change area is currently used for intensive dairy farming and is dominated by high production pasture, with some exotic weedy hedging and mature exotic trees.

9. The aquatic and terrestrial ecological values of the proposed plan change area are low. The most notable ecological feature is a highly modified watercourse and small wetland area on the 182 Studholm Road portion of the plan change area and a highly modified watercourse on the 162 Studholme Road portion of the plan change area. The watercourses are partially fenced, channelised with poor quality instream and riparian habitat. The watercourses support an invertebrate community indicative of very poor ecological health and only appear to support shortfin eels.

10. The plan change provides the opportunity to restore, protect and enhance the current low aquatic ecological values. Implementing the recommendations set out in my evidence will enhance the aquatic and terrestrial ecological values within the plan change area and will meet the broader objective of improving water and aquatic habitat quality in the wider Piako River catchment. It will also meet the relevant objectives of the National Policy Statement for Freshwater Management ("NPS-FM").

TERRESTRIAL ECOLOGY

11. Bird species identified within the 182 Studholm Road portion of the proposed plan change area and the historic records in the local area comprise common species typical of rural and urban areas and therefore in my opinion avifauna are not a constraint to developing that portion of the site.

12. The 182 Studholm Road portion of the proposed plan change area contains very poor habitat for native skinks and therefore in my opinion skinks are not a constraint to developing that portion Studholme of the site.

13. The 182 Studholm Road portion of the proposed plan change area does not contain habitats suitable for bat roosting or foraging and therefore in my opinion bats are not a constraint to developing that portion of the site.

FRESHWATER ECOLOGY

14. The proposed plan change site contains two highly modified watercourses – Watercourse S2 and Watercourse S3 that join immediately north of Taukoro Road.

15. Watercourses within the proposed plan change area comprise overland flow paths, artificial, or modified watercourses based on the Waikato Regional Plan definitions. The watercourses and their classifications are shown on Figure 1 in **Attachment 1** to my evidence. **Attachment 1** also includes an overview of the site inclusive of the watercourse lengths and wetland areas within the plan change area.

16. The overland flow paths were characterised by the absence of surface water with poorly defined channels, no riparian vegetation or streambed sorting processes and the channel was overgrown with pasture grass.

17. The artificial drains are mostly intermittent and provide limited if any aquatic habitat with riparian vegetation comprising pasture.

Watercourse S3

18. Watercourse S3 is a highly modified stream with ephemeral, intermittent and perennial sections that lacks riparian vegetation and has been significantly widened and deepened in places. At the time of the survey of the 182 Studholme Road property there was no water in the channel, which appeared to have been dry for some time as evidenced by the absence of aquatic vegetation and low soil moisture. The banks of the channel are eroded and support mainly pasture grass and weed species. Watercourse S3 currently provides highly modified, poor-quality habitat capable of supporting aquatic animals and plants that are able to exploit poor quality habitat.

19. The lower perennial section of Watercourse S3 has similar characteristics to the upstream ephemeral section but with more surface water diffusely spread across the gully.

20. There are six culverts on the modified section of Watercourse S3. Two of the culverts are perched and are likely to be a total barrier to fish.

21. Within the 182 Studholme Road portion of the plan change area there is one small (565 m^2) wetland (as per the definitions in the NPS-FM) associated with Watercourse S3.

22. Invertebrate communities within Watercourse S3 were not sampled on the day of the survey because there was insufficient surface water in the waterways on the site. However, invertebrates were collected in Watercourse S3 in 2019 by Wildlands (unpublished report). Results from that survey show that Invertebrate taxa richness was low (15 taxa) and the MCI score was 70 placing it in the 'poor' stream health category.

23. No fish were recorded from within the 182 Studholm Road portion of the proposed plan change area due to the absence of surface water. Previous surveys by Wildlands in 2019 only found shortfin eels of the lower reaches of Watercourse S1 and S3.

24. Environmental DNA ("eDNA") samples were collected from Watercourse S3a because it was the only watercourse with surface water at the time of the survey. There were no fish detected from the eDNA analysis.

25. Based on habitat conditions within the 182 Studholme Street portion of the proposed plan change area, it is unlikely any other native fish except shortfin eels will be present. The overall fish biodiversity values of the 182 Studholme Street portion of the proposed plan change area are very low.

Watercourse S2

26. Watercourse S2a is approximately 103 m in length and is a flow path that drains a gentle sloping broad gully within a grazed pasture paddock. Watercourse S2a drains into the mainstem Watercourse S2 and has been artificially widened and deepened to an extent that the water table is at or near the base of the shallow depression and resulting in diffuse and shallow surface water.

27. The fish fauna in Watercourses S2 was surveyed by Wildlands in 2019 (unpublished report) using an electric fishing machine and recorded a single shortfin eel from Watercourse S2. Shortfin eel are common in rural, perennial, soft-bottomed streams, can tolerate a wide range of water quality and habitat conditions and are not a threatened species. The overall fish biodiversity

values of the 162 Studholme Street portion of the proposed plan change area are very low.

EFFECTS OF PROPOSED PLAN CHANGE

28. The proposed plan change area is highly modified, intensive agricultural land with a mixture of highly modified poor-quality terrestrial, freshwater, wetland and stream habitat with very low ecological values. As a result of the low ecological values and with the proposed protection and enhancement (stormwater management, riparian planting and removal of culverts) of Watercourse S3 and its associated wetland and Watercourse S2 the potential ecological effects of the proposed Plan Change are will be positive. My recommendations for protecting and enhancing instream ecological values within the plan change area include:

- Undertaking the restoration initiatives for protecting and enhancing riparian vegetation either side of Watercourses S2 and S3.
- Protection of wetland associated with Watercourses S3.
- Riparian planting restoration of Watercourse S2 and S3.
- Reducing sediment inputs through erosion and stormwater control measures.
- Removing culverts to improve fish passage.

29. Implementing the recommendations set out above will result in an overall net ecological gain for the proposed plan change area and downstream catchment, including:

- Improved ecosystem function.
- Improved water and aquatic habitat quality.
- Improved ecological connectivity for aquatic invertebrate and fish species.
- Enhanced aquatic and terrestrial biodiversity values.

30. Implementing the current and proposed stormwater management plan and the recommendations set out above will result in improved water quality and ecological values. In doing so the proposed Plan Change meets the water quality and ecological enhancement objectives set out in the NPS-FM.

SUBMISSIONS

31. I am not aware of any specific ecology related submission points for me to address.

CONCLUSION

32. The proposed plan change area is characterised by a very high level of modification typical of rural land use. Terrestrial and freshwater ecological values within and immediate to the site are low.

33. In my opinion adoption of available mitigation options and watercourse enhancements will result in terrestrial ecological effects being negligible–low. With the mitigations and enhancements available, the overall effect of development enabled by proposed plan change on aquatic ecological values within and downstream of the site in my opinion will be positive.

Richard Montgomerie
4 July 2022

Attachment 1. Watercourse classifications.