

Before the Independent Commissioners

Under the Resource Management Act 1991

In the matter of a hearing on submissions on the proposed Te Tai o Poutini Plan

Topic 20: Settlement Zone and its Precincts

Submitter: **Russell Robinson** and **Brunner Builders Limited (S515)**

Statement of Evidence of Louise Bailey

18 March 2024

Submitters' solicitors:

Alex Booker | Kelsey Barry

Anderson Lloyd

Level 3, 70 Gloucester Street, Christchurch 8013

PO Box 13831, Armagh, Christchurch 8141

DX Box WX10009

p + 64 3 379 0037

alex.booker@al.nz | kelsey.barry@al.nz

**anderson
lloyd.**

Qualifications and experience

1. My full name is Louise Elizabeth Bailey
2. I am a Landscape Architect and Director of Outerspace Landscape Architects Ltd. a Christchurch based consultancy established in 2003.
3. I hold a Bachelor and Master of Landscape Architecture degrees from Lincoln University and I have been practising Landscape Architecture in Christchurch since 1999. I am a member of the New Zealand Institute of Landscape Architects (NZILA).
4. My previous work experience includes plan change applications throughout the South Island and landscape and visual assessments for many development proposals.
5. This evidence is provided in support of the submission by Russell Robinson and Brunner Builders Limited. The submission seeks to rezone Lot 1 DP 2820 and Part RS3806 (**Site**) from notified Settlement Zone and Rural Residential Precinct to a mix of Settlement Zone and Settlement Zone with Settlement Centre Precinct, subject to an Outline Development Plan (**ODP**), through the Proposed Te Tai o Poutini Plan (**TTPP**). The submission also seeks amendment to the location of the ONL line within the Site.
6. My role has been to provide advice in relation to landscape matters in relation to the appropriateness of the proposed zoning and an assessment of the proposed ONL map 29 as indicated in the s42A Report January 2024, examining the differences between the vegetation types within those areas and the appropriateness of development within.
7. I have visited the site between November 2020 and April 2021 and am familiar with the site and surrounding area.
8. In preparing this statement of evidence I have considered the following documents:
 - (a) the Statement of Evidence on Ecology prepared by Richard Nichol;
 - (b) Te Tai o Poutini Plan Landscape Report prepared by Bridget Gilbert, January 2024; TTPP Addendum to natural Features and Landscapes s42A Report – Responses to Landscape Review Report;
 - (c) Te Tangi a te Manu, Aotearoa New Zealand Landscape Assessment Guidelines, July 2022.

Code of Conduct for Expert Witnesses

9. While this is not a hearing before the Environment Court, I confirm that I have read the Code of Conduct for expert witnesses contained in the Environment Court of New Zealand Practice Note 2023 and that I have complied with it when preparing my evidence. Other than when I state I am relying on the advice of another person, this 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 that I express.

Scope of evidence

10. I have prepared evidence in relation to:
- (a) The landscape features of the site and its surrounding environment;
 - (b) the Outstanding Natural Landscape overlay in the context of the Site;
 - (c) potential landscape and visual effects of the proposed rezoning; and
 - (d) management of potential effects.

Summary of Assessment

11. The Site sits north of Moana township, a town on the northern shores of Kōtuku-Whakaoho (Lake Brunner). The wider surrounding environment of Kōtuku-Whakaoho, the Arnold River, and mountain ranges to the south and east (predominantly Mount Te Kinga and Mount French), portray the formative processes to high standards of legibility and are also highly 'scenic'. Moana is a highly modified urban environment that presents itself as an attractive, relaxed, modest lake-side village nestled within a greatly admired landscape of lake and mountains. In the vast setting and visual catchment of lake and mountains these modifications do not detract from a landscape of natural character as defined by the degree of human modification, natural elements, patterns and processes.
12. Views into the Site and within the site generally do not display a continuity of key statements, patterns, themes, and accents that give the landscape character and a sense of unity. However, the north-west corner of the north terrace and the south-west corner identified in the ecology evidence as mature podocarp forest and secondary forest and shrubland do exhibit a pattern of vegetation that would have once, prior to modification, dominated the Site. The higher altitude and more visible north terrace demonstrate formative geological processes. Overall, the Site is typical of patterns within the surrounding area where changes in use over a period of years have modified the landscape and vegetative patterns.

13. The indigenous vegetation along the western side of the Site has low-moderate significance under the West Coast Regional Policy Statement (**RPS**) criteria and under the notified TTPP makes it an area of Significant Indigenous Biodiversity, (R. Nichol).
14. Given my assessment of the Site in its context, and in particular drawing on R. Nichol's evidence on ecology, I consider that the ONL line should be amended to more accurately reflect the forest vegetation cover associated with the DoC Moana Scenic Reserve, and Arnold River environment located to the west of the site, which have been identified by R. Nichol as having significant ecological value. These are the areas of mature and secondary forest in the north-west and south-west corners of the Site respectively. These areas also form part of the 'No-build area' that is offered as a means of preventing adverse effects on this vegetation and the ONL.
15. The proposed rezoning represents an increase in density of development than that notified, noting that the notified zoning is still residential in nature. The potential for adverse effects to the values of the ONL, arises largely in the context of ecological matters, as it is the mature and secondary forest that inform the valuable landscape features of the Site. In that regard, potential adverse effects relate to the removal of indigenous vegetation. As noted above, views into the Site have limited landscape character and sense of unity, given the modified nature of the Site. However, an increase in density may inevitably affect that view.
16. The ODP and the associated provisions have been proposed in order to ensure that the increased density across the Site does not adversely affect the ecology and landscape values of the Site. In particular the identification of No-build areas and the indigenous vegetation restrictions in the identified Forest Residential area achieve this. The 10m buffer of native vegetation along Arnold Valley Road, as identified on the ODP, has the collective effect of offering privacy for future lot owners, and of shielding the viewshaft of passers-by by filtering and screening development on the lots. The 10m buffer will also provide an opportunity for a consistency and cohesiveness to the planting along Arnold Valley Road, and will avoid what may have otherwise resulted in an ad-hoc boundary treatment along Arnold Valley Road. I consider that these measures provide adequate controls excepting that the ONL boundary be amended.

Description of the surrounding environment

17. The broad context area is characterised by Kōtuku-Whakaoho (Lake Brunner), the Arnold River, the township of Moana, pockets of DoC Scenic Reserve and pastoral grazing and mountain ranges to the south and east,

predominantly Mount Te Kinga and Mount French. The totality of the lake and surrounding environment portrays the formative processes to high standards of legibility and is also highly 'scenic'. While the town lies on the northern edge of the lake the vastness of the landscape remains dominant.

18. The pattern of development in Moana was driven initially by commercial opportunities in relation to forestry and subsequently as a holiday destination centred around water sports and recreation. Dairy farming is reflected in the large open areas of land. Related services to support the community have increased in the last few years with the expansion of the supermarket and commercial business on Arnold Valley Road. Human made elements in this landscape are evident in the degree of clearance of indigenous vegetation for productive lowlands and settlement and the town of Moana is a highly modified urban environment that presents itself as an attractive, relaxed, modest lake-side village nestled within a greatly admired landscape of lake and mountains. However, in the vast setting and visual catchment of lake and mountains these modifications do not detract from a landscape of natural character as defined by the degree of human modification, natural elements, patterns and processes. The DoC Moana Scenic Reserve occupies the western side of the Site comprising mature podocarp forest and regenerating or secondary forest that spills over the boundaries into the application site. The dominant species are tall miro (*Prumnopitys ferruginea*) and kahikatea (*Dacrydium dacrydioides*), with a scattering of emergent rimu (*Dacrydium cupressinum*) the tallest reaching a height of 20-25 metres (as identified in R. Nichol's evidence).

The Application Site

19. The application Site of 26.7ha lies to the north of the edge of Moana township and comprises a series of three terraces that run in an east-west direction from Arnold Valley Road and is bounded to the west by Moana Scenic Reserve. The Site adjoins the northern extent of existing residential development. The more legible of the terraces sits at 132m ALS to the north of the Site below a higher terrace providing a backdrop of native forest which is outside the development site. The more dominant exotic grassland areas of the site comprise small areas of wetlands at the base of small slopes or where farm machinery has created depressions, low shrublands dominated by *Coprosma propinqua* mixed with dense areas of introduced gorse and blackberry, waterways with riparian vegetation, and exotic species including a ridgeline of Ash (*Fraxinus*) that are in poor health and form.
20. Usage of the Site has varied over years and subsequently there is considerable modification. R. Nichol identified five vegetation types: mature podocarp forest, secondary forest, shrubland association, stream and

wetland association and exotic grassland. Each of these vegetation types provides habitat and diverse communities and the presence of established forest and secondary forest demonstrates functioning ecological processes. It is this distinctive landform and vegetation and accompanying fauna in the landscape that demonstrates a New Zealand character and is familiar in this rural and recreational region.

Outstanding Natural Landscapes in Site context

21. The NZILA provide a meaning of outstanding as having both quality and relativity and could be considered conspicuous, eminent and have a quality of excellence.

22. Gilbert (January 2024) offers a more refined approach to the ONL alignment and states in reference to ONL 29 Moana North that, ‘it would benefit from minor refinement to align the ONL boundary with the edge of contiguous bush cover so that the grazing land is excluded’.

23. In 3.32 of her report Gilbert further explains that,

“a more detailed review of the updated ONL Mapping (January 2024) in relation to the case study area (Lake Brunner) and location specific ONL submissions (refer Section 4), has revealed some minor ONL mapping inconsistencies, including capturing land that does not merit incorporation as ONL, or misaligning the ONL boundary linework where there is an obvious natural landscape boundary in the immediate vicinity (typically this is a bush edge).”

24. This report details the on-site observations and makes a distinction between areas considered to be of ONL status in the Brown Ltd ONL mapping for ONL 29 Moana North and those that fall outside of that and align more closely with the TTPP Proposed plan Map for ONL 29 Moana North. Russell Robinson (S515.002) seeks that the ONL boundary at the Arnold River be amended to better align with the vegetation extent.



25. The bush edge was once delineated by boundary fencing and on one site visit with R. Robinson and R. Nichol required climbing over the fencing to enter further into the Reserve. This property boundary line is clearly observed in the historical imagery R. Nichol obtained from Retrolens and is extracted below for convenience. However, as site usage changed the vegetation began to emerge in the north-west corner of the Site. The more significant vegetation follows a natural ridgeline above the Arnold River and also lines the southern less accessible gullies.



Figure 1 Aerial Imagery from 1943 showing non-forested areas over much of the Project Area. Retrolens imagery is acknowledged.

Assessment of the potential landscape and visual effects of the proposal and key considerations

26. As detailed in the planning evidence of Craig Barr,¹ the Brunner Builders' submission seeks to rezone the Site to allow for greater residential density and some commercial activity and move the ONL line. Provisions of greater density and commercial activity are proposed through the inclusion of an Outline Development Plan (**ODP**) and associated provisions.

27. The configuration of the ODP proposal has been considerably influenced by the indigenous vegetation that remains within the site, and by the watercourses that traverse the site. These forest margins and riparian corridors offer substantial scope for recreational use, pedestrian\ cyclist movement, stormwater management and habitat restoration. Connected

¹ Evidence of Craig Barr. Attachment 2 S32AA Further Evaluation.

waterways will be managed by TTPP Rules NC-R1-4. Riparian planting and removal of invasive exotic species will improve the ecological health of all streams and deliver a better outcome for mahinga kai.

28. Buffer planting of 10 metres wide is proposed in the ODP along the Arnold Valley Road boundary to the east of the proposed residential dwellings to minimise visual intrusion both into and out of the development.
29. Views into the site and within the site generally do not display a continuity of key statements, patterns, themes, and accents that give the landscape character and a sense of unity. However, the more mature podocarp vegetation does exhibit a pattern of vegetation that would have once, prior to modification, dominated the Site. The higher altitude and more visible north terrace demonstrates formative geological processes. Overall, the Site is typical of patterns within the surrounding area where changes in use over a period of years have modified the landscape and vegetative patterns.
30. The parts of the Site that have a contiguous border with the Moana Scenic Reserve are those that exhibit a similar vegetative form being mature podocarp forest. It is the height, size of the canopy, foliage colour and species type that provide a consistent visual appearance. The value from a landscape perspective relates to the contiguous nature of the vegetation cover and these areas are outlined in more detail below.
31. The ODP indicates an area to the north-west and another along the south-west boundary designated as 'No-Build' areas in response to R. Nichol's recommendation that they be recognised as Significant Natural Areas. R. Nichol considered that these areas 'maintain a degree of connectedness with the Moana Scenic Reserve', and 'warrant a higher value when considered together with the Reserve'. He ascribed these two areas as containing the greatest significance and has accordingly recommended that they be identified on the ODP as 'No-build' areas.
32. However, the overlay mapping of Brown Ltd 2022 includes a more extensive area in ONL 29 Moana North and covers a considerable area of Lot 1 DP 2820 and a small area of Part RS 3806. The whole of the North terrace is included in the Brown ONL.
33. On walking the site on several occasions and once with R. Nichol I observed that while the north-west area of the north terrace contained some mature podocarp vegetation the remainder of the terrace was covered in exotic grassland and wetland species with a scattering of 1-metre-high coprosma (Figures 2 and 3), that had established after a period of non-grazing. An area had evolved into wetland due to depressions and compaction made by excavation vehicles in relation to the adjacent quarry. The contiguous nature

of the podocarp forest into the Site from the Moana Scenic Reserve terminates, as shown in the No-build area of the ODP, in the North-West corner. Viewed from Arnold Valley Road there is a distinctive termination or edge to the tall podocarp forest shown in figures 3 and 4. This north-west corner is protected in the ODP through the No-build area.



Figure 2 North terrace looking west showing exotic grasses, *Coprosma propinqua*, and the rush *Machaerina teretifolia*.



Figure 3 North terrace looking west taken from closer to Arnold Valley Road. Invasive gorse is predominant.



Figure 4 View looking into the site from Arnold Valley Road shows the slope of regenerating shrubland and distinctive edge of mature podocarp forest on the north terrace.

34. The area also of importance is the secondary forest and shrubland in the south-west corner of the Site. Having walked through this area the vegetation type and landform and function is contiguous with the Moana Scenic Reserve and there is no defined edge. It gradually meets shrubland and invasive species such as blackberry. A gully carries small waterways in this southern corner of the Site. Without surveyed locations in this dense vegetation there is no certainty as to the exact location within this gully, but my Figure 5 below provides a clue to the nature of the environment. The character is of immersion into a typical West Coast forest with deeply incised gully sides and water running down those sides and through the narrow gully floor. The vegetation is dense restricting light and damp with ferns. The gullies feed water into a lower stream and eventually into the Arnold Valley River. The gully to the extreme west of the Site is protected in the ODP within the No-build area and also in the ONL. The gullies are too steep for residential development. The remaining vegetation surrounding other gullies that are not included in the Development Restriction area is secondary forest and shrubland and identified in the ODP as Forest Residential.

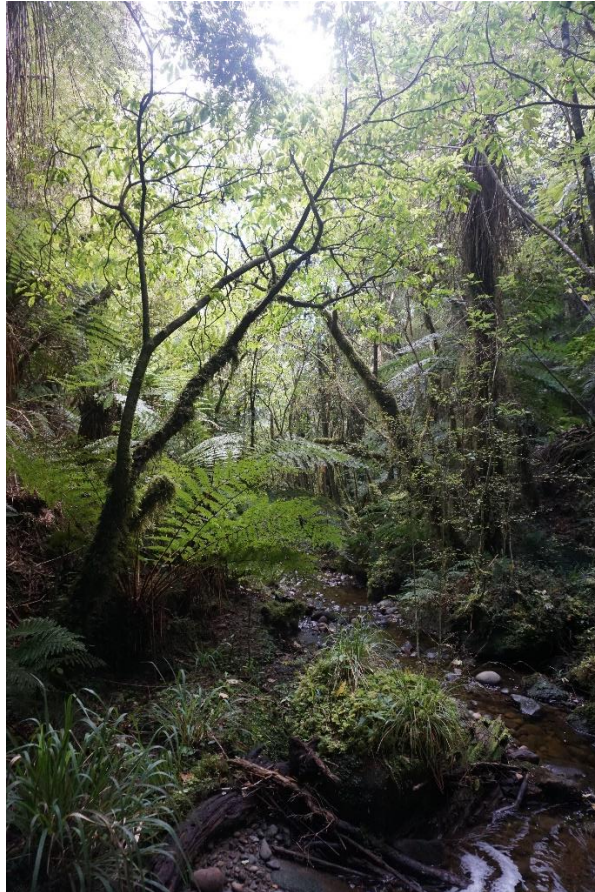


Figure 5 A small stream flowing through the base of the extreme south-west gully.

35. The Forest Residential zone on the north terrace is a mix of mature podocarp forest and secondary forest and shrubland. In these areas the forest is less tall and has more diversity of species. It blends into the regenerating vegetation of the slope/ bank to the true right of the main stream as shown in Figure 4. In terms of the 'No-build areas', these two areas maintain a degree of connectedness with the Moana Scenic Reserve, which warrant a higher value when considered together with the Reserve.
36. A consideration of the ODP is the graduation and continuity of the development areas of the Site with the adjacent DoC Reserve. The buffering provided by the Forest Residential area, while having ecological benefits, also integrates the Reserve into the development by blending the two elements built and natural thus maintaining a degree of naturalness which is in keeping with the character of Moana township and other more recent subdivisions such as Beechwater and the properties off Harper Place and environs.
37. The areas set aside in the ODP as No-build areas in the north-west and south-west corners of the Site, are acknowledged as a having medium–high ecological significance attribute rating, (Nichol Table 1). This more mature podocarp forest is shown within the ONL in the TTPP. I agree with this inclusion in the ONL and make a distinction between these areas and those

in the Forest Residential area on the ODP. R. Nichol makes the point that the areas of Forest Residential have the ability to absorb residential development with conditions to protect the integrity of the secondary forest. I agree with this point and in addition to ecological values, the Forest Residential affords a blurred visual boundary between the built form and the natural environment maintaining a less urban character which fits with the rural character of the TTPP Settlement Zones and the edges of the Moana residential area.

38. All indigenous vegetation clearance undertaken as part of subdivision and development would be regulated as part of the consent assessment process, and the ODP has provisions that restrict indigenous vegetation clearance in those lots within the Forest Residential area to a maximum of 35%, with additional restrictions on trees of a diameter greater than 20cm at breast height. The clearance percentage (as opposed to a fixed volume) allows for varying size of lots.
39. These restrictions represent greater protection than what would be afforded by the notified zoning and ONL. In particular, the only restrictions on indigenous vegetation clearance relating to the Site under the notified TTPP are around riparian margins, a Schedule 4 Significant Natural Area or an ONL. The TTPP notified ONL did not include the Forest Residential areas, and as I have indicated I consider that the restriction in these areas affords adequate protection.
40. I consider that the protection afforded to both the No-build and Residential Forest areas, as indicated on the ODP, provides adequate protection for the landscape values and character.
41. The slope to the true right of the main waterway traversing the Site is covered in regenerating native vegetation identified by R. Nichol as 'shrubland up to 2 metres high with occasional 6 metre taller vegetation' and is included within the Brown ONL 29. I maintain that it does not meet the criteria for an ONL as outstanding or significant, but it has merit in contributing to the legibility of natural processes. I considered whether the inclusion of that strip of vegetation within the waterway riparian area should qualify as part of the Forest Residential Area because I considered it to contribute to a degree of naturalness across the Site. However, I refer to and rely on R. Nichol's evidence and his identification of the extent of the proposed Forest Residential area, and also acknowledge that this area is primarily identified for indigenous vegetation management reasons. As far as I am aware, there is no intention to build on the slope and am satisfied that rule NC-R1 would provide adequate protection.

42. R. Nichol has undertaken an assessment of the wetlands on site to determine their significance, applying what I understand to be best practice evaluation methods associated with ecological values. From a landscape perspective, I have also considered whether the presence of the wetlands are such that they qualify as ONL, and the ONL boundary should encompass these features. Of the six wetlands identified on the site ranging from 0.1ha to 0.9ha. only wetland 6 meets RLWP significance criteria due to presence of rohtu. Nichol questions the viability of the species which is surrounded by invasive species. I also note that the larger of the wetlands, on the north terrace, does not achieve significance under the WCRPS. Both individually and collectively I do not consider the wetlands to qualify as an ONL either in their own right (i.e. as separate features), or that the ONL boundary be extended to include them.

Management of Effects

43. As discussed in my evidence above the potential adverse effects of the rezoning submission on landscape values could be managed with the following inclusions and amendments:

44. Of key consideration is the effect of the Brown Ltd ONL 29 Moana North mapping on the proposed rezoning. A considerable area of land had been included in the Brown ONL that on examination at a finer grain and from onsite observations does not warrant inclusion in the ONL.

45. The areas indicated on the ODP as No-build areas prevent any development occurring and therefore protect the ecological and landscape values. I support these areas remaining within the ONL boundary affording them additional protection.

46. The Forest Residential reduces the impact of the built environment on the adjoining ONL values by blending residences into the existing forest and reducing the amount of indigenous vegetation clearance. I recommend that the TTPP mapping be adopted with the finer grain amendments to exclude the Forest Residential areas identified on the ODP. These areas have a low to moderate ecological significance, and the amended provisions for these areas provide adequate measures to protect the landscape and ecological values.

47. Mitigating measures include:

- (a) Retention of the ONL (albeit in a modified form).
- (b) a recommendation that the Forest Residential clearance of indigenous vegetation be restricted to not more than 35% clearance

excluding accessways and avoiding trees with a DBH of 200mm or greater.

- (c) buffer planting of 10 metres wide along the Arnold Valley Road boundary to the east of the proposed residential dwellings. Such vegetation will be indigenous species endemic to the area with a range of heights but in general species would be selected with an average height of 3-5 metres to provide visual screening.
- (d) The addition of a Subdivision Rule (SUB – R13A), a bespoke rule making subdivision in the Moana North Development Area restricted discretionary where certain conditions are met. Conditions include adherence to the Development Area Plan, maximum 200 allotments, no residential development within the no-build areas, compliance with existing subdivision matters of control (SUB – R6 and SUB – R7) and subdivision standards. Restrictions on indigenous vegetation clearance in the Forest Residential Areas are covered by a new bespoke standard, and in SUB – R7 matters of control a., d. – e.;

Assessment of TTPP Schedule Five

48. The TTPP Schedule 5 ONL 29 'Site Type and Values' statement is:

Extensive fluvio-glacial lake basin strongly contained by the broad landforms of the Hohonu Range and Mt Te Kinga to the south.

- *Exposed peaks and ridgetops revealing underlying geology are highly expressive of the landscapes formative and ongoing natural processes. Erosion, scree slopes and depositional landforms clearly express the erosive nature of the mountain landscape and uplifted landforms.*
- *Dramatically eroded landforms clearly express the rivers power and varying flow. Broken vegetation and expansive depositional landforms reinforce these qualities.*
- *Homogenous and extensive wetland and swamp forest around the lake fringes. Vegetation directly interacts the open waters of the lake. High transient values*

Kōtukuwhakaoka/Lake Brunner is a key landmark within this unit.

49. In the scale and context of the area affected by ONL 29, the proposed amendment is relatively small. I consider the relevant parts of the schedule text are the third bullet point which refers to vegetation and wetland and swamp forest around the lake fringes. I note that in this case, while the site adjoins the Moana Reserve which itself is directly adjacent to the River, the Site is not located on the fringe of the Lake, and the re-alignment of the ONL better in my view reflects the text in the Schedule.

50. As stated above, I do not consider the six relatively small wetlands on site to qualify as ONL in their own right, and nor do I consider them to contribute to wetland and swamp forest on the edges of the Lake (or the River) as described in the text. I consider my proposed ONL boundary to better reflect the text in the schedule. I also do not consider any consequential amendments to the text of the Schedule.

Conclusion

51. I consider that my recommended ONL boundary better reflects the values and attributes of ONL 29 by amending the ONL boundary to conform to the mature forest cover on the Site.

52. I consider that water bodies on the site are able to be appropriately managed through TTPP Rules NC-P1-4 for the waterbodies and their margins in the Site.

53. The ODP would allow growth of Moana with a contiguous extension of residential properties and a sensitivity to the surrounding landscape while maintaining a semi-rural landscape character that is open with blurred boundaries integrating it into the wider context of town and magnificent landscapes for which it is well known.

54. I support the submission for rezoning from a landscape perspective and I consider that subdivision and development undertaken in accordance with the ODP, and those effects, can be appropriately managed. I consider that the Moana North ODP would result in a development that is well integrated into the adjacent DoC Reserve while maintaining the character of the Moana township district.

Louise Elizabeth Bailey

Dated this 18th day of March 2024