

Before the Independent Hearings Panel
at Selwyn District Council

under: the Resource Management Act 1991

in the matter of: Proposed Private Plan Change 80 to the Operative
District Plan

and: **Two Chain Road Limited**
Applicant

Evidence of Nicole Lauenstein (urban design)

Dated: 5 October 2022

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EVIDENCE OF NICOLE LAUENSTEIN

INTRODUCTION

- 1 My name is Nicole Lauenstein. I have the qualifications of Dipl. Ing Arch. And Dipl. R.U.Pl. equivalent to a Master in Architecture and a Master in Urban Design (Spatial and Environmental Planning) from the University of Kaiserslautern, Germany. I was an elected member of the Urban Design Panel in Christchurch from 2008 to 2016 and am a member of the UDF (Urban Design Forum). Before moving to New Zealand, I was a member of the BDA (German Institute of Architects) and the AIA (Association Internationale des Architects).
- 2 I am director of a + urban, a Christchurch based architecture and urban design company established in 1999. I have over 25 years of professional experience in architecture and urban design in particular within the crossover area of urban development, master planning, and comprehensive spatial developments.
- 3 I have practised as an Urban Designer and Architect for the first 8 years in Germany, Netherlands, England, Spain and Australia before re-establishing my own architectural and urban design practice in New Zealand. In both practices I have undertaken many projects combining the architectural and urban disciplines. Projects have been varied in scale and complexity from urban revitalisation of city centres, development of growth strategies for smaller communities, architectural buildings in the public realm and private residential projects in sensitive environments.
- 4 Prior to my arrival in NZ I worked for several European Architects and Urban Designers. I was involved in a range of urban studies and rural area assessments for the governance of the individual federal states in Germany, investigating urban sprawl of major cities such as Frankfurt, Darmstadt, Rostock, Berlin and the effect on the urban and rural character. This work included developing mechanisms and criteria to facilitate sustainable development. Other work for private clients consisted of the design of sustainable developments in sensitive areas with very stringent development guidelines.
- 5 My experience in New Zealand includes working on growth strategies for urban and peri-urban areas including rural and urban residential developments with a mixture of densities from low, medium to high. I have prepared several urban analyses, development strategies and design concepts for urban and rural residential areas within the Canterbury region (Lincoln, Rolleston, Tai Tapu, Ohoka, Rangiora, Kaiapoi, Lake Hood, Ashburton), Akaroa as well as the wider South Island, including developments in Queenstown, Wanaka, Invercargill, Marlborough Region, Hurunui District and Buller District.
- 6 My most recent urban design and architecture work includes:
 - 6.1 Papa Otakaro Avon River and East/North Frame concept design, Christchurch Central City;
 - 6.2 Kirimoko residential development in Wanaka Stages 1 – 6;

- 6.3 Urban analysis and strategic plans for Selwyn District Council, Hurunui District Council, Christchurch City Council, Queenstown and Lakes District, Nelson and Buller District, Wellington CBD and Auckland City and the greater Auckland urban area;
 - 6.4 Masterplans for urban development in Lincoln, Rolleston, Taitapu, Amberley, Rangiora, Ohoka, Ashburton, Christchurch, Westport Wanaka and Queenstown, Auckland;
 - 6.5 Mixed Use development Hagley Avenue, Christchurch;
 - 6.6 New Tait Building and Masterplan, north-west Christchurch;
 - 6.7 Several commercial and residential 'rebuild' projects in Christchurch;
 - 6.8 Master Plans for post-earthquake Inner-City block infill and brown field conversions in Christchurch;
 - 6.9 ODP's for rebuild projects in the Christchurch CBD;
 - 6.10 Analysis and identification of Character Areas within Christchurch as part of the District Plan Review; and
 - 6.11 Several private plan changes.
- 7 I have been involved in tertiary education and lectured in urban design at Lincoln University at both graduate and post graduate level. I am currently a guest lecturer at ARA Institute of Technology, teaching architecture and urban design. I have also delivered professional development workshops for both architects and urban designers.

CODE OF CONDUCT

- 8 Although this is not an Environment Court hearing, I note that in preparing my evidence I have reviewed the Code of Conduct for Expert Witnesses contained in Part 7 of the Environment Court Practice Note 2014. I have complied with it in preparing my evidence. I confirm that the issues addressed in this statement of evidence are within my area of expertise, except where relying on the opinion or evidence of other witnesses. I have not omitted to consider material facts known to me that might alter or detract from the opinions expressed.

SCOPE OF EVIDENCE

- 9 My evidence relates to:
- 9.1 the growth pattern of Rolleston and how the proposal integrates into the urban form and structure of the wider township;
 - 9.2 character, visual amenity and interface with neighbouring activities.

SUMMARY

- 10 I have been engaged by the applicant to provide a peer review of the urban design assessment prepared by Mr Compton-Moen in relation to this rezoning request.
- 11 I agree with Mr Dave Compton Moen's assessment and summary that the character of the site will shift from open and agriculturally focused, to having an industrial character as a result of change in land use introduced by PC80. In the context of visual amenity, both the adjacent properties, and especially the rural properties to the north, will experience change in surroundings from semi-open views across the rural land to views that are more restricted and screened by vegetation. Planning, urban design and landscape experts all agree that with the additional rules and proposed edge treatment, the effects on character and amenity can be mitigated to an acceptable level.
- 12 I also agree with Mr Compton Moen that the effects on visual amenity have been addressed appropriately through mitigation measures, primarily landscape treatment, along the road boundaries of Walkers Road and Two Chain Road. In particular, the very wide Two Chain Road corridor, combined with proposed revised bund and planting strategy, will be able to mitigate most of the effects experienced by existing rural properties which currently are the most sensitive to the changes PC80 introduces.
- 13 In general, any expansion to an urban area will alter people's experience of that area, however, it is unreasonable to expect that townships remain static. The National Policy Statement on Urban Development 2020 (NPS-UD) expressly anticipates that urban environments, including their amenity values, will develop and change over time
- 14 Beyond the review of Mr Compton Moen, I have considered PC80 within the wider urban context of Rolleston, a key activity centre in the Selwyn District, with a focus on urban growth and compact urban form, accessibility, and connectivity.
- 15 The proposal would contribute to a well-functioning urban environment and fit very well into the existing urban structure and development pattern of Rolleston. It ensures that industrial development remains located north of SH1, clearly separated from the residential and commercial activities to the south.
- 16 It will logically complete the compact urban form filling a rural gap between the existing I-Zone to the east and the correctional facilities to the west. Therefore becoming a logical and sequential extension of the I-Zone westwards.
- 17 The site is well-connected to main transport corridors, including both road and rail network. The main benefit of the site however is the direct connection to the rail corridor itself which allows it to pull sidings into the site if required.
- 18 The proposal is also a logical development for the Site, considering the proposed roading and associated traffic distribution changes proposed by Waka Kotahi as part of the SH1 intersection upgrades and the Rolleston Flyover. The proposed rerouting of traffic flows from SH1 into and out of the

existing I-Zone via either Two Chain Road/Walker Road or Jones Road /Weedons Road will change the streetscape and street character of all these roads.

- 19 The proposal does fit well into the objectives and policies - the Business 2A Zone (B2A) rules package is appropriate with regard to build standards and interface treatment with adjacent residential or rural zones and will guide the development accordingly

EVIDENCE

- 20 I have been involved in the application for PC 80 in an advisory role providing input into the ODP on urban design matters. In that capacity, I have contributed to the RFI response and the resulting changes to the internal layout and edge treatment of the proposal.
- 21 As a result of my involvement in several plan changes in Rolleston over the last 15 years, but in particular in the last 2-3 years, I have a very good understanding of the urban environment and development patterns of Rolleston.
- 22 I have undertaken several site visits, reviewed the visual assessment prepared by Mr Compton Moen, am familiar with the latest discussion between Mr Compton Moen and Ms Faulkner with regard to the landscape matters, and am aware of the additional mitigation measures that are being proposed by the applicant along Two Chain Road (refer to Appendix 1, the most recent ODP).
- 23 In preparing my evidence, I have reviewed and considered the following key documents with regard to urban design matters:

23.1 Rolleston Structure Plan;

23.2 Our Space 2018-2048: Greater Christchurch Settlement Pattern Update
Whakahāngai O Te Hōrapa Nohoanga;

23.3 National Policy Statement on Urban Development;

23.4 National Policy Statement on Highly Productive Land;

23.5 Operative and Proposed Selwyn District Plans.

Urban growth and form

- 24 Rolleston started as a small settlement centred around the SH1 and quickly grew into a township with a centre focused on the southern side, turning its back to the highway corridor. This was further consolidated with establishment of the I-Zone to the north and all urban residential, commercial and community growth being guided to the south, east, and west, remaining south of the highway. The state highway / railway corridor has since established itself as a hard, northern boundary to the main township with only industrial areas establishing beyond that line.
- 25 Large scale business and industrial zones form part of the natural urban growth pattern of a township. They are an important part of the economic infrastructure of urban environments, they provide places of work and service

the community with goods which makes them reliant on good access to major transport networks.

- 26 SH1 and the rail corridor provide such access. At the same time, they offer a buffer between the residential, commercial, and community activities to the south, and the industrial Zone (I-Zone) to the north. This clear and deliberate separation was solidified by the Rolleston Structure Plan in 2012 and has since clearly been an accepted and desired planning outcome.
- 27 Although PC80 is currently outside the areas planned for urban development with regard to a consolidated urban form, it is a logical sequence of urban industrial development for Rolleston and fits within the overall direction of key planning documents in particular the direction given by the Rolleston Structure Plan.
- 28 This strong separation of the industrial zone from all other urban zones brings with it clear benefits as it reduces the risk of noise, dust, and odour related to industrial activities affecting the more people-oriented activities in residential, commercial, and community. It also brings with it challenges of access and connectivity.

Wider connectivity and accessibility

- 29 The severance between the northern and southern part of Rolleston created by SH1 and the rail corridor is an accepted and manageable compromise. Although this separation results in a general lack of connectivity and accessibility between these areas of Rolleston, it has the advantage of keeping the potential effects of an industrial zone away from denser residential areas.

Connectivity and accessibility of the site within the northern context

- 30 It is my understanding that the proposed changes to roading and associated traffic distribution proposed by Waka Kotahi as part of the SH1 intersection upgrades and the Rolleston Flyover will result in a rerouting of traffic flows from SH1 into and out of the existing I-Zone. Traffic to the I-Zone will be re-routed off SH 1 either via Walkers Road/Two Chain Road or via Weedons Road/Jones Road. This will not only change the streetscape and street character of all these roads, but also surround the PC 80 site with road environments sized and tailored for the movement of trucks.
- 31 The additional changes introduced by the PC 80 proposal in the form of access points to the Site from Two Chain Road and Walkers Road will not add any further changes in street character apart from allowing intermittent views into the Site. It is mainly the rerouting proposal by Waka Kotahi that instigates the change in character for these roads.
- 32 From a traffic flow perspective and related effects on the rural residents on Two Chain Road, a single vehicular access off Two Chain Road is an understandable request from some submitters. It would by default create a through-route through the PC80 Site and could potentially reduce the use of Two Chain Road. This may reduce the potential effect of traffic noise on the rural residential neighbours.
- 33 However, from an urban design perspective, a single vehicular access is not advisable as it would channel all modes of transport into and through the Site

along a single route. This would make the shared pedestrian/cycle route on Two Chain Road west of the access literally redundant.

- 34 My main concern with limited access is that the shared pedestrian/cycle route on Two Chain Road will lead to nowhere and have very poor passive surveillance. At a minimum, there should be additional pedestrian / cycle entry points from the shared cycle / walkway on Two Chain Road into the site.
- 35 My second concern with a single access off Two Chain Road is the lack of permeability into the block and the long 2km stretch of a pedestrian/cycle way with no lateral connection points. This creates a low amenity with very limited connectivity, risk of entrapment areas with no exit and literally no passive surveillance over the road environment. The rural residential properties already turn their back onto the road.
- 36 My third concern with a single access is the lack of activity within the Two Chain Road corridor if the internal PC80 road becomes a through road by default.
- 37 And last – with regard to flexibility and resilience, it is never a good solution to limit access points into an area that is highly reliant on good transport and distribution networks. Servicing a 98ha site with only two points of entry/exit creates a 'dead end' as soon as one point is blocked, even just temporarily – I would not consider that a well-functioning urban environment.
- 38 Should the proposal be limited to only one vehicular access off Two Chain Road in the eastern corner, it would be best to provide an additional internal cycle / pedestrian route through the site separated from the road carriage way for people working in Rolleston to use to commute to work safely, this however would pose the risk of introducing unnecessary conflicts between this pathway and the internal through route at intersections.

Highly Productive Land

- 39 The far eastern corner of the Site has an area of approximately 18ha with an overlay indicating that LUC Class 3 versatile soils are present. I am not an expert on soil or rural productivity but from experience when assessing rural and urban areas over the last 25 years, smaller rural properties within similar environments surrounded by industrial or residential zones tend not to retain their rural zoning over time and are absorbed into the adjacent land uses. In an urban assessment, an 18ha area of rural land would be considered only a 'pocket of rural land'. In most of my urban assessments undertaken over the last years in the area, rural properties are significantly larger.
- 40 In addition to the limited size, if it remains rural this pocket of land would be surrounded on three sides by non-rural land use which can create reverse sensitivities, dependent on the nature of rural activities that are occurring.
- 41 Should the eastern area be excluded from the industrial re-zoning, this would not necessarily impact the ability of the remaining site to provide a functioning industrial zone, but from an urban perspective it would be better to have the proposed site and the I-Zone to visually connect directly without an undeveloped gap.

- 42 Normally direct connection means better accessibility, connectivity, and cohesive, compact urban form. However, due to the nature of the proposal already being disconnected via railway lines to the east and south, this aspect of direct connectivity to provide easy access is not a concern.
- 43 Currently, the railway line to the east of the site does create a physical threshold and separation to the I-zone and all movement is linked via the Two Chain Road rail crossing. Should this 18ha area be excluded from rezoning, the shared cycle and walkway and the vehicular connection on Two Chain Road would not be affected; access and connectivity would remain the same. This possible visual disconnect would not impede the urban functions.
- 44 The only difference would be a small pocket of rural zoned land filling the gap between the two industrial zones, potentially rendering the rural pocket less effective. Considering the size of the area is only 18ha this would not affect the compact urban form of the Township, in particular if the edge treatment along the Two Chain road frontage remains the same.

Rail Corridor / State Highway 1

- 45 The rail corridor provides some intermittent screening through existing tree planting and combined with SH1 road corridor creates a wide buffer towards the residential and commercial areas south of SH1. Due to the nature of SH1, the residential and commercial properties to the south also provide their own mitigation in the form of earth bunds, landscaping and/or tall fencing. This results in very limited opportunities for visual interaction with the PC 80 site.

No additional planting has been proposed along the southern boundary of the Site to retain the flexibility for direct access to the rail corridor for transport of goods. Considering the low sensitivity of the adjacent transport corridors no mitigation measures are required.

Internal layout amenity

- 46 In addition to the existing zone rule requirements for landscaping, the revised ODP shows green links and connections within the site to facilitate pedestrian and cycle movement as well as the integration of the existing water race. These linear green spaces will also allow for generous tree planting within the Site that will be able to break up the larger site into smaller compartments and provide some relief from the built forms and predominantly long flat rooflines of the large industrial structures.
- 47 Additional small pocket greens have been integrated into this green structure to create small nodes and breakout spaces for lunchbreaks and general internal amenity. The green structure creates more permeable and safe movement corridors for pedestrians and cyclists, linking into the wider pedestrian and cycling network.
- 48 The inclusion of a small commercial node to service people working in the area was raised, but not requested. I agree that providing some small food and beverage outlets within the Site would be beneficial and understand that the rules enable this specific focused activity.
- 49 As stated by the officers Section 42a report, the ODP provides for an internal street network that generally integrates well with the surrounding (existing

and future) transport network and will provide for all users of the transport system.

Issues raised by submitters - character and amenity effects

Walkers Road - Interface with neighbouring areas

- 50 The B2A zone rules require a 3m landscape strip to mitigate, or partially screen, the bulk and height of the larger building and other associated industrial activities. These rules are specifically developed to provide the appropriate level of screening, whilst still allowing for legibility of access points, passive surveillance etc. and will be the primary mitigating measure.
- 51 No additional specific vegetation screening has been proposed along Walkers Road for the following reasons:
- 51.1 The proposed intersection upgrade of SH1 / Walkers Road and Dunns Crossing Road will become a main threshold into Rolleston. With associated planting signage etc., it will also require realignment of part of the road and most likely allow for a larger triangle of "leftover land" outside of the ODP area in this corner to be used for strategic landscaping to create a gateway.
- 51.2 Considering the proposed changes to the southern end of Walker Road as part of the transport improvements and intersection upgrades, any larger screening vegetation along this western boundary should be avoided until the new road design is fully resolved and passive surveillance requirements over the road are identifiable. This is in order to ensure the safety and amenity of pedestrian and cyclists.
- 51.3 The neighbouring prison presents larger buildings, well set back from the road boundary. Due to their internalised activities, they do not overlook the site. The prison grounds are sparsely vegetated and dominated by fences and lighting structures. Exercise yards are visible in the distance as well as a small orchard but generally there are no outdoor activities located directly adjacent to the road boundary. Ms Seaton's evidence also states that Ara Poutama staff specifically indicated they would prefer not to have high, dense planting located on the Walkers Road frontage, for security reasons.

Two Chain Road and rural properties

- 52 As mentioned earlier, Waka Kotahi's proposal to reroute traffic flows from SH1 into and out of the existing I-Zone via Two Chain Road/Walker Road change the streetscape and street character of both roads. It is mainly the rerouting that instigates this change in character with intersection upgrades, and carriage ways suitable for truck movements. The expected increase in traffic movement and its impact on the amenity of adjacent properties mainly through noise disturbance and possible vibration is a direct flow on effect of these proposed changes.
- 53 PC 80 does benefit from this rerouting and will add vehicular and pedestrian /cycle access points which will allow intermittent views into the Site. The location of these access points on Two Chain Road have been carefully and strategically placed avoiding alignment with existing houses on the adjacent rural residential properties.

- 54 With regards to the built form, Mr Compton Moen has covered the basis that structures such as milking sheds and other larger rural auxiliary structures are permitted within a rural zone. However, an industrial zone will bring with it a more varied built form consisting of potentially larger structures and definitely arranged with a higher density and less open gaps between built form. It also brings with it more roading, hardstand areas, different type of fencing, signage and streetlighting, etc. In summary, PC 80 will introduce a change from rural to industrial and this change can affect the street character of Two Chain Road.
- 55 This is however mitigated by the proposed edge treatment measure. The key component of this with regard to visual amenity and character are the retention of the existing boundary vegetation, the earth bund and the additional planting requirements. Combined, these measures will continue to present a vegetated edge to the road that is sufficient height to screen most of the industrial scale buildings introduced by PC 80.

Planning frame work

- 56 I have considered the urban design elements of this rezoning request and assessed them against the relevant objectives, policies, and rules of the Operative District Plan.
- 57 The proposal does align well with the objectives and policies. The B2A rules package is appropriate with regard to build standards and interface treatment with adjacent residential or rural zones and will guide the development accordingly.
- 58 The proposed treatment of Two Chain Road provides further mitigation measures beyond the B2A rules/requirements in direct response to concerns/submissions by the rural residential neighbours and the Corrections facilities. These measures are partially reflected in the revised ODP and in additional rules which will be covered by Ms Seaton. I am comfortable with this approach and consider the proposed additional edge treatment will provide further mitigation and improve the visual amenity.

CONCLUSION

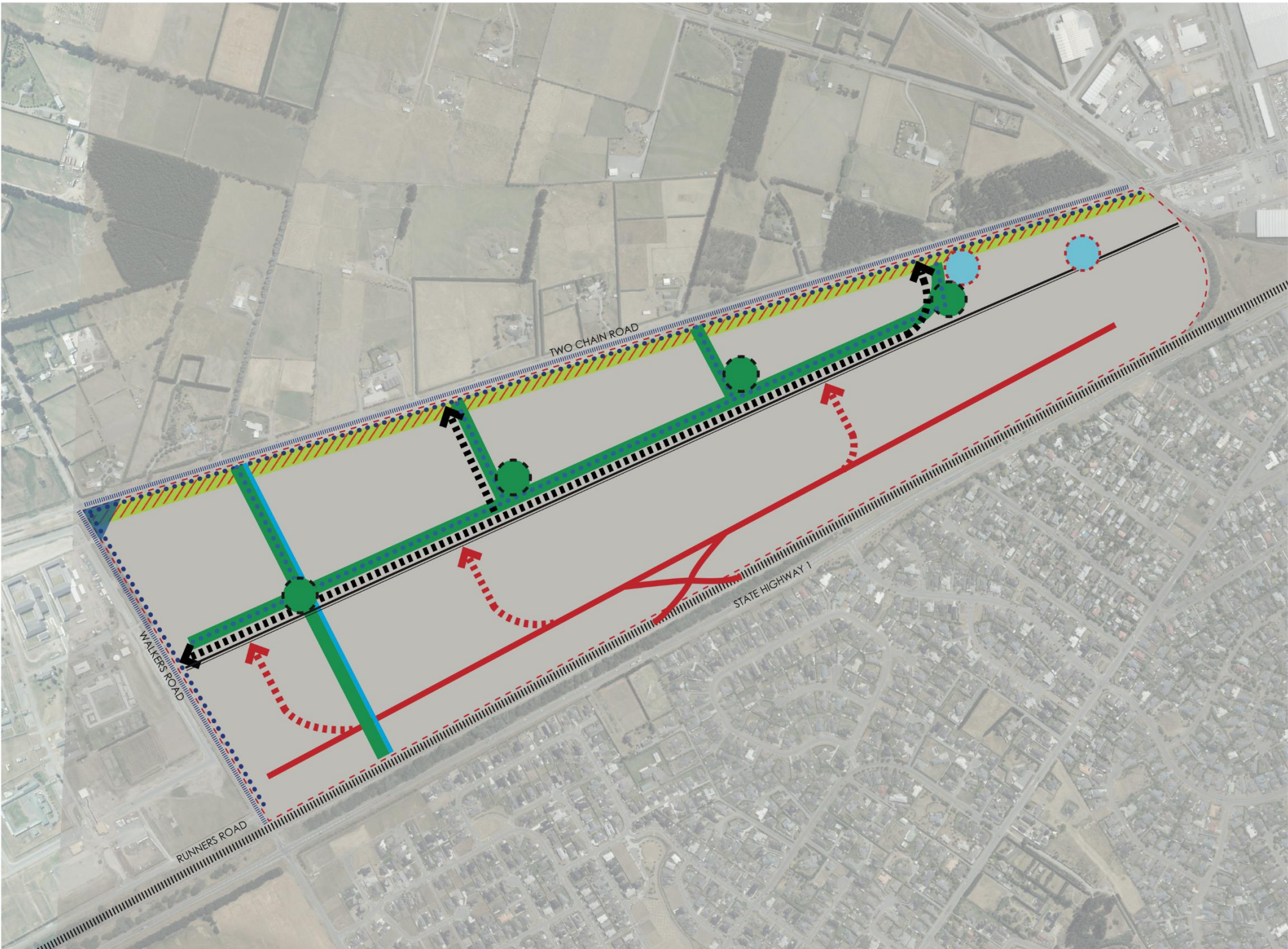
- 59 Rolleston is a key regional centre in the Selwyn District and growth is to be expected and directed around such centres. This is clearly in-line with the directions set out by the NPS-UD.
- 60 Industrial activities are part of a natural urban growth and need to be carefully considered and accommodated with the aim to minimise and or mitigate effects on sensitive receptors such as residential areas.
- 61 Rolleston has established a clear separation of industrial activities from all other urban activities by strategically placing the I-Zone north of the major transport corridor. Introducing a further industrial zone to extend the I-Zone along the rail corridor is logical continuation of the urban structure and compact form of Rolleston.
- 62 I agree with the conclusion drawn by the planning officer, Ms White, that the proposal contributes to a well-functioning urban environment, as it:

- 62.1 pro-actively and specifically manages the use and development of industrial land adjoining the existing industrial zone boundary;
- 62.2 is located in close proximity to key transport links, including SH1 and the main north-south rail corridor;
- 62.3 assists with reducing adverse rural character and visual effects that might otherwise arise by concentrating buildings and activities adjacent SH1 / the rail corridor, existing Rolleston urban boundary to the south, and the existing business zone to the east;
- 62.4 can effectively avoid or mitigate potential adverse effects from industrial development on the adjacent environments through compliance with the operative District Plan rules for the zones coupled with a proposed ODP and associated additional mitigation measures; and
- 62.5 enables the community to provide for its economic wellbeing, thereby contributing to its social wellbeing.

Dated: 5 October 2022

Nicole Lauenstein

- LEGEND
- Outline Development Plan Area
 - Business 2A Zone
 - Retain shelter belt / landscape treatment area 5 / 2.5m high bund / No individual property access
 - Indicative Primary Road
 - Indicative Rail Siding Infrastructure
 - Indicative Rail Spurs into Warehouses
 - Extent of Rail Infrastructure (no sidings or spurs to extend beyond this point)
 - Existing Water Race Retained
 - Extent of Road Frontage Upgrade
 - Shared Pedestrian / Cycle Path
 - Intersection Upgrade (area shown is indicative)
 - Green link
 - Green link including shared pedestrian / cycle path
 - Node including seating and landscaping (area and location indicative)
 - Wet area for further investigation at the time of subdivision



A. OUTLINE DEVELOPMENT PLAN - BUSINESS 2A ZONE TWO CHAIN ROAD

URBAN DESIGN, LANDSCAPE AND VISUAL IMPACT ASSESSMENT

PROPOSAL - OUTLINE DEVELOPMENT PLAN
TWO CHAIN ROAD PLAN CHANGE