

**BEFORE THE COMMISSIONERS APPOINTED BY
THE QUEENSTOWN LAKES DISTRICT COUNCIL**

Submitter 31021

IN THE MATTER

of Queenstown Lakes District
Council Proposed Plan Stage 3

**Corbridge Estate Limited
Partnership**

Submitter

BRIEF OF EVIDENCE OF GARTH JAMES FALCONER

**GALLAWAY COOK ALLAN
LAWYERS
DUNEDIN**

Solicitor on record: Bridget Irving
Solicitor to contact: Derek McLachlan
P O Box 143, Dunedin 9054
Ph: (03) 477 7312
Fax: (03) 477 5564
Email: bridget.irving@gallawaycookallan.co.nz
Email: derek.mclachlan@gallawaycookallan.co.nz

BRIEF OF EVIDENCE OF GARTH JAMES FALCONER

INTRODUCTION

1. My full name is Garth James Falconer, I am a Landscape Architect, Urban Designer and Director of Reset Urban Design with offices in Auckland and Wanaka.
2. I have a BA from Auckland University, a Post Graduate Diploma in Landscape Architecture from Lincoln University and a Master of Arts in Urban Design from Oxford Brookes University in the UK. I have 30 years experience and am a Fellow of the New Zealand Institute of Landscape Architects. I am also the author of the critically acclaimed book "Living in Paradox, an urban design history of kainga, towns and cities across New Zealand" (2015).
3. I have read the Expert Witness Code of Conduct set out in the Environment Court's Practice Note 2014 and agree to comply with it. I have complied with the Code of Conduct in preparing this evidence and I agree to comply with it while giving oral evidence before the hearing committee. Except where I state that I am relying on the evidence of another person, this written evidence is within my area of expertise. I have not omitted to consider material facts known to me that might alter or detract from the opinions expressed in this evidence.
4. I have been asked by Corbridge to provide this brief of evidence in relation to the urban design aspirations for the worker accommodation proposed as part of the Corbridge Rural Visitor Zone.

CORBRIDGE WORKER ACCOMMODATION

5. As discussed in the evidence of Mr Watkins, Corbridge have identified the need to provide worker accommodation for the various phases of the Corbridge development including construction and operational phases. Corbridge engaged me to advise on the options for this accommodation and how to best provide a high quality living environment for residents. I was engaged primarily due to the research I have done on the development of settlements across New Zealand which culminated in my 2015 book "Living in Paradox". My research

identified worker accommodation as one of the fundamental types of New Zealand settlements from the early whaling stations, the string of railway villages in central North Island in the late nineteenth century to the hydro villages built in the Sixties to house workers building dams and canals. Locally, parts of Cromwell represent an example of these hydro villages.

6. These often rudimentary settlements share a number of common elements such as prefabrication of building elements, use of common facilities and the installation of resourceful infrastructure. Known for their basic no frills setups these types of settlements have been regarded historically as temporary places that do not warrant substantial investment in construction or the provision of amenities and facilities. Most often these spartan environments were places for single men only and lacked provision for couples and families. However a number of what were worker villages such as Twizel have persisted to become significant permanent settlements boasting a full range of community facilities.
7. I first visited the site known as Corbridge Estates in 2017 and was impressed with the easy access, good contours and panoramic views. Peter Marshall who is one of the Limited Partners of Corbridge Estates met me on site and showed me the location he had in mind for the worker village. It was in a prime spot set back from the highway but close to the entry and set around a small man-made lake. We discussed the patched history of worker accommodation in New Zealand. .
8. Mr Marshall then set out his brief which was relatively short, but was visionary with respect to social and environmental elements. He wanted a quality development based on sustainability principles where there would be a strong sense of community. Memorably he used the phrase to “touch the land lightly” and to provide workers with spacious settings links to existing infrastructure and to provide easy access to walking trails and recreation areas in the vicinity.

9. Mr Marshall saw that a key element of the Corbridge proposal would be to provide high quality accommodation options for staff both during the construction phase of the development, but also to house staff associated with the operation once it was established. The genesis of this was a concern about the availability and affordability of accommodation for staff within Wanaka and the impact that has on being able to find and retain staff. This issue is discussed in more detail in the evidence of Mr Watkins. He could see that whilst the bulk of workers would be likely single adults, there would also be young families and perhaps even active seniors. I understand the worker accommodation is primarily for the purpose of housing Corbridge staff, but in future there may be further opportunities to provide accommodation for other seasonal or project based workers.
10. With the Corbridge setting and Mr Marshall's vision the possibilities were opened up. Our initial concepts quickly focused on a series of small groups of units like cells to keep the scale intimate and flexible on the landscape. Rather than a large format, or grid layout we developed the idea of an organic shape that closely fitted the land and flowed with the contour, giving it a distinctive and intimate neighbourhood form.
11. Our first layouts were based on a tree form, with a central trunk as the access road to a series of unfurling koru or fern like groups of units. These were short cul de sacs with a central common space ringed by half a dozen units which then radiated outwards to common landscape areas. At that stage the units were not specifically designed. This layout is depicted below in Figure 1.



Figure 1: First concept for the Corbridge worker village. At this stage the village area being considered was larger than is now proposed in the Structure Plan.

12. At the time we were completing this work Nautilus Modular were in the design concept phase for their modular homes. We collaborated on a series of fittings such as decks and storage lockers that could be added to the units to provide further customisation and variety
13. In late 2019 we were re-engaged to further evolve the design of the village. This was initiated because the design of the Nautilus Modular homes had progressed and several prototypes had been made and these buildings were fundamental to the Corbridge Village. Furthermore, we were engaged by Nautilus Modular and asked to

participate in the development of Nautilus Modular Communities. This is a community building model that Nautilus Modular had developed a conceptual framework for use at a range of sites and scale. We were anticipating that this community model could be adopted at Corbridge in some form.

14. In developing the Nautilus Modular Community model we wanted to develop a more efficient shape with less travel for residents. We ultimately settled on the circular nautilus like shape. This produced a more compact form than the earlier concepts of the Corbridge Village. The Nautilus Modular Community concept provides a large central area that all units could orientate around and enjoy. This open organic layout, was a place with no boundaries between units and it was to be safe, with cars restricted to the entry area and the units accessed by a shared path for walking and cycling. Importantly, this model could support greater or lower building densities depending on circumstances at each site. In the case of Corbridge, due to the abundance of open and recreational spaces available on the surrounding property, greater densities of dwellings within the village would be achievable.
15. In developing the Nautilus Modular Community model we experimented with several versions to get the scale right and to get a shape that could be replicated to fit together. The refined layout is set out in Figure 2 below and gives an example of the conceptual model that could be applied at Corbridge, albeit that Corbridge are likely to have higher densities given the nature of the site.



Figure 2: Proposed Nautilus Modular Community layout

16. The illustrated low density example is based on a 4.5 hectare lot and includes vehicle parking (35 spaces) and 7x 3-4 bedroom multi pavilions. 18x 2-bedroom pavilions, which together would be suitable for up to 75 occupants. It is intended that other developers would be able to adopt this model for their own worker accommodation facilities within other developments.
17. Living areas of the accommodation units are typically facing in a north – northwest direction to maximise access to sun, meaning living areas can be either at front or back of the dwelling.
18. The central open space was based on a 'Common' type model, where there is an open space focus for the community and this is where we located additional facilities that will contribute to the overall liveability and sense of community within the worker village. These common facilities could include elements such as an open lawn, gardens, shade trees and picnic tables for recreation. Also there could be available

other facilities, such as shared sheds & office/storage or workshop buildings that could be subscribed or let to occupants.

19. The accessways are essentially lanes of 3m wide shared paths with swales to allow cycling, walking and service vehicles. Private cars could possibly also use the lane however the concept was to retain an open safe park like environment for children and adults to enjoy
20. Based on providing sustainable low impact development we have also given thought to the provision of infrastructure and services (water, power, waste etc). We have been incorporating the potential to use 'community' systems that service the whole aggregation of communities. The intention is to have shared utilities and services and a focus on non-vehicular transport. Much of the infrastructure can be provided by the household with roof mounted solar panels for power, also harvesting and storing the rainwater off the roof to for household use, recycling grey water for irrigation and combining the wastewater of several units into a nearby common seepage field.



Figure 3: Cross section of Nautilus Modular Community.

21. These communities can be extended to create a series of neighbouring communities. The 30ha example includes 4 separate clusters of 20-30 units a large central park and screen / buffer planting along main road edge. This community/hub model could be replicated to provide larger volumes of accommodation as depicted in Figure 3 below.

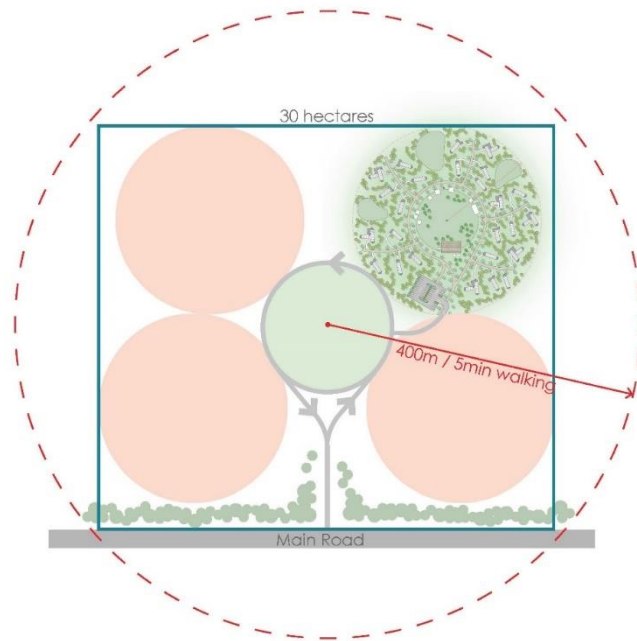


Figure 4: Image depicting ability to replicate Nautilus Modular Communities.

Conclusions

22. We have set out to ambitiously design the worker accommodation at Corbridge, to touch the land lightly, to provide a quality environment for the occupants and to develop a real sense of community belonging and enjoyment.
23. Longer term there may be an opportunity for a series of these communities to be developed with a collective focus and provide a high quality living environment for the Upper Clutha's seasonal and project based work forces. We also hope that the design will be adopted by other developers or sectors that have worker accommodation demands.
24. Together with the innovative modular building system developed by Nautilus Modular I believe these first worker community villages at Corbridge could be the benchmark across the country and thereby

make a significant contribution to solving the housing crisis in New Zealand.

Garth Falconer

Reset Urban Design

Date: 27 May 2020