

BEFORE THE WAIMAKARIRI DISTRICT PLAN REVIEW HEARINGS PANEL

IN THE MATTER OF the Resource Management Act 1991

AND

IN THE MATTER OF the hearing of submissions and further submissions on the Proposed Waimakariri District Plan

AND

hearing of submissions and further submissions on Variations 1 and 2 to the Proposed Waimakariri District Plan

Hearing Stream 12E: Rezoning Requests

**SUPPLEMENTARY STATEMENT OF EVIDENCE OF NICOLE LAUENSTEIN
(URBAN DESIGN)
FOR RICHARD AND GEOFF SPARK
(PDP SUBMITTER 183 / VARIATION 1 SUBMITTER 61)**

Dated 2 August 2024

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Introduction

1. My name is Nicole Lauenstein.
2. My area of expertise, experience, and qualifications are set out in my First Statement of Evidence dated 4 March 2024 for this hearing stream.
3. The purpose of this supplementary evidence is to respond to matters raised in the Officer's Report dated 22 July 2024 relevant to my evidence.

Code of Conduct

4. I have read the Code of Conduct for Expert Witnesses (contained in the Environment Court Practice Note 2023) and I agree to comply with it. Except where I state that I rely on the evidence of another person, I confirm that the issues addressed in this statement of evidence are within my area of expertise, and I have not omitted to consider material facts known to me that might alter or detract from my expressed opinions.

Response to Officer's Report

5. In my evidence below I have focussed on some matters raised in the evidence of Mr Jolly (urban design) and on the recommendations made by the reporting officer in relation to urban design, namely:
 - (a) Prohibiting access points to private properties from the REL
 - (b) Removing road connections to the REL in Block B
 - (c) Location of commercial node(s)
 - (d) Additional vehicular access to the eastern part of the development area over the Northbrook Stream

Prohibiting access points to private properties from the REL

6. The reporting officer refers to a prohibition on access points to the REL and recommends to provide access to adjacent properties from local roads instead¹.
7. This is not a good approach and goes against best urban design practice - a road that goes through a residential development should be integrated and be treated as a residential street with direct access points to properties otherwise the development will turn its back onto this road with fencing and tall vegetation thus negating the sense of

¹ Paragraph 624 bullet point 1, 620 bullet point 2, 629 bullet point 1 and 632 bullet point 1.

community and preventing passive surveillance over the street. Treating the REL as bypass or as a pure thoroughfare will split the development into two. This approach encourages faster than necessary traveling speeds due to the tunnel effect created by fencing and edge treatment.

8. Allowing access to private properties creates a finer grain and a rhythm within the streetscape that is better suited to a residential environment. Without an adequate streetscape the pedestrian and cycle movement along the road will be of a lesser amenity and less safe with a lack of passive surveillance the street will be perceived as difficult to cross.
9. In Block A the REL is an integral part of the character of the residential neighbourhood and needs to be very carefully integrated with people in mind first. The streetscape can be designed in detail for both key aspects, residential character as well as distribution and through traffic. These key functions are sufficiently compatible to coexist within one road corridor.
10. The nature of the REL in Block A as proposed will result in a mix of directly accessed properties as well as several properties that require access from local roads due to the roundabout, several intersections and the crossing of the Northbrook waterway. This mix will provide sufficient residential character whilst retaining the added function of a through road.
11. In Block B the REL runs along the edge of the proposed development and no driveways from the REL onto private properties have been considered. All adjacent private properties will be serviced from internal local roads. As traveling speeds may increase along this stretch of the REL, the stormwater conveyance along this eastern edge of Block B creates a buffer which can be planted to provide a high amenity for residents.
12. In addition, the private properties are likely to be built up to a level above the road creating a small bund within the private land that can be planted to further mitigate visual impact as well as noise.

Commercial centres

13. The reporting officer recommends that the final determination of the location of the commercial node occur after the recommendations on Blocks B and C².
14. There seems to be some uncertainty around the timing and establishment of the local commercial zone on Northbrook Road, which would be the closest commercial zone of

² Paragraph 648 and 664 of Mr Wilson's S.42A Report for Hearing Stream 12E.

a suitable size to service the Rangiora East neighbourhood. Although this is to some extent a matter for other areas of expertise to comment on in relation to commercial distribution, I agree that a local centre further south on Boys Road might be warranted with Block B being added to the urban form.

15. To address this potential shortfall, a potential commercial centre has been added to the ODP in relation to Block B. This is strategically positioned south of Boys Road in proximity to the REL/Boys Road intersection north-south and east-west walking and cycling corridors to provide ease of access. Recognising that the centre of Rangiora is important, the newly identified local centre is intended to offer a small range of local shops and services within walking and cycling distance of residents of Block A and B.
16. The indicative location is in a strategic position allowing for frontages and direct pedestrian / cycle access to Boys Road and the REL. Vehicle access would be provided via local roads within Block B.
17. The purpose of this local commercial centre would be to meet some of the convenience needs of residents in Block A and B should the proposed commercial centre on Northbrook Road not come through in a timely manner or if a second local commercial area was required. The location has therefore been identified on the revised ODP³ as an indicative possible or optional location to provide such flexibility.
18. To provide guidance on scale and size, access, road frontage interfaces and general built form matters further detail has been added to the ODP narrative⁴.

Community hub / small commercial zone with a special purpose

19. In addition to the new local commercial zone in Block B discussed in the previous paragraphs, the original proposal identified a small commercial zone adjacent to the intersection of the REL with the Northbrook Esplanade. This opportunity for a uniquely tailored facility to service the recreational activities with good walking and cycling accessibility should be retained in this location.
20. Mr Spark has addressed his intentions and reasons for choosing that location. It is a very aesthetic site overlooking the Northbrook Stream and the unobstructed longer distance views across the SW areas to the north to Mount Grey. The site has north-west aspects and directly engages with the Northbrook Stream and Council park making it a very appealing location for a public social space.

³ Attached to Mr Thomson's supplementary evidence.

⁴ Attached to Mr Thomson's supplementary evidence.

21. The location is right on the shared active walk/cycleway connecting the of Northbrook Wetlands (existing) and Northbrook Trail (future) finally leading to the Cam River and would so encourage active movement of people in this location.
22. The local centre would be limited to a café/bar and ancillary activities, in a single tenancy, of no more than 650m² with direct cycle and pedestrian access from the REL, and the Northbrook trail, and vehicular access via a short local road to minimise effects on the local transport network.
23. The ODP therefore identifies two locations for small local commercial centres. This is not necessarily the result of a market analysis. Rather it is an urban design response to the uniqueness of the location in Block A and the opportunity to create a distinct local destination, coupled with the required flexibility to respond to possible future scenarios including:
 - (a) any potential need to relocate the Northbrook Road centre into a new location further south; and
 - (b) the need for a local commercial centre in addition to the Northbrook Road centre to service the new south-east residential areas.
24. Although the two commercial areas have the same underlying zoning from an urban design perspective they provide very different urban services and create different urban footprints. One is a distinct, very small destination maximising the high natural amenity of the site, the other is a slightly larger local commercial service node in a strategic and highly accessible location. This difference carries through into the built form and associated landscaping. The destination node will be a single building designed to nestle into the natural environment through architecture and landscaping. The service node now proposed south of Boys Road will be a cluster of convenience shops with several smaller buildings and associated parking, signage and landscape treatment.

Second access over the Northbrook

25. The reporting officer notes that the secondary collector which is identified in the SER ODP crossing the North Brook is absent. He considers the location of the secondary collector in the SER ODP is a logical location providing both east-west and north-south connectivity over the Northbrook and recommends the connection remain⁵.

⁵ Paragraph 621 and 629 bullet point 3 and 632 bullet point 3 of Mr Wilson's S.42A Report for Hearing Stream 12E

26. He considers that limiting the connectivity over the Northbrook will potentially reduce the overall integration of future residential neighbourhoods, whilst retaining it will provide benefits that include vehicular access alongside walking and cycling connectivity.
27. The proposal does allow for a future crossing point in such a location which may not have been identified clearly enough. The ODP has added a green link north of the main SMA in Block A to provide at a minimum a cycling and walking connection across the Northbrook to future development in the east. The proposed green link is wide enough to include a future road reserve – so a road connection can be established if the development east of the Northbrook requires such a vehicular connection.
28. However, there are several reasons why this second crossing over the Northbrook is considered undesirable. These include:
 - (a) for ecological reasons to protect the waterway margins and avoid disturbing waterflows and habitat within the waterway;
 - (b) to keep the amenity of the esplanade and larger the green space in this delicate part of the Northbrook as intact as possible (retaining existing trees and vegetation);
 - (c) to avoid a rat-run type shortcut through Block A onto Boys Road;
 - (d) to prioritise walking and cycling over vehicular movement between the immediate neighbourhoods.
29. The REL has shifted eastwards from its original location. Providing a second north–south vehicular crossing in such proximity to the REL is in my view counterintuitive.
30. Vehicular movement from the east towards Rangiora will always have to use Boys Road or Northbrook Road due to the severance of the railway line crossing point. To preserve the amenity of the residential neighbourhoods, it is best practice to avoid creating through traffic via shortcuts.
31. The ODP has therefore provided several walking and cycling connections over the Northbrook to facilitate a fine grain of connectivity at a very local level onto the Northbrook trail leading into Rangiora and onto the REL.
32. These crossing points for cycling and pedestrians also provide east-west and north south connectivity through the adjacent new green space and feed into the a wider network to the north and east, to Belgrove and the entire SER ODP.

33. In addition, any development to the east of the Northbrook will most likely require larger stormwater areas and esplanade reserves at the southern edge. This will likely shift the residential development further northwards and this would allow a larger SW, greenspace and biodiversity area to establish in this corner.
34. In summary, we have discussed this particular issue amongst the entire team of experts and have decided not to provide this second vehicular crossing over the Northbrook for the following reasons:
 - (a) the road network will function well without this vehicular connection (traffic engineer Lisa Williams);
 - (b) that there are significant ecological benefits in minimising any disturbance to the waterway (aquatic ecologist Mark Taylor);
 - (c) retaining as much of the established trees in this area as possible is important to integrate them into the new reserve (landscape expert Matt Lester);
 - (d) Northbrook is a natural overflow path and obstructions such as culverts, bridge abatements and other larger structures should be kept to a minimum (infrastructure and stormwater services expert Alastair McNabb);
 - (e) the fine grain pedestrian and cycling network with several crossings provides a more refined local connectivity that encourages active modes of transport between the neighbouring residential areas (urban design);
 - (f) removing the road increases the visual and physical amenity for people by removing noise from traffic (urban design).

Density 15hh/ha

35. The officers report recommends to rezone Block B to Medium Density Residential with a minimum density of 15hh/ha.
36. This has to some extent been anticipated in light of the overall directives of the NPS-UD. The team of experts decided very early on to develop an ODP which could accommodate a density of 15hh/ha. The main difference between 12hh/ha and 15hh/ha is a higher number of attached town house typologies on a smaller site. The proposal can accommodate this adjacent to the various green spaces, along the REL in Block A and in proximity to the SMA where the additional open space will provide a higher amenity and outlook. The road layout and distribution of open spaces has sufficient flexibility within the ODP structure to identify these areas at detailed design stage and respond to

the appropriate rules and regulation of the PDP Medium Density Residential. No changes are required to the ODP to facilitate this minor increase.

Ngā tūrangā tupuna cultural landscape

37. The officers report recommends the ngā tūrangā tupuna cultural landscape, which represents the former extent of a podocarp forest centred on Rangiora, is incorporated into the design.
38. The overlay is shown in the proposed WDP as part of the Ngā Tūrangā Tupuna Overlay titled the Ngahere Rangiora (SASM 016). To recognise this, native tree species are intended to be used in the public spaces as key landscape character elements, using native plant communities that reflect natural plant communities and specific plant communities that support specific cultural practices with the aim to focus on strengthening or recreating indigenous fauna habitats. Podocarps are obvious tree species choices. These include totara, miro and kahikatea which would all provide strong character and associative values and I understand would suit different parts of the existing site conditions.

Block C

39. The officers report recommends that Block C is included in the South-East Rangiora development area with an explanation outlining its potential suitability for commercial or industrial uses. I fully agree with this recommendation and consider the future development overlay to be an appropriate method to provide sufficient certainty whilst allowing for further detailed information to be gathered and design/development options to be explored.

RESPONSE TO MR JOLLY'S REPORT⁶

Commercial areas

40. In terms of the proposed small commercial node, Mr Jolly notes⁷ that from an urban design perspective this node could consist of community facilities or neighbourhood shops and could potentially play an important role in future community cohesion. He recommends that consideration is given to its proximity in conjunction with the proposed open space reserve further to the south and if the two are collocated together would potentially be a stronger community focus for the area.

6 Appendix G Attached to Mr Wilson's S 42 A report.

7 Refer to Mr Jolly's memo Sparks Development ODP_Boys Rd, Rangiora_UD Review dated 16/04/2024 bullet point 3.

41. My earlier discussion and the rationale behind the two commercial areas that are now proposed should provide an answer to Mr Jolly's concerns. The ODP for Block B has sufficient flexibility to add a small reserve to the southern side of the commercial zone to connect the commercial activity with the community to the south via an active green space.

Stormwater areas

42. Mr Jolly notes the locations of the stormwater management areas are consistent with the SER ODP and could provide a gateway landscape feature. This is the design intent of the ODP.

Roading layout and connectivity

43. Mr Jolly identifies the concept plan showing two cul-de-sac heads within a large block to the eastern side of the proposal with the block's dimensions being unclear however the scale is significant and will not promote good walking and cycling. He recommends that the cul-de-sacs are joined to create a through-road with traffic calming measures and notes that this will also allow greater pedestrian access and promote healthy active lifestyles. (Figure 2.)⁸
44. The concept plan is only indicative to test the key aspects of the ODP and ensure it will deliver the required urban design outcomes. It was not intended as a final design layout. Depending on the final sizes of the stormwater management areas, the exact location and scale of the REL, the final intersection layouts and round-a-bouts, and the stormwater conveyance and naturalisation of the Boys Road northern water channel, this internal block will likely be adjusted to suit. The internal roading of the block is yet to be determined and is therefore not shown on the ODP. In my experience, local roads are rarely indicated at ODP level to retain sufficient flexibility for detailed designs to be developed without triggering non compliances.
45. I do agree with Mr Jolly's observation that where possible cul-de-sacs are to be avoided in favour of connected street layouts, and should cul-de-sacs be required in this area, their heads will be connected via a shared cycle and walking link.

Grid versus curvilinear road layout and connectivity

46. Mr Jolly identifies the curvilinear structure as being an inconsistent approach when compared with the majority of the layout of Rangiora which is predominantly set out in

⁸ Refer to Mr Jolly's memo Sparks Development ODP_ Boys Rd, Rangiora_ UD Review dated 16/04/2024 bullet point 5.

variations of an orthogonal grid which could also be adopted for this site and would provide greater legibility and connectivity with adjacent areas⁹.

47. Mr Jolly is correct in stating that the predominant road layout in Rangiora is based on an efficient gridded structure which does provide good connectivity for all modes of transport. However the road grid often prioritises vehicular movement over cycling and walking and, more importantly, it can negate the natural dynamic processes of the underlying land.
48. Water management is a critical component of the development and the natural drainage pattern of the land does therefore inform the main road alignments. Roads function as secondary overflow paths and have been placed to work with the contours of the land. The proposed layout does provide good internal connectivity via a finer grain pedestrian and cycling network coupled with local roads. With regards to vehicular connectivity this has deliberately been focused on providing good access to Boys Road and the REL as these are the main connections to the wider network. The proposal elevates cycling and walking over car movement and provides the most direct connections within the ped/cycling network.
49. Mr Jolly notes that the primary connectivity of the eastern link road over Boys Road makes logical sense connecting the northern and southern portions of the proposed ODP but that because of the curvilinear approach to the loop road in Block B an opportunity to also connect the secondary road over Boys Road has not been proposed. He recommends that the secondary connection is considered with an additional intersection rather than two separated T intersections.
50. I have discussed the rationale behind the road alignment in previous paragraphs. The use of T intersections versus crossing intersections is one of traffic management on Boys Road and falls into a different expert discipline. Cross intersections do provide stronger connectivity for all modes of transport, however the ODP has created an independent pedestrian/cycle network and additional pedestrian/cycle links and crossings to provide a high level of connectivity between the two development blocks north and south of Boys Road. The benefit of dedicated crossings as part of a dedicated pedestrian/cycle network creates a generally higher amenity for users, and less conflict with vehicles.

Other connectivity

51. Mr Jolly notes the railway line provides a barrier to connectivity east-west and restricts connectivity between future neighbourhoods in the proposed ODP with established

⁹ Refer to Mr Jolly's memo Sparks Development ODP_ Boys Rd, Rangiora_ UD Review dated 16/04/2024 bullet point 6.

neighbourhoods in Southbrook and therefore supports the proposed cycle and pedestrian pathway which connects east-west as this will provide an important connection between the Southbrook community including Southbrook School and Rangiora New Life School and future neighbourhoods within the proposed ODP.

52. I fully agree with Mr Jolly on this point and would like to emphasize the benefits of such a pedestrian/cycle crossing. The ODP positions a green space along the railway to provide maximum flexibility to establish a pedestrian and cycle connection where it can best respond to the alignment of pathways in Hegan Reserve opposite. In addition, it positions a road in close proximity to enable a vehicular connection if this is agreed to by Council and Kiwi rail in the future.

Stormwater Management Areas

53. In terms of stormwater management areas, Mr Jolly identifies that those areas will be important to manage stormwater but also to provide a porous edge when considering the strong edge created by the Eastern Link Road. He considers that the adjacent biodiversity area although supported seems hemmed in a corner that limits its potential, and potentially could be integrated with the SMA and form a much larger element within the proposed ODP¹⁰.
54. I agree with Mr Jolly and would like to see more space being made available for such biodiversity areas. There will most likely be opportunities in the detailed design to investigate this further. However, biodiversity areas need to work. Meaning, they need to be associated with the various waterways and need to be part of a wider system. I have learned from my expert colleagues that it is not just a matter of placing them. To fully embrace the opportunities the Middle Brook offers to establish biodiversity areas at the junction of Blocks B and C, the REL alignment would need to be adjusted to provide sufficient space for esplanade treatment, wetlands and similar.
55. It is also important to keep specific functions such as overflow pathways and SW conveyance separate from some biodiversity areas – again this is not necessarily my area of expertise – however from an urban design perspective all of these areas (SW treatment, overflow pathways, waterways and esplanade and biodiversity areas) have a degree of naturalness and landscaping in common and can be designed to visually merge into a larger area of a very high amenity.

¹⁰ Refer to Mr Jolly's memo Sparks Development ODP_ Boys Rd, Rangiora_ UD Review dated 16/04/2024 bullet point 10

Block C

56. In terms of the light industrial area in the southwestern corner, Mr Jolly considers that it seems isolated from other land use activities and is also contained within an irregular jagged property boundary and a residential property between the rail line and the proposed ODP. This may lead to difficult subdivision layout and sensitivity issues. He further notes it is unclear how this will be assessed and connected to established similar uses in the future.
57. As recommended in the officers report, the area known as Block C is best served by a 'future development' overlay identifying it as suitable for light industrial uses. It is an acknowledgement that this left over pocket is not suitable for either agricultural nor residential uses. In my view, in terms of urban design, that provides the right level of guidance and certainty for this cut-off area between the REL and the Railway line to be integrated into the future urban planning of Rangiora with regard to roading networks, servicing and general landuse activities. Any further detail information and planning will be part of a future planning/consenting process.

Clarification Boys Road

58. Although not specifically mentioned in either Mr Jolly's or the officers report I would like reiterate the importance of Boys Road to provide a residential character in parts and slow traffic to a reasonable speed. Access onto private properties from Boys Road is an important aspect that contributes to this residential character. To ensure properties do not turn their back onto this road, a mix of bundled access, direct individual access and internalised access from local roads is proposed. The key aim is to ensure adequate passive surveillance over shared pathways and a gradual change from a rural to a residential street character is achieved from the rural edge at the eastern SMA in Block A until the REL round about.

Nicole Lauenstein

2 August 2024