Appendix 3: Peer Reviews and Evidence Statements

- Transport Flow Transportation Specialists (Flow) Mr Mat Collins in respect of V1-0025, V1-0084 and V1-0093
- Urban Design SDC Urban Design Lead Ms Gabi Wolfer in respect of V1-0025 and V1-0084
- Servicing Infrastructure (Three Waters) Waugh Mr Hugh Blake-Manson in respect of V1-0025, V1-0084 and V1-0093
- Geotechnical Geotech Consulting Mr Ian McCahon respect of V1-0025, V1-0084 and V1-0093
- **Soil Contamination** Pattle Delamore Partners Ltd Mr Rowan Freeman respect of V1-0025, V1-0084 and V1-0093
- Economic Formative Limited Mr Derek Foy respect of V1-0025 and V1-0084

technical note



PROJECT VARIATION 1 TO THE PROPOSED DISTRICT PLAN: REZONING SUBMISSIONS

SUBJECT ROLLESTON PACKET: PEER REVIEW OF TRANSPORT MATTERS

TO JOCELYN LEWES; JUSTINE ASHLEY

FROM MAT COLLINS

DATE 28 MARCH 2023

SUMMARY OF MY PEER REVIEW

Flow Transportation Specialists Ltd (Flow) has been engaged by Selwyn District Council (Council) to provide transport planning and transport engineering advice regarding the Variation 1 to the Proposed District Plan (PDP). Variation 1 to the PDP was notified in August 2022, with numerous submissions being received seeking the re-zoning of land.

Council has requested that I review transport matters associated with these rezoning requests. This technical note relates to submissions within Rolleston. In summary, my view on each submission is as follows:

V1-0025: 148 – 178 LINCOLN ROLLESTON ROAD, ROLLESTON, YOURSECTION LIMITED

I recommend that

- If Council approves the rezoning of the site, a planning mechanism (such as a District Plan Rule) should be included to delay development of the site until the following intersection improvements are undertaken by Council (which may include a Developer Agreement with the submitter)
 - Selwyn Road/Lincoln Rolleston Road intersection is upgraded to a roundabout, which I understand is programmed for 2028/2029
 - Selwyn Road/Weedons Road intersection is upgraded to a roundabout, which I understand is programmed for 2027/2028
 - Lowes Road/Levi Drive/Masefield intersection is upgraded to traffic signals, which I understand is programmed for 2025/2026
- The proposed ODP narrative is amended to
 - Realign the northern east/west road to connect with Ed Hilary Drive (CRETS Collector) proposed under PC75
 - Identify that the northern and southern intersections with Lincoln Rolleston Road are to be roundabouts
 - o state that a shared use path is required along the site frontage with Lincoln Rolleston Road.

Refer to required intersection upgrades and nearby rezone requests shown in Figure 1, and my discussion of V1-0025 in Section 1.

Levi/Masefield/
Lincoln Rolleston

Rezone
submission/Plan
Change

V1-0093

V1-0084

PC78

Lincoln Rolleston/
Selwyn

Figure 1: Eastern Rolleston showing plan changes and rezoning requests

V1-0084: 478 WEEDONS ROAD, ROLLESTON, APPLEFIELDS LIMITED

I recommend that

- If Council approves the rezoning of the site, a planning mechanism (such as a District Plan Rule) should be included to delay the any development within the site until the following intersection improvements are undertaken by Council (which may include a Developer Agreement with the submitter)
 - Selwyn Road/Lincoln Rolleston Road intersection is upgraded to a roundabout, which I understand is programmed for 2028/2029
 - Selwyn Road/Weedons Road intersection is upgraded to a roundabout, which I understand is programmed for 2027/2028
 - Lowes Road/Levi Drive/Masefield intersection is upgraded to traffic signals, which I understand is programmed for 2025/2026
- The ODP is amended to

- o adopt Option 1, which will create a four-arm roundabout with Council's intended roundabout upgrade for the Lincoln Rolleston Road/Selwyn Road intersection
- indicate that site frontage may be required to be vested to Council for the purpose of upgrading the Selwyn Road/Lincoln Rolleston Road intersection
- o indicate that full site frontage with Selwyn Road and Lincoln Rolleston Road be upgraded to urban standard, including footpath and cycle facilities
- remove the secondary east/west road, east of the primary north south road (towards Reids Pit Park). However, the walking and cycling link along this route should be maintained.

Refer to required intersection upgrades and nearby rezone requests shown in Figure 1, and my discussion of V1-0084 in Section 2.

V1-0093: 478 WEEDONS ROAD, ROLLESTON, BRENDEAN DRIVE REZONING GROUP

I recommend that

- Council rejects the rezoning request as there is insufficient information provided to assess the potential transport effects of the rezoning
- If the submitter provides additional assessment of transport effects, I recommend that this include consideration of several changes to the ODP to ensure consistency with adjacent Plan Changes and rezoning submissions.

Refer to my discussion in Section 3.

1 V1-0025: 148 – 178 LINCOLN ROLLESTON ROAD, ROLLESTON, YOURSECTION LIMITED

This submission seeks to amend the zoning of approximately 24ha from General Rural Zone (GRUZ) to Medium Density Residential Zone (MRZ) at 148 - 178 Lincoln Rolleston Road (see Figure 2). Based on an average density of 13.5 lots per hectare, 280 - 310 residential dwellings are anticipated. The site is located within the Urban Growth Overlay.

Key transport aspects include

- Once fully developed, the site is indicated to generate around 252 vehicle trips during the peak hour
- Lincoln Rolleston Road is classified in the Operative and Proposed District Plan as an arterial road
- An ODP is proposed, as shown in Figure 3. This includes an internal network of Primary and Secondary Roads, and walking and cycling facilities
- Three new intersections are proposed along Lincoln Rolleston Road to provide vehicle access to the site. Section 7 of the ITA confirms that these are intended to be roundabouts for Ed Hilary Drive (extension) and Lady Isaac Drive (extension), and a local road T-intersection for the secondary road
- The ODP includes the extension of Ed Hilary Drive (also known as the CRETS Collector) through the site
- The Lincoln Rolleston Road frontage will be upgraded to an urban standard.

Figure 2: Site location



Figure 3: Proposed ODP



1.1 Documents reviewed

I have reviewed the following documents

Integrated Transport Assessment (ITA), prepared by Stantec, dated 6 September 2022.

1.2 My discussion and recommendations

As part of my review I have taken into account the following

- The proposed transport network shown in the ODP generally aligns with the adjacent developments, however the northern east/west road should be moved north to align with Ed Hilary Drive (CRETS Collector) proposed by PC75. Refer to Figure 4
- The proposed development is generally consistent with the Rolleston Structure Plan. It provides for the alignment of the CRETS Collector Road via the extension of Ed Hillary Drive
- I support the ITA's conclusion that the northern and southern intersections (being Ed Hilary Drive extension and Lady Isaac Drive extension) should be formed as roundabouts. I recommend that the ODP is amended to clarify this
- The trip generation and distribution assumptions in the ITA are generally consistent with those used for the nearby Plan Change 75 and Plan Change 78, which I consider are reasonable
- The ITA assessment assumes that the Lincoln Rolleston Road / Selwyn Road intersection has been upgraded to a roundabout, however no analysis is provided of the potential effects of the rezoning on the existing intersection form. I am therefore unsure of the effects that rezoning would have, should development proceed prior to the upgrade of the Lincoln Rolleston Road / Selwyn Road intersection to a roundabout
- As part of my review of Plan Change 75, I undertook a high level estimate of the extent to which various plan changes in Rolleston were contributing to congestion effects at various intersections within the Rolleston network¹. I found that Plan Change 75 contributed
 - o around 1.5% of congestion effects at the Selwyn Road/Lincoln Rolleston Road intersection, and
 - o around 1.4% of congestion effects at the Selwyn Road/Weedons Road intersection, and
 - o around 1.7% of congestion effects at the Lowes Road/Levi Drive/Masefield intersection.
- ◆ Plan Change 75 anticipated around 280 residential dwellings, and is located adjacent to 148 178 Lincoln Rolleston Road. I therefore consider that the effects of the rezoning request on the wider transport network will likely be similar to those generated by Plan Change 75
- As part of my recommendation on Plan Change 75 I recommended that Council consider whether the multiple Plan Change applications within Rolleston could affect the timing of programmed funding within the Long Term Plan, including for upgrades to the intersections that I have listed above

¹ Refer to Flow Report R1B210920, Section 4, available online at https://www.selwyn.govt.nz/_data/assets/pdf_file/0007/531358/PC75-Officer-s42A-report_Appendix-4-Transport-evidence_final.pdf

- However, due to the number of rezoning submissions and Plan Change requests that Council has received, I now consider it appropriate to delay further development until Council has undertaken the necessary upgrades along Selwyn Road, unless further analysis is provided which demonstrates that the existing intersections can operate safely and efficiently with the addition of traffic generated by urban zoned but as yet undeveloped land within Rolleston. This is consistent with my recommendations contained within the Flow Integrated Transport Assessment (ITA) for several sites within Rolleston that were proposed to be rezoned by Council as part of Variation 1 to the Proposed District Plan
- The proposed ODP narrative states that "A second dedicated [shared use] path on the eastern side of Lincoln Rolleston Road is not required". However, this is inconsistent with the Commissioner's recommendation of the nearby Plan Change 71², which states that "Separated shared pedestrian/cycle ways are to be included in.... the Lincoln Rolleston Road frontage upgrade...". I therefore recommend that the proposed ODP is amended to state that a shared use path is required along the site frontage with Lincoln Rolleston Road.

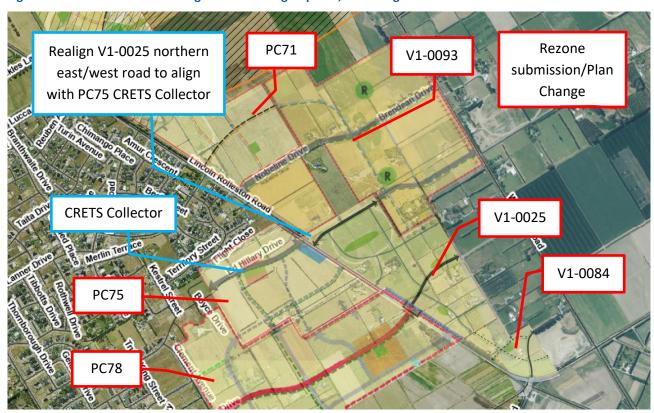


Figure 4: Rolleston East Plan Changes and rezoning requests, and realignment of the CRETS Collector for V1-0025

I recommend that

If Council approves the rezoning of the site, a planning mechanism (such as a District Plan Rule) should be included to delay any development within the site until the following intersection improvements are undertaken by Council (which may include a Developer Agreement with the submitter)

² Commissioner Final Recommendation: ODP Area 14 narrative, available online at https://www.selwyn.govt.nz/_data/assets/pdf_file/0017/1003733/SDC-PC71-Commissioner-Final-Recommendation-29-July-2022-Appendix-1B-ODP-Area-14-narrative.pdf

- Selwyn Road/Lincoln Rolleston Road intersection is upgraded to a roundabout, which I understand is programmed for 2028/2029
- Selwyn Road/Weedons Road intersection is upgraded to a roundabout, which I understand is programmed for 2027/2028
- Lowes Road/Levi Drive/Masefield intersection is upgraded to traffic signals, which I understand is programmed for 2025/2026
- The proposed ODP narrative is amended to
 - Realign the northern east/west road to connect with Ed Hilary Drive (CRETS Collector) proposed under PC75
 - o Identify that the northern and southern intersections with Lincoln Rolleston Road are to be roundabouts
 - o state that a shared use path is required along the site frontage with Lincoln Rolleston Road.

2 V1-0084: 478 WEEDONS ROAD, ROLLESTON, APPLEFIELDS LIMITED

This submission seeks to amend the zoning of approximately 6.2ha from General Rural Zone (GRUZ) to Medium Density Residential Zone (MRZ) at 148 – 178 Lincoln Rolleston Road (see Figure 5). Based on an average density of 15 lots per hectare, 90 residential dwellings are anticipated. The site is located within the Urban Growth Overlay.

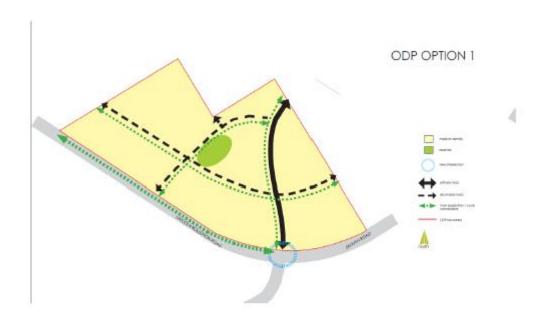
Key transport aspects include

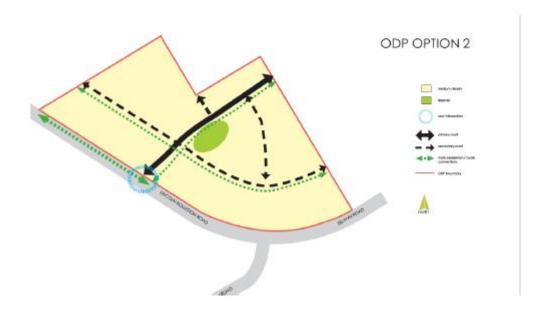
- Once fully developed, the site is indicated to generate around 80 90 vehicle trips during the peak hour
- Lincoln Rolleston Road and Selwyn Road are classified in the Operative and Proposed District Plan as an arterial road
- Two potential ODPs are proposed, to allow flexibility with Council's upgrade of the Selwyn Road / Lincoln Rolleston Road, as shown in Figure 6. This includes an internal network of Primary and Secondary Roads, and a walking and cycling facilities
- Up to two new intersections are proposed along Lincoln Rolleston Road to provide vehicle access to the site
- The Lincoln Rolleston Road frontage will be upgraded to an urban standard.

Figure 5: Site location



Figure 6: Outline Development Plan (options dependent on Selwyn Road / Lincoln Rolleston Road intersection improvements)





2.1 Documents reviewed

I have reviewed the following documents

• Transport Assessment by Carriageway Consulting, dated 15 September 2022.

2.2 My discussion and recommendations

As part of my review I have taken into account the following

- The proposed transport network shown in the ODP generally aligns with the adjacent developments
- The proposed development is generally consistent with the Rolleston Structure Plan
- The trip generation and distribution assumptions in the ITA are generally consistent with those used for the nearby Plan Change 75 and Plan Change 78, which I consider are appropriate
- I understand that Council intends to upgrade the Selwyn Road/Lincoln Rolleston Road intersection to a roundabout. This may require road widening within the site, the concept design produced by Council is shown in Figure 7
- However, the ODP does not indicate that this land may be required and therefore rezoning the site risks foreclosing Council's opportunity to upgrade the intersection. I recommend that the ODP indicate that site frontage may need to be vested to Council to allow the upgrade of the Selwyn Road/Lincoln Rolleston Road intersection, I note that this method was used for the SH1/Dunns Crossing Road in Plan Change 73³ and for the Dunns Crossing Road/Selwyn Road intersection in Plan Change 81⁴
- I consider that the ODP should indicate that the submitter is to urbanise the full site frontage with Lincoln Rolleston Road and Selwyn Road. The proposed ODP only indicates an upgrade on Lincoln Rolleston Road north of the primary access to the site. This would create a gap in the walking and cycling network that would otherwise need to be rectified by Council
- I consider that the secondary east/west road should be deleted from the ODP, east of the primary north south road. The secondary east/west road is unlikely to be able to be extended as V1-0084 is adjacent to Reids Pit Park, as shown in Figure 8. I do not consider this connection to be critical to V1-0084 however I consider that the walking and cycling link that is shown on the ODP should be maintained
- The ODP provides two options for the primary road access. I consider that Option 1 should be adopted, which will create a four-arm roundabout with Council's intended roundabout upgrade for the Lincoln Rolleston Road/Selwyn Road intersection
- The Transport Assessment concludes that the existing Selwyn Road / Lincoln Rolleston Road will experience significant delays (however the SIDRA analysis of this is not included in the report). The Transport Assessment undertakes a further assessment to assess the intersection performance once it has been upgraded to a roundabout. This showed that the intersection performs acceptably
- As part of my review of Plan Change 75, I undertook a high level estimate of the extent to which various plan changes in Rolleston were contributing to congestion effects at various intersections within the Rolleston network
- Plan Change 75 anticipated around 280 residential dwellings and is located near 478 Weedons Road. I therefore consider that the effects of the rezoning request on the wider transport network will likely be around 30% of the magnitude generated by Plan Change 75

³ Plan Change 73, proposed ODP https://www.selwyn.govt.nz/ data/assets/pdf file/0006/562866/Appendix-1-Proposed-Rules-Package-and-ODPS.pdf

⁴ Plan Change 81, proposed ODP https://www.selwyn.govt.nz/ data/assets/pdf file/0005/1345082/PC81 82-Supplementary evidence of Jeremy Phillips FINALv2.pdf

- As part of my recommendation on Plan Change 75 I recommended that Council consider whether the multiple Plan Change applications within Rolleston could affect the timing of programmed funding within the Long Term Plan, including upgrades for
 - Selwyn Road/Lincoln Rolleston Road intersection, and
 - Selwyn Road/Weedons Road intersection, and
 - Lowes Road/Levi Drive/Masefield intersection.
- However, due to the number of rezoning submissions and Plan Change requests that Council has received, I now consider it appropriate to delay further development until Council has undertaken the necessary upgrades along Selwyn Road, unless further analysis is provided which demonstrates that the existing intersections can operate safely and efficiently with the addition of traffic generated by urban zoned but as yet undeveloped land within Rolleston. This is consistent with my recommendations contained within the Flow Integrated Transport Assessment (ITA) for several sites within Rolleston that were proposed to be rezoned by Council as part of Variation 1 to the Proposed District Plan.

I recommend that

- If Council approves the rezoning of the site, a planning mechanism (such as a District Plan Rule) should be included to delay any development within the site until the following intersection improvements are undertaken by Council (which may include a Developer Agreement with the submitter)
 - Selwyn Road/Lincoln Rolleston Road intersection is upgraded to a roundabout, which I understand is programmed for 2028/2029
 - Selwyn Road/Weedons Road intersection is upgraded to a roundabout, which I understand is programmed for 2027/2028
 - Lowes Road/Levi Drive/Masefield intersection is upgraded to traffic signals, which I understand is programmed for 2025/2026

The ODP is amended to

- o adopt Option 1, which will create a four-arm roundabout with Council's intended roundabout upgrade for the Lincoln Rolleston Road/Selwyn Road intersection
- indicate that site frontage may be required to be vested to Council for the purpose of upgrading the Selwyn Road/Lincoln Rolleston Road intersection
- o indicate that full site frontage with Selwyn Road and Lincoln Rolleston Road be upgraded to urban standard, including footpath and cycle facilities
- o remove the secondary east/west road, east of the primary north south road (towards Reids Pit Park). However, the walking and cycling link along this route should be maintained. Refer to Figure 9.

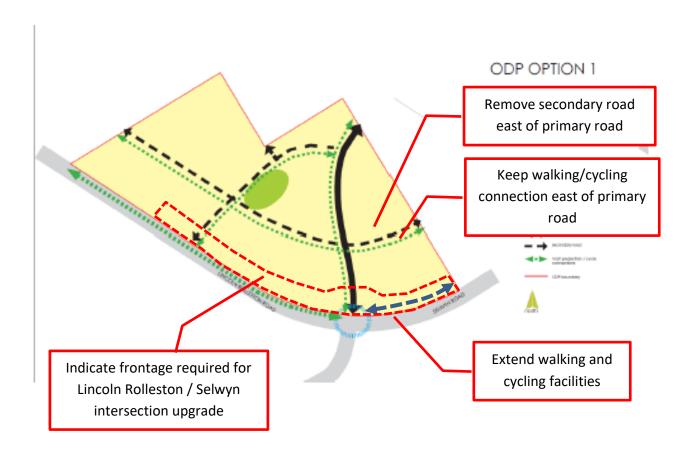
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Figure 7: Concept design for the upgrade of Lincoln Rolleston Road / Selwyn Road intersection

Figure 8: Reids Pit Park, owned by Council



Figure 9: V1-0084 ODP amendments



3 V1-0093: LINCOLN ROLLESTON ROAD, ROLLESTON, BRENDEAN DRIVE REZONING GROUP

This submission seeks to amend the zoning of approximately 53ha from General Rural Zone (GRUZ) to Medium Density Residential Zone (MRZ) at multiple sites on Lincoln Rolleston Road, Weedons Road, Brendean Drive and Nobeline Drive (see Figure 10) and introduce an ODP (see Figure 11). The site is located within the Urban Growth Overlay.

The submission does not state the expected number of dwellings that will result. Based on an average density of 13.5 lots per hectare (which I have relied on from V1-0025), around 700 residential dwellings could be provided. Based on a peak hour vehicle trip rate of 0.9 vehicles/dwelling/hr, the rezoning could generate around 640 vehicle movements in the peak hour.

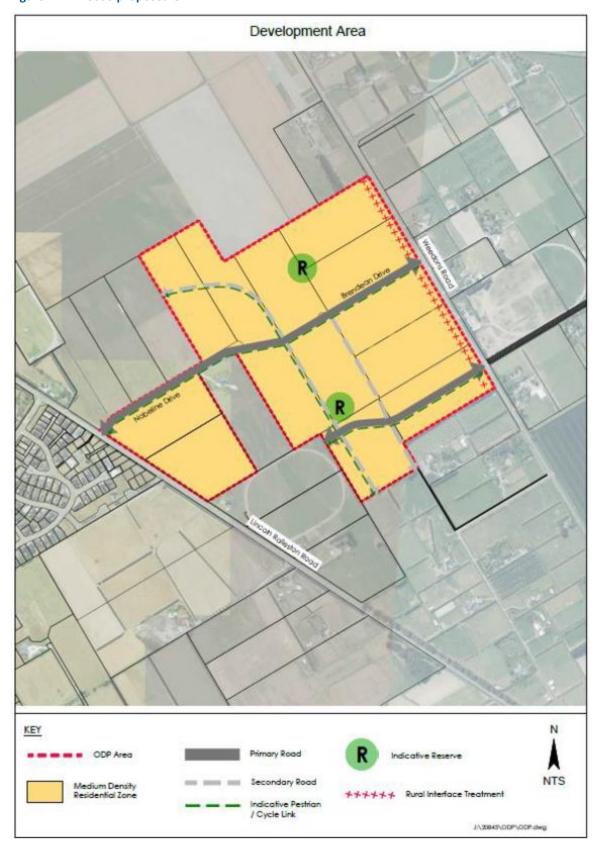
Key transport aspects include

- Two primary east/west roads, one following the exiting Nobeline Drive / Brendean Drive alignment
- A secondary north/south road
- An internal pedestrian and cycling network.

Figure 10: V1-0093 sites location



Figure 11: V1-0093 proposed ODP



3.1 Documents reviewed

I have reviewed the following documents

Section 32 report, prepared by Davie Lovell-Smith, dated 16 September 2022.

3.2 My discussion and recommendations

As part of my review I have taken into account the following

- The Future Urban Development Area (FUDA) ITA, prepared by Flow on behalf of Selwyn Council, which is relied upon in the Section 32 report by Davie Lovell-Smith. In my view the FUDA ITA cannot be relied upon as an assessment of traffic effects for V1-0093, as the FUDA ITA assessed a number of sites that are remote from V1-0093
- The Transport Assessments included within V1-0025 and V1-0084, which are adjacent to V1-0093. In my view these cannot be relied upon as an assessment of traffic effects for V1-0093, as both submissions are considerably smaller in size, and are likely to result in different trip distributions (as V1-0093 proposes a transport link between Lincoln Rolleston Road and Weedons Road, which will affect trip distributions on the network)
- My understanding of the Rolleston Paramics Traffic model, from my role as Council's Transport
 Expert for Plan Change 71, 75 and 78. From this work I have an understanding of existing and
 future hotspots on the network, which includes the Levi Road/Weedons Road intersection
- The secondary north/south road should be realigned at the southern boundary, to integrated with V1-0025
- The road frontages with Lincoln Rolleston Road and Weedons Road should include walking and cycling facilities
- The southern east/west road should include reference to its function as the extension of the CRETS Collector in the ODP narrative.

I recommend that

- Council rejects the rezoning request as there is insufficient information provided to assess the potential transport effects of the rezoning
- If the submitter provides additional assessment of transport effects, I recommend that this include consideration of several changes to the ODP to ensure consistency with adjacent Plan Changes and rezoning submissions, shown in Figure 12.

Show walking and cycling network on frontage

V1-0093

PC71

Identify CRETS
Collector

Cycling network on frontage

V1-0025

PC75

Align N/S road with V1-0025

Figure 12: Recommend amendments to the V1-0093 ODP

VARIATION 1 TO THE PROPOSED SELWYN DISTRICT PLAN

URBAN DESIGN PEER REVIEW IN THE MATTER OF

REZONING REQUEST V1-0025 ROLLESTON (YOURSECTION LTD.)

1. INTRODUCTION AND SCOPE

- a. In my role as Selwyn District Council's Urban Design Lead, I have peer reviewed the rezoning request V1-0025 regarding Variation 1 to the Proposed Selwyn District Plan (PDP).
- b. V1-0025 seeks to rezone approximately 24.18 ha of land, comprised in five titles and situated at 148-178 Lincoln Rolleston Road in Rolleston from General Rural Zone (GRUZ) to Medium Density Residential Zone (MRZ) in accordance with a proposed Outline Development Plan (ODP) and a complementary ODP narrative.
- c. The site is subject to a Future Development Area (FDA) classification under the Canterbury Regional Policy Statement (CPRS) and has not been identified for residential use through any other process. The PDP also identifies the site within an Urban Growth (UG) overlay.
- d. The submitter's Urban Design assessment includes an indicative layout to test the possible density distribution on site and the required roading connections envisaged for the site.
- e. The review of urban design matters and their appropriateness against the relevant strategic directions is to assist the council's officers in preparing their s42A report.
- f. The review includes an assessment of the appropriateness of the proposed rezoning against the relevant strategic directions as outlined below.
- g. To this effect I have reviewed the submitter's Landscape and Visual Impact Assessment¹, the Transport Assessment² and the Urban Design Statement³ on matters in my field of expertise. Where appropriate, I have identified information gaps or areas where further clarification is needed in the relevant expert evidence. I have also identified and recommended changes to the proposed ODP to achieve a better alignment with the strategic directions.
- h. I restrict my assessment to matters that are appropriate to the rezoning request, which determines the suitability of this site for residential landuse and note that detailed matters will have to be addressed at detailed design stage.
- i. The matters that I have reviewed relate to urban form and growth, connectivity and accessibility, amenity and quality of the proposed receiving environment.

¹ Appendix D- Lincoln Rolleston Road Re-zoning, Rolleston, Landscape and Visual Impact Assessment

² Appendix E- Lincoln Rolleston Road Residential Rezoning Integrated Transport Assessment

³ Appendix F- Rolleston Southeast, Residential development Proposal, Urban Design Statement

2. STRATEGIC DIRECTIONS

- a. The following review is based on strategic directions on good urban form from the following framework documentations: the National Policy Statement on Urban Development (NPS-UD), the CRPS and the PDP.
- b. Drawing on the strategic directions outlined above I have reviewed the urban form proposed in terms of:
 - 1. The extent to which it creates a consolidated and compact urban form and urban growth is provided in a sustainable form.
 - 2. The level of connectivity with the existing urban environment.
 - 3. The accessibility to services and facilities using motorised and non-motorised transport modes.
 - 4. The residential amenity values and character and the interface treatment with surrounding sites.

3. EXISTING ENVIRONMENT

- a. The proposed site is a 24.18ha block of land, situated on the south-eastern fringe of the Rolleston Township, along the eastern side of Lincoln Rolleston Road.
- b. The site is located at the current periphery of Rolleston Township, approximately 3km from the town centre.
- c. Surrounding neighbourhoods to the west on the opposite side of Lincoln Rolleston Road are either established residential (Falcon's Landing) or going through an incremental change to become residential (Private Plan changes 75 and 78, both of which are proposed to be rezoned to MRZ through Variation 1).
- d. Lincoln Rolleston Road is characterised as an arterial road and functions as the eastern gateway into the township. Along the road's south-western side runs a shared pedestrian/cycle path that connects Rolleston with the Lincoln Township.
- e. The site is characterised as having a semi-open character of largely flat land parcels used for agricultural purposes that are framed by shelterbelt plantings amongst which single-storey dwellings and auxiliary structures have been placed.
- f. The modification of the land and the increase in density and height will have visual effects on the outlook for some surrounding areas, particularly those rural sites along the site's eastern boundary.

- g. The change in character from rural to that of a more suburban and denser character with smaller building footprints, public open space, more articulated facades, and attractive streetscapes is considered to be in line with the "anticipated urban environment" of the MRZ.
- h. I agree with the submitter in the UD assessment that outlook, character and amenity effects along the interface with surrounding rural sites, which have an UG overlay in the PDP, will only be temporary and will reduce over time when these areas get developed and existing development will assimilate with the new environment, hence this change is anticipated and acceptable.
- i. I agree with the submitter's assessment⁵ that it is not necessary to provide mitigation measures or hard or edge treatment to preserve rural outlooks for above reasons.
- j. I concur with the submitter's assessment of the existing largely rural-residential character of the site and the effects of the proposal on landscape character.
- k. I concur with the submitter's assessment on the effect of the proposal on the landscape values and agree that the proposed rezoning is consistent with the urban growth objectives and policies and conclude that the development is situated in a location that is anticipated to be subject to urban growth.

4. URBAN GROWTH AND URBAN FORM

- a. Rolleston is classified as a Key Activity Centre⁶ and is the primary focus for commercial, civic and community facilities in the district. The proposed zoning is in keeping with the objectives and policies, which seeks that urban growth is located only in and around existing townships aligned with the anticipated role in the township.
- b. The Rolleston Structure Plan (RSP), albeit somewhat outdated in terms of growth numbers and boundaries, sets out framework principles and identifies the strategic direction for the site being suited to a medium density residential landuse that is well-connected to adjacent residential neighbourhoods.
- c. The site is positioned in a location that lends itself to a residential landuse and achieving a compact urban form, as the site is placed within the projected infrastructure boundary, which supports an integrated landuse/infrastructure approach; is situated within the current Urban Growth boundary for Rolleston; is identified in the CRPS FDA; and the PDP seeks townships to maintain a consolidated and compact urban form.
- d. The UG overlay in the PDP stretches across the proposed site and other sites within the triangle of Weedons, Lincoln Rolleston and Selwyn Roads, as the new extension of the urban boundary reflecting the direction for growth for Rolleston.

⁴ PDP-MRZ-O1.

⁵ Appendix D- Lincoln Rolleston Road Re-zoning, Rolleston, Landscape and Visual Impact Assessment, page 7 and Appendix F- Rolleston Southeast, Residential development Proposal, Urban Design Statement, page 10

e. It is anticipated that the site will become part of the wider neighbourhood forming East Rolleston, if and when adjacent sites get developed.

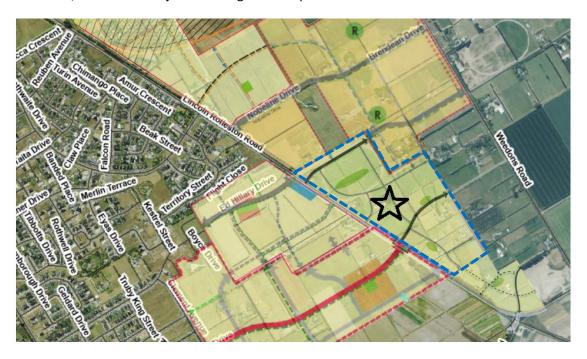


Figure 1: Illustration of site (outlined in blue) in context

- f. The proposal has demonstrated with the indicative layout in Appendix 1 of the Urban Design Assessment that it meets the objectives and policies in terms of built form by providing a variety of section sizes, thus enabling variation in housing typologies and indicating where further intensification is placed.
- g. I consider the proposal will contribute to the residential character anticipated within a MRZ zone.
- h. I consider the development of the site with a residential landuse aligns with the statutory framework and provides direction to encourage consolidation of urban areas.

5. CONNECTIVITY AND ACCESSIBILITY

- a. Connectivity relates to how to create joining roading networks that provide transport choices and support resilience and safer places. Well-connected street networks support cycling and walking as well as other alternative transport modes.
- b. Accessibility relates to providing and enhancing access to public services and facilities, particularly for non-motorised transport modes. The New Zealand Urban Design Protocol states that "quality urban design to have social, environmental and cultural benefits by creating well connected, inclusive and accessible places...".
- c. Liveable places are considered those that are easy to move around, with accessible services and a variety of integrated transport options.

- d. The RSP identified the function of Lincoln Rolleston Road as a national arterial, leading into the township and the town centre.
- e. As an arterial the road needs to cater both for access and movement functions, which the proposal will be able to provide for with integrated frontages. These measures and upgrades to the road corridor will assist in creating an urban environment with lower speed limits and more crossing opportunities for pedestrians and cyclists.
- f. The proposal provides two primary roading links to Lincoln Rolleston Road linking with the wider roading network and supporting second roading connections.
- g. The proposal seeks a strategic roading alignment with adjacent sites off Lincoln Rolleston Road, which are also owned by the submitter.
- h. The proposed roading network consists of two primary east-west roads that provide essential connectivity via Ed Hillary and Lady Isaac Drives across Rolleston. It is anticipated that these connections will in the future link with Weedons Road, which forms the extent of the urban boundary, as shown in the RSP.
- i. I have consulted with the Council's Transport Lead in the matter of the proposed north-south secondary spine road. To reinforce the intended function to provide access, as well as connectivity beyond the site, the classification of this road needs to be amended accordingly to a primary road. The alignment needs to reflect the ability to provide adequate connectivity to the east and subsequent development areas (see context map Appendix B).
- j. The site contains a secondary roading network, which adequately supports the primary roading network. Tertiary roading provisions will be determined at subdivision level.
- k. Pedestrian and cycling opportunities within the site are provided via on-road and off-road provisions. Shared pedestrian/cycle paths located off- road are proposed for east-west roads, while on-road provisions are integrated within the North-South roads, both which connect to the wider cycling and walking network within adjacent neighbourhoods.
- I agree that the submitter's provided design principles have informed the pedestrian and cycle strategy and consider the site to be designed in a way that is supportive of active transport modes.
- m. The proposal achieves direct, legible and safe connections for pedestrians and cyclists for the most part.
- n. To improve pedestrian permeability in accordance with the ODP and the indicative development layout and for a better overall integration of the site with adjacent neighbourhoods, I consider an additional pedestrian/cycle link to Lincoln Rolleston Road and an additional pedestrian cycle route to the East, as illustrated in Figure 2.

- o. The Rolleston to Lincoln Cycleway runs along the south-western side of Lincoln Rolleston Road providing cycle connections between the two townships. ⁷ The proposal seeks to establish a separate cycle/pedestrian pathway on the eastern side of Lincoln Rolleston Road.
- p. I support the proposal seeking "to upgrade the road frontage of Lincoln Rolleston Road to provide additional facilities for pedestrians and cyclists, consistent with what would be anticipated in an urban area."
- q. The site is at present not connected to the public transport system and bus services are not operating in walking or cycling distance to the site. However, a density increases along the main corridor of Lincoln Rolleston Road could warrant a review of these provisions in time, noting that buses are not controlled by SDC.
- r. Given the proposals location opposite and in immediate vicinity to a smaller commercial area within adjacent development area DEV-R010, some services will be accessible within a 400-metre walking radius. The town centre and essential services, such as supermarkets and shops are situated approximately 2.5km to the North.
- s. The site is situated in proximity to a proposed District Park, located about 700 metres as the crow flies to the North. The proposed site will be able to connect to this community facility via secondary roading link and on-road pedestrian/cycle path through Nobeline Drive and the PC71 area, as and when developed. Reids Pit, a former gravel pit and now public reserve and open for recreational uses, such as mountain biking and walking, is located approximately 600 metres to the South on Selwyn Road.
- t. The site is approximately 1km away from a recently opened primary school within Acland Park.

Conclusion Connectivity and Accessibility

- u. The site is well connected to existing and future infrastructures consistent with Rolleston's role as the Key Activity Centre in the Selwyn District. I consider the site to be well-designed in terms of providing roading access to community services and consider the roading provisions sufficient to integrate the proposal well with the existing network.
- v. Overall, I consider the site to have a high level of connectivity within the Rolleston township, and the wider district.
- w. In my opinion it would be easy to move around the site, with accessible services and a variety of integrated transport options provided.

6. AMENITY AND QUALITY OF THE RECEIVING ENVIRONMENT

a. The proposal seeks to change the current rural landuse to one that is residential in character. The MRZ rule package enables a variety of typologies and housing styles, which will in time blend in with the existing environment.

⁷ Appendix E- Lincoln Rolleston Road Residential Rezoning Integrated Transport Assessment, Figure 3-1

⁸ Appendix D- Lincoln Rolleston Road Re-zoning, Rolleston, Landscape and Visual Impact Assessment, page 6

- b. The site is currently surrounded on three sides by rural land uses, which can be further developed in the future. The receiving environment at this boundary is anticipated to change in line with the underlying FDA and UG overlay.
- c. Possible outlook and amenity issues have been addressed by the submitter as 'anticipated'. The proposed urban development in this location, and subsequently the change to a residential character and environment is expected and acceptable, having regard to the various strategic and higher order documents.
- d. I agree with the submitters assessment⁹ that it therefore not necessary to provide landscape mitigation measures or development controls to preserve a rural outlook in the form of a hardedge treatment.
- e. I have reviewed the proposed mitigation measures and consider their application to be largely placed within detailed design. I have reviewed the provided narrative and consider it appropriate in supporting the ODP in achieving best practise outcomes.
- f. I consider that the proposed rezoning of the site will in time visually be perceived as an extension of DEV- RO10 and DEV-RO11 and that the housing typologies envisaged by the MRZ will be complementary in that overall context.
- g. The interface along the rural boundaries of the site will be with existing residential housing, characterised dominantly by single-storey stand-alone housing on large sites. The change from a low density to a higher density character along this boundary is an anticipated outcome as a result of the implementation of the RMA-EHS¹⁰.
- h. I consider the proposal to be complimentary to the receiving environment being a natural extension of the existing residential neighbourhoods in the vicinity.
- i. In my opinion the proposal reflects the strategic directions for urban growth and urban form for Rolleston East.

7. RECOMMENDED CHANGES TO THE OUTLINE DEVELOPMENT PLAN

a. If the rezoning request is considered favourable by the panel, I recommend making the following changes to the Outline Development Plan (illustrated in Figure 2 below, see also Appendix A):

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⁹ Lincoln Rolleston Road Re-zoning, Rolleston, Landscape and Visual Impact Assessment, Page 7

¹⁰ Enabling Housing Supply and Other Matters Amendment Act 2021

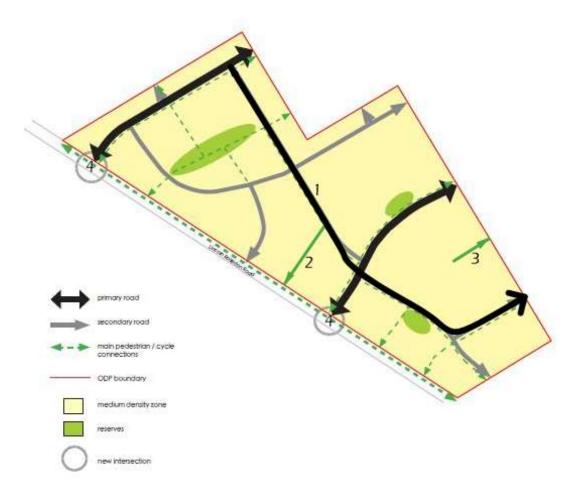


Figure 2: Proposed changes to the Outline Development Plan

- 1. Change the secondary north-south internal spine road to a primary classification, reflecting the wider connectivity function of this road.
- 2. Include a fourth pedestrian/cycle connection along Lincoln Rolleston Road to provide a better walkability within the development and to improve connectivity to adjacent neighbourhoods.
- 3. Include a pedestrian/cycle connection along the eastern boundary to provide a better walkability within the development and to improve connectivity to adjacent future neighbourhoods.
- 4. A notation to ensure that the northern most primary roading connection links with the extension of Ed Hillary Drive within DEV-RO10 and Lady Issacs Drive, within DEV-ROXX
- b. I have overlaid best practise principles to the proposed ODP. The above recommendations to the ODP would translate to the following outcomes within the indicative layout provided with the submission:



Figure 3: Proposed changes (highlighted with red circles) to indicative layout 11

c. I have included above recommendations and illustrated the changes and their implications on the wider area (see Appendix B).

8. CONCLUSION

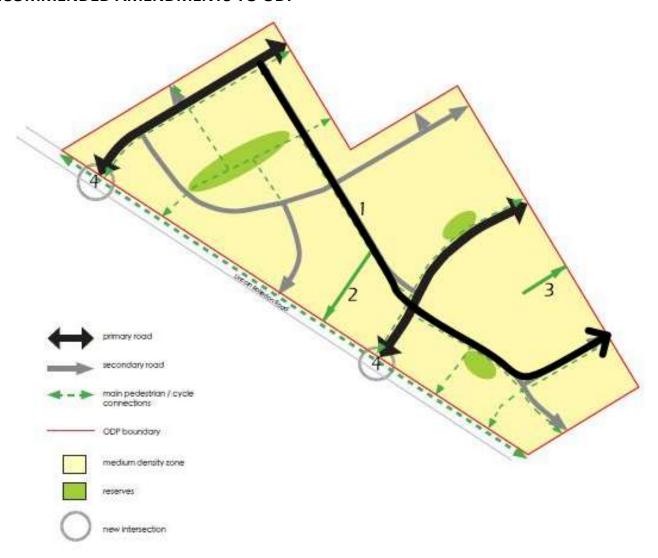
- a. From an Urban Design perspective, I am supportive of the rezoning request of V1-0025 and consider that the proposed development is in keeping with the anticipated growth within a Future Development Area in Rolleston. While the proposed rezoning will have visual effects for surrounding areas, these effects will reduce over time as surrounding areas get developed (PC71, 75 and 78). The new incrementally developing urban fabric will be in keeping with what is an expected outcome as the 'neighbourhood's planned urban built character' in Rolleston.
- b. I consider the rezoning of the site will positively contribute to achieving a compact urban form. I consider the site to have a high level of connectivity with surrounding services and facilities. In my opinion the proposal as it stands provides a moderate level of accessibility, which could be improved in time by an increase in public transport provisions and by the recommended changes to the Outline Development Plan.

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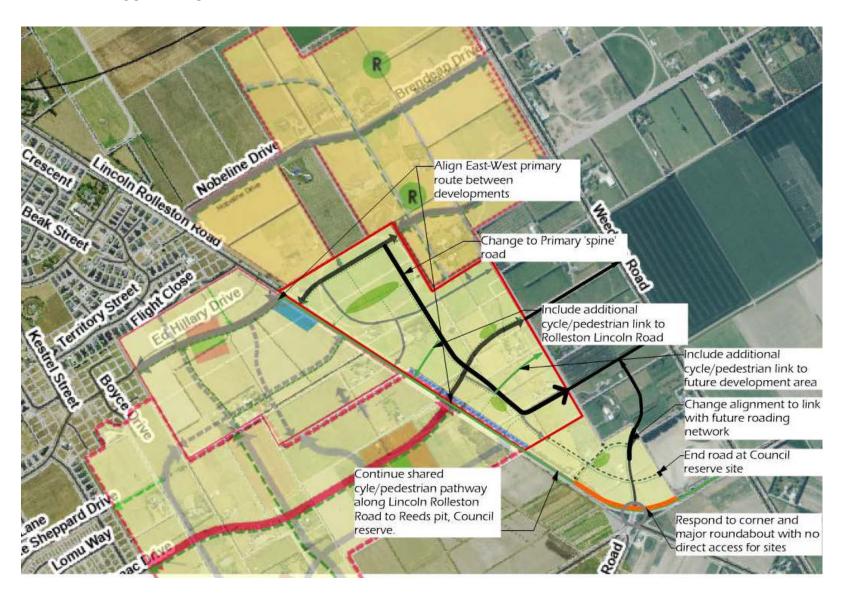
¹¹ Appendix F- Rolleston Southeast, Residential development Proposal, Urban Design Statement, page 20

¹² PDP-MRZ-O1 2.

APPENDIX 1- RECOMMENDED AMENDMENTS TO ODP



APPENDIX 2- CONTEXTUAL MAP



VARIATION 1 TO THE PROPOSED SELWYN DISTRICT PLAN

URBAN DESIGN PEER REVIEW IN THE MATTER OF

REZONING REQUEST V1-0084 ROLLESTON (APPLEFIELDS LTD.)

1. INTRODUCTION AND SCOPE

- a. In my role as Selwyn District Council's Urban Design Lead, I have peer reviewed the rezoning request V1-0084 regarding Variation 1 to the Proposed Selwyn District Plan (PDP).
- b. V1-0084 seeks to rezone approximately 6.22ha of land, comprised in two titles and situated along Lincoln Rolleston and Selwyn Roads in Rolleston from General Rural Zone (GRUZ) to Medium Density Residential Zone (MRZ), and incorporate an Outline Development Plan (ODP), including a supplementary narrative, into the PDP.
- c. The site is subject to a Future Development Area (FDA) classification under the Canterbury Regional Policy Statement (CRPS), and has not been recognised for residential use through any other process. The PDP also identifies the site within an Urban Growth Overlay.
- d. The applicant's Urban Design assessment states that the proposed ODP for the site is based on a design concept and has been tested by developing an indicative subdivision layout¹ to confirm the density distribution on site, the required transport modes and connectivity as envisaged and residential amenity and character will be achieved.
- e. The review of urban design matters and their appropriateness against the relevant strategic directions is to assist the council's officer in preparing their s42A report.
- f. The review includes an assessment of the appropriateness of the proposed rezoning against the relevant strategic directions.
- g. To this effect I have reviewed the applicants Transport Assessment² and the Urban Design Statement³ on matters in my field of expertise. Where appropriate, I have identified information gaps or areas where further clarification is needed in the relevant expert evidence. I have also identified and recommended changes to the proposed Outline Development Plan (ODP) and ODP narrative to achieve a better alignment with the strategic directions.
- h. I restrict my assessment to matters that are appropriate to the rezoning request, which determines the suitability of this site for residential landuse and note that detailed matters will be addressed at detailed design stage.

¹ Applefields Ltd. Proposed Rezoning Rolleston, Transport Assessment

² Applefields Rolleston South-East, Residential Development Proposal, Urban Design Statement, pg.2

³ Applefields Rolleston South-East, Residential Development Proposal, Urban Design Statement

i. The matters that I have reviewed relate to urban form and growth, connectivity and accessibility, amenity and quality of the proposed receiving environment.

2. STRATEGIC DIRECTIONS

- a. The following review is based on strategic directions on good urban form from the following framework documentations: the National Policy Statement on Urban Development (NPS-UD), the CRPS and the proposed Selwyn District Plan (PDP).
- b. Drawing on the strategic direction outlined in the above documents, I have reviewed the urban form proposed in terms of:
 - 1. The extent to which it creates a consolidated and compact urban form and urban growth is provided in a sustainable form.
 - 2. The level of connectivity with the existing urban environment.
 - 3. The accessibility to services and facilities using motorised and non-motorised transport modes.
 - 4. The residential amenity values and character and the interface treatment with surrounding sites.

3. EXISTING ENVIRONMENT

- a. The proposed site is a 6.2ha block of land, situated on a prominent corner site, identified as a key gateway in the Rolleston Structure Plan (RSP)⁴. The site sits at the south-eastern periphery of the Rolleston Township, on the rural edge of Rolleston, approximately 3.5 km from the town centre.
- b. Surrounding sites are zoned GRUZ in the PDP. Sites to the North and West have been identified as a FDA in the CRPS and have an Urban Growth (UG) overlay in the PDP. Sites on the opposite side of Lincoln Rolleston and Selwyn Roads are now zoned a mix of MRZ and GRUZ. The adjoining site to the West is a Council Reserve. Selwyn Road forms the urban boundary to the South.
- c. Lincoln Rolleston and Selwyn Roads aligned along the proposed site are characterised as arterial roads with the focus to connect between townships, but also have the function as key access roads leading into the urban areas and the township.
- d. A shared pedestrian/cycle path that links Rolleston with the Lincoln Township runs along Lincoln Rolleston Road on the opposite side of the proposal.
- e. The site itself can be characterised as having a semi-open character of largely flat land parcels used for agricultural purposes that are framed by shelterbelt plantings amongst which single-storey dwellings and auxiliary structures have been placed.

⁴ https://www.selwyn.govt.nz/__data/assets/pdf_file/0015/14361/Final-Rolleston-Structure-Plan-230909.pdf

- f. The site immediately opposite is used for horticultural purposes. A poultry operation is within 300 metres of the site, which puts the site within an identified intensive farming buffer zone. Land to the east is known as 'Reid's Pit', a Council reserve land that has been repurposed for recreational uses.
- g. The adjoining site to the North referred to as 'Rolleston SE' in the applicants UD assessment is subject to a submission to be rezoned to MRZ. Sites in the vicinity, located on the opposite side of Lincoln Rolleston Road are identified as development areas DEV-RO10 and DEV-RO11 and are to be rezoned to MRZ, as part of Variation 1 to the PDP.
- h. The modification of the land and the increase in density and height will have visual effects on the outlook for some surrounding areas, particularly those rural sites along the site's northern boundary, which are occupied by smaller rural lifestyle blocks with larger dwellings amongst well-established domestic curtilage, with the remainder of the land used for pastoral grazing.
- i. I concur with the applicant's assessment of the existing largely rural-residential character of the site and the effects of the proposal on landscape character.
- j. I agree with the applicant in the UD assessment that outlook, character and amenity effects along the interface with surrounding rural sites to the North, East and West, identified as FDAs, will only be temporary and will reduce over time when these areas get developed and existing development will assimilate with the new anticipated urban environment of Rolleston's residential zones, hence this change is anticipated and acceptable.
- k. I agree with the applicant's assessment⁵ that it is not necessary to provide "any hard or irreversible edge treatment at the rural-urban interface" to preserve rural outlooks for above reasons.
- I. I consider that the proposed rezoning is consistent with the urban growth objectives and policies and conclude that the development is situated in a location that is anticipated to be subject to urban growth.

4. URBAN GROWTH AND URBAN FORM

- a. Rolleston is classified as a Key Activity Centre⁶ and is the primary focus for commercial, civic and community facilities in the district. The proposed zoning is in keeping with the objectives and policies, which seeks that urban growth is located only in and around existing townships aligned with the anticipated role in the township.⁷
- b. The RSP, albeit somewhat outdated in terms of growth numbers and boundaries, sets out framework principles and identifies the strategic direction for the site being suited to a medium density residential landuse that is well-connected to adjacent residential neighbourhoods.

⁵ Applefields Rolleston South-East, Residential Development Proposal, Urban Design Statement, pg.10

 $^{^6\} https://www.selwyn.govt.nz/__data/assets/pdf_file/0015/14361/Final-Rolleston-Structure-Plan-230909.pdf$

⁷ SD-UFD-O1

- c. The site is positioned in a location that lends itself to a residential landuse and achieving a compact urban form, as the site is placed within the projected infrastructure boundary, is situated within the current Urban Growth boundary for Rolleston; and is identified in the CRPS as a FDA, and the PDP seeks townships to maintain a consolidated and compact urban form⁸.
- d. The Urban Growth overlay in the PDP stretches across the proposed site and other sites within the triangle of Weedons, Lincoln Rolleston and Selwyn Roads, reflecting the direction for growth for Rolleston. It is anticipated that the site will become part of the wider neighbourhood forming East Rolleston, if and when adjacent sites get developed.
- e. The proposal will allow for a variety of section sizes, thus enabling variation in housing typologies in line with the MDRS framework. The ODP narrative⁹ confirms a minimum net density of 15hh/ha and indicates that further intensification will be co-located with the central green space.
- f. I consider the proposal will contribute to the residential character anticipated within a MRZ.
- g. I consider the development of the site with a residential landuse aligns with the statutory framework and provides direction to encourage consolidation of urban areas.



Figure 1: Illustration of site (outlined in blue) in context

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⁸ SD-UFD-O1

⁹ Applefields Ltd. Proposed Rezoning Rolleston, Appendix 1A: Outline Plan (ODP) Narrative, pg.7

5. CONNECTIVITY AND ACCESSIBILITY

- a. Connectivity relates to how to create joining roading networks that provide transport choices and support resilience and safer places. Well-connected street networks support cycling and walking as well as other alternative transport modes.
- b. Accessibility relates to providing and enhancing access to public services and facilities, particularly for non-motorised transport modes. The New Zealand Urban Design Protocol states that "quality urban design to have social, environmental and cultural benefits by creating well connected, inclusive and accessible places...".
- c. Liveable places are considered those that are easy to move around, with accessible services and a variety of integrated transport options.
- d. I agree with the applicant in identifying Lincoln Rolleston Road as the most direct link to the town centre for all modes of transport and its status as the key link to the wider community.
- e. The RSP identified the function of Lincoln Rolleston and Selwyn Roads as a national arterial, confirming the roads' function for providing connectivity between townships, but also highlighting the intersection as a key gateway into the township and its urban areas.
- f. As an arterial, the roads needs to cater both for access and movement functions, which the proposal will be able to provide for with integrated frontages where appropriate. These measures and upgrades to the road corridor will assist in creating an urban environment with lower speed limits and more crossing opportunities for pedestrian and cyclists.
- g. The proposal seeks a strategic roading and pedestrian and cycle route alignment with adjacent sites to the North, identified as Rolleston Southeast, and two other connections with the proposed FDAs to the North/ North-East.
- h. I have consulted with the Council's Transport Lead in the matter of the proposed North-South primary road and have recommended a slight change to the alignment to reflect the ability to provide adequate connectivity to the North and subsequent development of this area (see Appendix B).
- i. The site contains a secondary roading network, which adequately supports the primary roading network by linking to Lincoln Rolleston Road and the wider roading network. Tertiary roading provisions will be determined at subdivision level.
- j. The submitter has proposed a complementary shared walk and cycleway along the site's eastern boundary within the existing road reserve, which will complement the existing Rolleston to Lincoln Cycleway which runs along the opposite (along the south-western) side of Lincoln Rolleston Road.
- k. I agree with the applicants provided design principles to have informed the pedestrian and cycle strategy and consider the site to be designed in a way that is supportive of active transport modes.

- I. Pedestrian and cycling opportunities within the site are provided parallel to roading provisions. Clarification is sought if these provisions are off or on-road. Both options will be able to connect to the wider cycling and walking network within adjacent neighbourhoods.
- m. The site is at present not connected to the public transport system and bus services are not operating in walking or cycling distance to the site. However, a density increase along the main corridor of Lincoln Rolleston Road within this and other development sites could warrant a review of these provisions in the future, albeit noting that the provision of bus services is not provided by SDC.
- n. Given the proposals location on the edge of the urban boundary, accessibility to community services is somewhat limited. A proposed smaller commercial area situated approximately 650 metres to the North within DEV-RO10 will provide some services, while the majority of essential services, such as supermarkets and shops are located within the town centre approximately 3.5km further to the Northwest.
- o. The site is directly adjacent to Reids Pit. In order to utilise this repurposed and recently upgraded community facility for recreational uses including biking and walking, the proposed pathway along Lincoln Rolleston Road needs to be extended to provide the required connectivity for non-motorised transport modes.
- p. The proposed District Park, located about 1.8 km as the crow flies to the North may be another community asset in the vicinity to the site. Future residents of the site will be able to connect to this community facility via adjacent land referred to as Submission RE and the PC71 area, as and when developed.
- q. The site is approximately 1.8 km away from a recently opened primary school within Acland Park.

Conclusion Connectivity and Accessibility

- r. I consider the site is well connected to existing and future infrastructure consistent with Rolleston's role as the Key Activity Centre in the Selwyn District and the site to have a high level of connectivity within the Rolleston township and the wider district. I consider the site is well-designed in terms of providing roading access to community services, with a lower level of accessibility for non-motorised transport modes, due to distance to these facilities.
- s. Overall, I consider the provisions adequate to allow for an integration of the site with existing and future neighbourhoods.

6. AMENITY AND QUALITY OF THE RECEIVING ENVIRONMENT

- a. The proposal seeks to change the current rural landuse to one that is residential in character. The MRZ rule package enables a variety of typologies and housing styles, which will in time blend in with the existing environment.
- b. The site is surrounded by rural land uses, which have the ability to be further developed. The receiving environment is anticipated to change in line with the underlying FDA and UG overlay.

- c. Possible outlook and amenity issues have been addressed by the applicant as 'anticipated'. I agree with this assessment and consider that the change to a residential character and environment is expected and acceptable, having regard to the various strategic and higher order documents.
- d. I agree with the assessment¹⁰ that it therefore not necessary to provide landscape mitigation measures or development controls to preserve a rural outlook in the form of a hard-edge treatment.
- e. I consider that the proposed rezoning of the site will in time visually be perceived as an extension of DEV-RO10 and DEV-RO11 and the established residential neighbourhoods further west (e.g. Falcons Landing) and that the comprehensive housing typologies that could occur on site will be complementary in that overall context.
- f. The interface along the north-eastern boundary of the site will be with existing residential housing, characterised dominantly by single-storey stand-alone housing on large sites. The change from a low density to a higher density character along this boundary is an anticipated outcome as a result of the implementation of the RMA-EHS¹¹.
- g. The site adjacent to the East is used as a reserve, hence no amenity and outlook effects are anticipated on this boundary.
- h. The interface with rural land remains at the southern boundary (south of Lincoln Rolleston and Selwyn Roads), with these roads somewhat providing a mitigation buffer to adjacent rural land uses to the west and south-west.
- i. I agree with the applicant noting that there is opportunity to provide relief with soft landscape measures on individual properties or slightly larger lots "...at specific points along this boundary" 12 and consider this appropriate to be determined at subdivision stage.
- j. Properties situated across Lincoln Rolleston and Selwyn Roads to the south and outside the urban boundary will retain a rural/urban interface, which is consistent along the extent of Selwyn Road (e.g. Faringdon).
- k. Applying a 300-metre buffer from the source of an existing lawfully established poultry operation, situated in the triangle of Selwyn Road and Rattletrack Road, confirms that the proposed site sits within this buffer and that there might be subsequent reverse sensitivity issues between residential and rural landuses.
- I. The AEE¹³ identifies that consideration needs to be given to how reverse sensitivity (if any) from the poultry operation are mitigated or avoided. I consider it appropriate to alert to the potential issue within the ODP narrative and have included this in my recommendations.

¹² Applefields Rolleston South-East, Residential Development Proposal, Urban Design Statement, pg.16

¹⁰ Applefields Rolleston South-East, Residential Development Proposal, Urban Design Statement, pg.10

¹¹ Enabling Housing Supply and Other Matters Amendment Act 2021

¹³ Appendix 2: Assessment of proposed district plan objectives and policies: Applefield Road, page 18

- m. I consider the proposal to be complimentary to the receiving environment being a natural extension of the existing residential neighbourhoods in the vicinity.
- n. In my opinion the proposal reflects the strategic directions for urban growth and urban form for Rolleston East.

7. RECOMMENDED CHANGES TO THE OUTLINE DEVELOPMENT PLAN

- a. I have reviewed the design concepts Option 1 and 2 and the design drivers for the proposed ODP layouts and consider Option 1 the preferred option in terms of alignment with the strategic future roading upgrades and overall achieving a better connectivity to adjoining development areas.
- b. If the rezoning request is considered favourable by the panel, I recommend making the following changes to the Outline Development Plan (illustrated in Figure 2 and Appendix A):

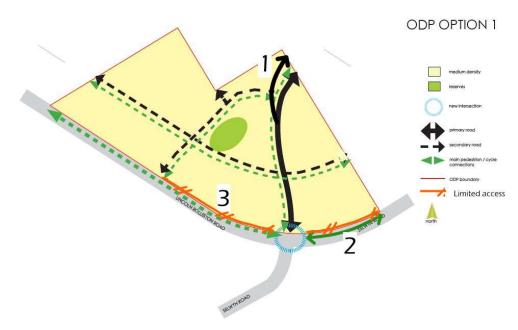


Figure 2: Proposed changes (1-3) to the Outline Development Plan

- 1. Change in alignment of the primary route to achieve a better overall north-south connection with adjoining future development areas.
- 2. A continuation of the proposed pedestrian/cycle connection along Lincoln Rolleston Road to the extent of the boundary with Reids Pit (Council reserve).
- A notation on the ODP to limit access off Lincoln Rolleston Road for a portion of the site either side of the proposed future roundabout and major intersection for traffic safety reasons.
- c. For clarification I recommend making the following changes to the Outline Development Plan narrative:

Access and Circulation:

- 4. Remove sentence referring to two Outline Development Plan options and only refer to the chosen option.
- 5. Remove wording speculating on traffic volumes and speed.
- 6. Amend wording of last sentence referring to properties along Lincoln Rolleston Road to be able to have direct property access, as follows: "Properties outside area of limited access along Lincoln Rolleston Road will be able to have direct property access and contribute to an urban streetscape."
- 7. Supplementary comment in the ODP narrative on the interface treatment along Lincoln Rolleston Road and function of the internal secondary spine road.
- 8. Supplementary comment in the ODP narrative on the proposed interface with rural landuses, including potential reverse sensitivity issues with an existing poultry operation situated within 300m of the site.
- d. For clarification purpose I have illustrated some of the proposed recommendations in a contextual map (attached as Appendix B).

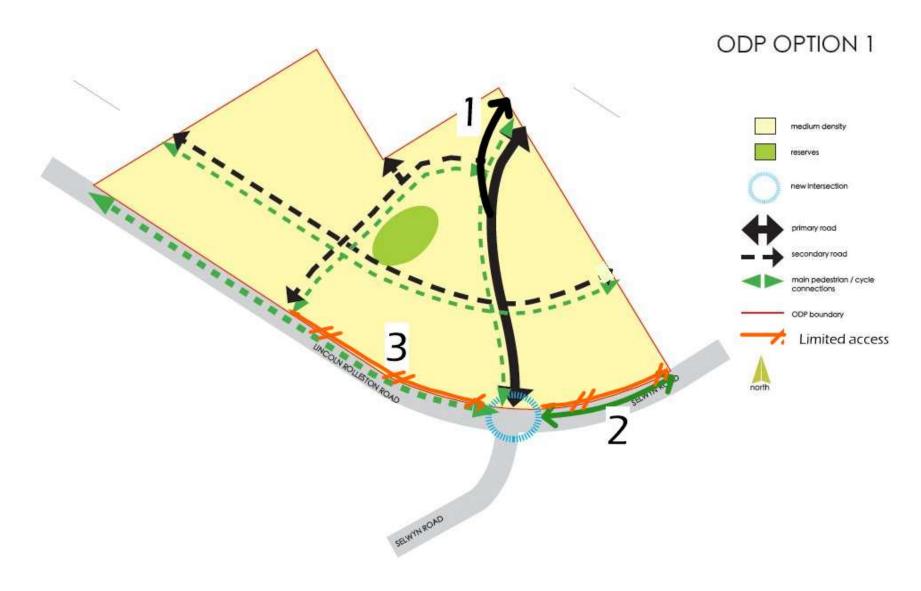
8. CONCLUSION

- a. From an Urban Design perspective, I am supportive of the rezoning request of V1-0084 and consider that the proposed development is in keeping with the anticipated growth within a FDA in Rolleston. While the proposed rezoning will have visual effects for surrounding areas, these effects will reduce over time as surrounding areas are developed. The new incrementally developing urban fabric will be in keeping with what is an expected outcome as the 'neighbourhood's planned urban built character' in Rolleston.
- b. I consider the rezoning of the site will positively contribute to achieving a compact urban form and having appropriate levels of connectivity with surrounding services and facilities. In my opinion the proposal as it stands provides a moderate level of accessibility, which could be improved in time by an increase in public transport provisions and by the recommended changes to the Outline Development Plan.

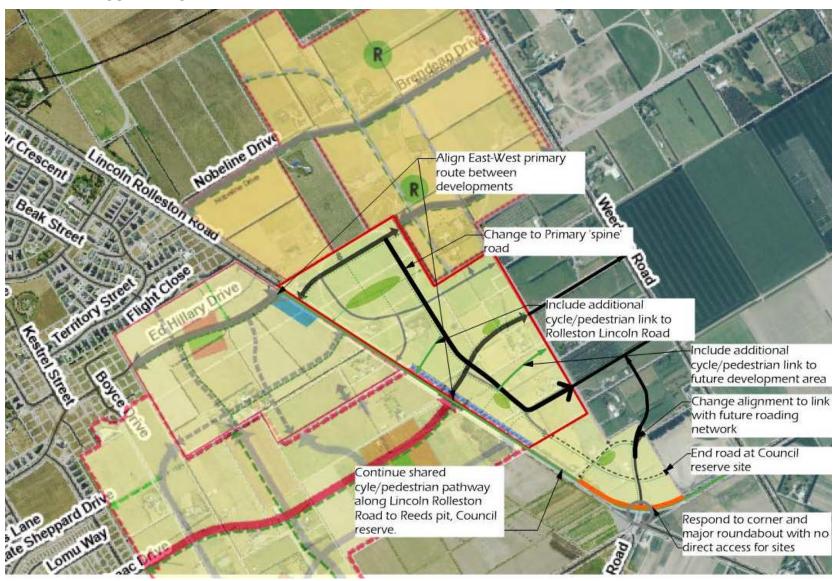
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¹⁴ PDP-MRZ-O1 2.

APPENDIX A- RECOMMENDED AMENDMENTS TO ODP



APPENDIX B- CONTEXTUAL MAP



In The Matter
In The Matter of

of the Resource Management Act 1991 ("the Act") And Part A of the Intensification Planning Instrument (IPI) to the Proposed District Plan (PDP) - Rolleston

SUMMARY STATEMENT OF HUGH BLAKE-MANSON V1-0025 Yoursection Ltd

Introduction

- 1. My name is **HUGH MAXWELL BLAKE-MANSON.** My qualifications are BE (Natural Resources) and I have Diplomas in Asset Management, Assessor (Drinking Water Networks) and Water Treatment (Operator). I am a Chartered Engineer. These qualifications allow me to practice, design, manage and audit any of the three waters; water, wastewater and stormwater. I am also completing a Masters in Freshwater Management at University of Canterbury.
- 2. I am an Infrastructure Advisor at Waugh Infrastructure Management Limited (Waugh). I was previously employed by City Care Ltd as their Three Waters Contract Manager (2012-2021) and prior to that, Selwyn District Councils Asset Manager Utilities (2004-2012) covering water, wastewater, stormwater, land drainage and waterrace services for the Council (the Council).
- 3. I support the Council as an infrastructure advisor specialising in strategic, tactical and operational matters across the services identified.
- 4. I am authorised to present these comments on the Councils behalf.
- 5. I confirm that the matters on which I express my opinion are within my field of expertise.
- 6. I prepared this Statement of Evidence on 10 March 2023.

Scope of Review

7. My comments relate to the impact the Intensification Planning Instrument (IPI) to the Proposed District Plan (PDP) may have on the community water services in Rolleston – specifically drinking water, wastewater, stormwater and water race networks, resulting from the submission from Yoursection Ltd (the submitter) on 148-17 8 Lincoln Rolleston

Road via V1-0025.

- 8. The submitter seeks rezoning of the land to medium density residential zoning (MRZ). This zone would implement the MDRS allowing for the establishment of residential units, each up to three stories high (11 metres).
- 9. I have read the infrastructure evidence provided by Your Section Ltd.

Current and Modelled Density – Water and Wastewater Network Capability and Capacity

- 10. Currently housing density in the newer developed areas of Rolleston is generally 11 houses per hectare (hhold/ha) for example those properties in the Springston-Rolleston Road and Selwyn Road area.
- 11. The submitters land is within the Rolleston Structure Plan area and is described as "medium density residential" at a density of 20 hhold/ha,
- 12. Modelling of water and wastewater networks, completed for Council in 2022 considered a consolidated growth scenario. This modelled demand on source and networks at a density of 20 hhold/ha in the year 2050.
- 13. The submitter has stated that a minimum density of 12 hhold/ha within the site is being applied for.
- 14. A three storey building may, dependant on its design, be able to accommodate more people and have a higher extent of hardstand. This could mean increased water demand, wastewater flows and stormwater runoff at certain times.
- 15. This area is outside the Rolleston Structure Plan area, and has a lower priority for access to Councils consented water allocation than development with the structure plan area. Utilisation of water within the structure plan area is more efficient given it makes more efficient use of existing infrastructure.

Rolleston Water Supply

- 16. The Rolleston Water Supply provides treated deep groundwater to the community.
- 17. The target level of service pressure at the property point of connection is 310 kPa. Currently the network pressure to the property boundary ranges between 410 kPa to 560 kPa dependant on consumer demands.

- 18. MDRS structures are noted by the submitter as being up to 11 metres above ground level. It is possible, dependant on where internal building water fixtures are installed and their type, that internal property pressures will be insufficient for some applications e.g. hot water cylinders.
- 19. Network capacity upgrades are proposed to meet this growth including additional water sources (bores), storage and pipeline infrastructure that have been identified generally over the next 30 years. Funding for foreseeable works has been included in Councils Long Term Plan (LTP), and this is reviewed annually.
- 20. It is considered that additional capacity within the network to service this proposed rezoning can be made available and in accordance with Council capacity upgrade programme.
- 21. Any reticulated water supply for the intensification will need to be designed to meet

 Fire Fighting Code of Practice standards which is a requirement in Councils

 Engineering Code of Practice.
- 22. Vesting of land within the proposed area to facilitate capacity upgrades may be required. Detailed network modelling is not currently available to confirm what requirements Council may have.
- 23. No water take and use consents have been stated by the submitter as existing within the variation area. All water take and use consents connected to the submitters land should be transferred to Council where they exist.
- 24. It should be noted that development contributions would be payable for development identified by the submitter should the rezoning be supported.

Conclusion

- 25. It is considered that additional capacity within the network to fully service the proposed rezoning is not currently available, though Council are planning to address this following infrastructure upgrades via its LTP process.
- 26. It should be note that, for three storey dwellings, Councils target level of service of 310 kPa at the point of connection may not be achieved at some times. This may then have an impact on water flows in internal building, upper storey water systems.

- 27. Should there be any water take and use consents within the variation area, these should be transferred to Council.
- 28. It is noted that development contributions are payable for any additional lot developed.

Rolleston Wastewater

Pines Wastewater Treatment Plant (Pines WWTP)

- 29. Wastewater is treated at the Pines WWTP in Rolleston with the liquid stream disposed of to land and biosolids taken offsite currently.
- 30. The current connected catchment (2023) is approximately 45,000 PE and by 2025 is expected to reach 55,000 PE. Critical to the treatment are three bioreactors with combined treatment of 45,000 PE. Through optimisation these and other processes are currently able to manage the loads and flows, though best practice is to allow for a PE buffer to manage shock loading events.
- 31. By late 2023, a fourth bioreactor should be operational, allowing for up to 60,000 person equivalents (PE) of incoming flows and loads. This will enable a return to a suitable level of treatment resilience.
- 32. There are plans to increase the treatment capacity up to 120,000 PE being prepared ("Pines 120"). This will include expansion of the irrigation area to cover 302 ha (currently irrigating 189 ha).
- 33. There is also a programme underway to vary to the current Pines WWTP discharge consent CRC040100.1, with the intention to allow for 120,000 PE treatment and discharge. The consent may take two years to obtain and could be secured from mid 2025.
- 34. No significant additional physical works to increase treatment and disposal capacity are planned to be undertaken until the consent variation is secured. Following this liquid stream infrastructure works in the order of 20,000-40,000 PE will be programmed. Depending on market conditions and the complexity of the work, it can take 2-5 years to complete these.
- 35. Council is required to take a prudent approach to managing connections to its network, ensuring that Pines WWTP treatment and disposal comply with consent.

- 36. Ultimately, additional areas within the 486 ha of land owned designated and consented in association with the Pines WWTP could be developed for land based disposal.
- 37. There are no reverse sensitivity (odour) issues identified given the distance from the boundary of the Pines WWTP.

Wastewater Conveyance

- 38. Connection of the area to Council's reticulated network is feasible. The submitter has provided a number options, which are dependent on both Council progressing in undertaking its network upgrades and/or progress on adjoining developments.
- 39. Council has indicated that a "south east" pumpstation may be necessary in the future.

 Should rezoning approval be provided, then internal reticulation will be required to connect with this propose future pumpstation.
- 40. The submitter should provide for temporary pumpstations which can ultimately be joined into the larger wastewater network. Any proposal will be the subject of an engineering approval process in the future.
- 41. It should be noted that development contributions would be payable for development identified by the submitter should the rezoning be supported.

Conclusion

- 42. There is a viable means to treat and dispose of wastewater for this variation area.
- 43. Details of any specific upgrades required can be addressed more appropriately through a subdivision consent and engineering approval process.

Stormwater

- 44. Council has a global consent for Rolleston to discharge stormwater to land (CRC132527).

 The submitters land is not covered by this consent.
- 45. The soils beneath Rolleston are typically free draining sandy gravels. The submitter proposes that stormwater treatment and disposal would be provided for within the variation area, and a consent will be required for this from the Canterbury Regional Council.
- 46. No specific capacity and treatment volume and rate details have been provided by the submitter.

47. Stormwater management will be subject to further investigations, design and review should the rezoning be supported and development progress to engineering approval

stage.

Conclusion

48. The submitter proposes that stormwater treatment and disposal would be provided

for within the development.

49. Consent will be required from the Canterbury Regional Council. Conveyance and

treatment system approval will be subject to an engineering approval process.

Water races

50. Waterraces have primary purpose of providing water for stock needs, but are also

utilised in some areas as an amenity feature. This includes providing manmade

wetland and pond features.

51. The submitter has not identified any water races within the variation area. Where

they exist on the boundary of, or within the land, it may not be possible to close them.

Hugh Blake-Manson

10 March 2023

In The Matter
In The Matter of

of the Resource Management Act 1991 ("the Act") And Part A of the Intensification Planning Instrument (IPI) to the Proposed District Plan (PDP) - Rolleston

SUMMARY STATEMENT OF HUGH BLAKE-MANSON V1-00084 Applefields Ltd

Introduction

- 1. My name is **HUGH MAXWELL BLAKE-MANSON.** My qualifications are BE (Natural Resources) and I have Diplomas in Asset Management, Assessor (Drinking Water Networks) and Water Treatment (Operator). I am a Chartered Engineer. These qualifications allow me to practice, design, manage and audit any of the three waters; water, wastewater and stormwater. I am also completing a Masters in Freshwater Management at University of Canterbury.
- 2. I am an Infrastructure Advisor at Waugh Infrastructure Management Limited (Waugh). I was previously employed by City Care Ltd as their Three Waters Contract Manager (2012-2021) and prior to that, Selwyn District Councils Asset Manager Utilities (2004-2012) covering water, wastewater, stormwater, land drainage and waterrace services for the Council (the Council).
- 3. I support the Council as an infrastructure advisor specialising in strategic, tactical and operational matters across the services identified.
- 4. I am authorised to present these comments on the Councils behalf.
- 5. I confirm that the matters on which I express my opinion are within my field of expertise.
- 6. I prepared this Statement of Evidence on 10 March 2023.

Scope of Review

7. My comments relate to the impact the Intensification Planning Instrument (IPI) to the Proposed District Plan (PDP) may have on the community water services in Rolleston – specifically drinking water, wastewater, stormwater and water race networks, resulting from the submission from Applefields Ltd (the submitter) on 12/478 and 11/478 Weedons

- Road Rolleston via V1-0084.
- 8. The submitter seeks rezoning of the land to medium density residential zoning (MDZ). This zone would implement the MDRS allowing for the establishment residential units, each up to three stories high (11 metres).
- 9. I have read the infrastructure evidence provided by the submitter.

Current and Modelled Density – Water and Wastewater Network Capability and Capacity

- 10. Currently housing density in the newer developed areas of Rolleston is generally 11 houses per hectare (hhold/ha) for example those properties in the Springston-Rolleston Road and Selwyn Road area.
- 11. The submitters land is within the Rolleston Structure Plan area, and is described as "low density residential" at a density of 10 hhold/ha.
- 12. The submitter has stated that average density of 15 hhold/ha within and over the site is being applied for.
- 13. Modelling of water and wastewater networks, completed for Council in 2022 considered a Greater Christchurch consolidated growth scenario. This modelled demand on source and networks at a density of 20 hhold/ha in the year 2050.
- 14. A three storey building may, dependant on its design, be able to accommodate more people and have a higher extent of hardstand. This could mean increased water demand, wastewater flows and stormwater runoff at certain times.

Rolleston Water Supply

- 15. The Rolleston Water Supply provides treated deep groundwater to the community.
- 16. The target level of service pressure at the property point of connection is 310 kPa. Currently the network pressure to the property boundary ranges between 410 kPa to 560 kPa dependant on consumer demands.
- 17. MDRS structures can be up to 11 metres above ground level. It is possible, dependant on where internal building water fixtures are installed and their type, that internal property pressures will be insufficient for some applications e.g. hot water cylinders.

- 18. Network capacity upgrades are proposed to meet this growth including additional water sources (bores), storage and pipeline infrastructure that have been identified generally over the next 30 years. Funding for foreseeable works has been included in Councils Long Term Plan (LTP), and this is reviewed annually.
- 19. It is considered that additional capacity within the network to service this proposed rezoning can be made available and in accordance with Council capacity upgrade programme.
- 20. Any reticulated water supply for the intensification will need to be designed to meet

 Fire Fighting Code of Practice standards, which is a requirement of Councils

 Engineering Code of Practice.
- 21. Vesting of land within the proposed area to facilitate capacity upgrades may be required. Detailed network modelling is not currently available to confirm what requirements Council may have.
- 22. No water take and use consents have been stated by the submitter as existing within the area. All water take and use consents connected to the submitters land should be transferred to Council where they exist.
- 23. It should be noted that development contributions would be payable for development identified by the submitter should the rezoning be supported.

Conclusion

- 24. It is considered that additional capacity within the network to fully service the rezoning is not currently available, though Council are planning to address this following infrastructure upgrades via its LTP process.
- 25. It should be note that, for three storey dwellings, Councils target level of service of 310 kPa at the point of connection may not be achieved at some times. This may then have an impact on water flows in internal building, upper storey water systems.
- 26. Should there be any water take and use consents within the variation area, these should be transferred to Council.
- 27. It is noted that development contributions are payable for any additional lot developed.

Rolleston Wastewater

Pines Wastewater Treatment Plant (Pines WWTP)

- 28. Wastewater is treated at the Pines WWTP in Rolleston with the liquid stream disposed of to land and biosolids taken offsite currently.
- 29. The current connected catchment (2023) is approximately 45,000 PE and by 2025 is expected to reach 55,000 PE. Critical to the treatment are three bioreactors with combined treatment of 45,000 PE. Through optimisation these and other processes are currently able to manage the loads and flows, though best practice is to allow for a PE buffer to manage shock loading events.
- 30. By late 2023, a fourth bioreactor should be operational, allowing for up to 60,000 person equivalents (PE) of incoming flows and loads. This will enable a return to a suitable level of treatment resilience.
- 31. There are plans to increase the treatment capacity up to 120,000 PE being prepared ("Pines 120"). This will include expansion of the irrigation area to cover 302 ha (currently irrigating 189 ha).
- 32. There is also a programme underway to vary to the current Pines WWTP discharge consent CRC040100.1, with the intention to allow for 120,000 PE treatment and discharge. The consent may take two years to obtain and could be secured from mid 2025.
- 33. No significant additional physical works to increase treatment and disposal capacity are planned to be undertaken until the consent variation is secured. Following this liquid stream infrastructure works in the order of 20,000-40,000 PE will be programmed. Depending on market conditions and the complexity of the work, it can take 2-5 years to complete these.
- 34. Council is required to take a prudent approach to managing connections to its network, ensuring that Pines WWTP treatment and disposal comply with consent.
- 35. Ultimately, additional areas within the 486 ha of land owned, designated and consented in association with the Pines WWTP could be developed for land based disposal.
- 36. Councils expansion plans for the Pines WWTP takes into account growth in the area of this proposed rezoning.

37. There are no reverse sensitivity (odour) issues identified given the distance from the boundary of the Pines WWTP.

Wastewater Conveyance

- 38. Connection of the area to Council's reticulated network is feasible. There are number options, which will be dependent on both Council progressing in undertaking its network upgrades and/or progress on adjoining developments wastewater infrastructure.
- 39. Council has indicated that a "south east" pumpstation may be necessary in the future.

 Should variation approval be provided, then internal reticulation will be required to connect with this propose future pumpstation.
- 40. The submitter should provide for temporary pumpstations which can ultimately be joined into the larger wastewater network. Any proposal will be the subject of an engineering approval process in the future.
- 41. It should be noted that development contributions would be payable for development identified by the submitter should the proposed rezoning be supported.

Conclusion

- 42. There is a viable means to treat and dispose of wastewater for this variation area.
- 43. Details of any specific upgrades required can be addressed more appropriately through a subdivision consent and engineering approval process.

Stormwater

- 44. Council has a global consent for Rolleston to discharge stormwater to land (CRC132527).

 The submitters land is not covered by this consent.
- 45. The soils beneath Rolleston are typically free draining sandy gravels. The submitter proposes that stormwater treatment and disposal would be provided for within the variation area, and a consent will be required for this from the Canterbury Regional Council.
- 46. Stormwater management will be subject to further investigations, design and review should the rezoning be supported and development progress to engineering approval stage.

Conclusion

47. The submitter proposes that stormwater treatment and disposal would be provided for within the development. Conveyance and treatment system approval will be subject to an engineering approval process.

48. Consent will be required by the submitter from the Canterbury Regional Council.

Water races

49. Water races have primary purpose of providing water for stock needs, but are also utilised in some areas as an amenity feature. This includes providing manmade wetland and pond features.

50. The applicant has not identified any water races within the variation area. Where they exist on the boundary of, or within the land, it may not be possible to close them.

Conclusion – Water races

51. The location and management of water races can be appropriately addressed through the subdivision consent and engineering approval process.

Hugh Blake-Manson

10 March 2023

In The Matter
In The Matter of

of the Resource Management Act 1991 ("the Act") And Part A of the Intensification Planning Instrument (IPI) to the Proposed District Plan (PDP) - Rolleston

SUMMARY STATEMENT OF HUGH BLAKE-MANSON V1-0093 Brendean Drive Rezoning Group

Introduction

- 1. My name is **HUGH MAXWELL BLAKE-MANSON.** My qualifications are BE (Natural Resources) and I have Diplomas in Asset Management, Assessor (Drinking Water Networks) and Water Treatment (Operator). I am a Chartered Engineer. These qualifications allow me to practice, design, manage and audit any of the three waters; water, wastewater and stormwater. I am also completing a Masters in Freshwater Management at University of Canterbury.
- 2. I am an Infrastructure Advisor at Waugh Infrastructure Management Limited (Waugh). I was previously employed by City Care Ltd as their Three Waters Contract Manager (2012-2021) and prior to that, Selwyn District Councils Asset Manager Utilities (2004-2012) covering water, wastewater, stormwater, land drainage and waterrace services for the Council (the Council).
- 3. I support the Council as an infrastructure advisor specialising in strategic, tactical and operational matters across the services identified.
- 4. I am authorised to present these comments on the Councils behalf.
- 5. I confirm that the matters on which I express my opinion are within my field of expertise.
- 6. I prepared this Statement of Evidence on 10 March 2023.

Scope of Review

7. My comments relate to the impact the Intensification Planning Instrument (IPI) to the Proposed District Plan (PDP) may have on the community water services in Rolleston – specifically drinking water, wastewater, stormwater and water race networks, resulting from the submission from Brendean Drive Rezoning Group Ltd (the submitter) located

- generally at Brendean Drive, Lincoln Rolleston Road, Nobeline Drive and Weedons Road via V1-0093.
- 8. The submitter seeks rezoning of the land to medium density residential zoning (MDZ). This zone would implement the MDRS allows for the establishment of residential units, each up to three stories high (11 metres).
- 9. I have read the infrastructure evidence provided by the submitter.

Current and Modelled Density – Water and Wastewater Network Capability and Capacity

- 10. Currently housing densities in the newer developed areas of Rolleston are generally 11 houses per hectare (hhold/ha) for example those properties in the Springston-Rolleston Road and Selwyn Road area.
- 11. The submitters land is within the Rolleston Structure Plan area, which can allow for medium and low density residential land at densities of 15-20 and 10 hhold/ha respectively.
- 12. The submitter has stated that a minimum density of 12 hhold/ha over the site is being applied for.
- 13. Modelling of water and wastewater networks, completed for Council in 2022, considered a Greater Christchurch consolidated growth scenario. This modelled demand on water sources and throughout networks at a density of 20 hhold/ha in the year 2050.
- 14. As a result of this work, a programme of water network infrastructure improvements have been identified over this period.
- 15. A three storey building may, dependant on its design, be able to accommodate more people and have a higher extent of hardstand that lower density sections. This could result in increased water demand, wastewater flows and stormwater runoff at certain times.

Rolleston Water Supply

16. The Rolleston Water Supply provides treated deep groundwater to the community.

- 17. The target level of service pressure at the property point of connection is 310 kPa. Currently the network pressure to the property boundary ranges between 410 kPa to 560 kPa dependant on consumer demands.
- 18. MDRS structures can be up to 11 metres above ground level. It is possible, dependant on where internal building water fixtures are installed and their type, that internal property pressures will be insufficient for some applications e.g. hot water cylinders.
- 19. Network capacity upgrades are proposed to meet growth including additional water sources (bores), storage and pipeline infrastructure have been identified generally over the next 30 years. Funding for foreseeable works have been included in Councils Long Term Plan (LTP), and this is reviewed annually.
- 20. It is considered that additional capacity within the network to service this proposed variation can be made available and in accordance with Council capacity upgrade programme.
- 21. Any reticulated water supply for the intensification will need to be designed to meet

 Fire Fighting Code of Practice standards, which is a requirement in Councils

 Engineering Code of Practice.
- 22. Vesting of land within the proposed area to facilitate capacity upgrades may be required. Detailed network modelling is not currently available to confirm what requirements Council may have for land.
- 23. No water take and use consents have been stated by the submitter as existing within the area. All water take and use consents connected to the submitters land should be transferred to Council where they exist.
- 24. It should be noted that development contributions would be payable for development identified by the submitter should the rezoning be supported.

Conclusion

- 25. It is considered that additional capacity within the network to fully service the proposed rezoning is not currently available, though Council are planning to address this through infrastructure upgrades via its LTP process.
- 26. It should be note that Councils target level of service of 310 kPa at the point of connection

- may not be achieved at some times. This may then have an impact on water pressure and flows in internal building, upper storey water systems.
- 27. Should there be any water take and use consents within the variation area, these should be transferred to Council.
- 28. It is noted that development contributions are payable for any additional lot developed.

Rolleston Wastewater

Pines Wastewater Treatment Plant (Pines WWTP)

- 29. Wastewater is treated at the Pines WWTP in Rolleston with the liquid stream disposed of to land and biosolids taken offsite currently.
- 30. The current connected catchment (2023) is approximately 45,000 PE and by 2025 is expected to reach 55,000 PE. Critical to the treatment are three bioreactors with combined treatment of 45,000 PE. Through optimisation these and other processes are currently able to manage the loads and flows, though best practice is to allow for a PE buffer to manage shock loading events.
- 31. By late 2023, a fourth bioreactor should be operational, allowing for up to 60,000 person equivalents (PE) of incoming flows and loads. This will enable a return to a suitable level of treatment resilience.
- 32. There are plans to increase the treatment capacity up to 120,000 PE being prepared ("Pines 120"). This will include expansion of the irrigation area to cover 302 ha (currently irrigating 189 ha).
- 33. There is also a programme underway to vary to the current Pines WWTP discharge consent CRC040100.1, with the intention to allow for 120,000 PE treatment and discharge. The consent may take two years to obtain and could be secured from mid 2025.
- 34. No significant additional physical works to increase treatment and disposal capacity are planned to be undertaken until the consent variation is secured. Following this liquid stream infrastructure works in the order of 20,000-40,000 PE will be programmed. Depending on market conditions and the complexity of the work, it can take 2-5 years to complete these.
- 35. Council is required to take a prudent approach to managing connections to its network, ensuring that Pines WWTP treatment and disposal comply with consent.

- 36. Ultimately, additional areas within the 486 ha of land owned designated and consented in association with the Pines WWTP could be developed for land based disposal.
- 37. There are no reverse sensitivity (odour) issues identified given the distance from the boundary of the Pines WWTP.

Wastewater Conveyance

- 38. Connection of the area to Council's reticulated network is feasible. There are number options, which will be dependent on both Councils progress in undertaking its network upgrades and/or progress on adjoining developments wastewater infrastructure.
- 39. The submitter has identified that a pressure sewer network could be utilised where gravity conveyance is not possible. Council takes a long term approach to infrastructure and wherever possible utilises gravity systems.
- 40. The submitter should provide for temporary pumpstations which can ultimately be joined in to the larger wastewater network. Any proposal will be the subject of an engineering approval process in the future.
- 41. It should be noted that development contributions would be payable for development identified by the submitter should the rezoning be supported.

Conclusion

- 42. There is a viable means to treat and dispose of wastewater for this variation area.
- 43. Details of any upgrades required can be addressed more appropriately through a subdivision consent and engineering approval process.

Stormwater

- 44. Council has a global consent for Rolleston to discharge stormwater to land (CRC132527).

 The submitters land is not covered by this consent.
- 45. The soils beneath Rolleston are typically free draining sandy gravels. The submitter proposes that stormwater treatment and disposal would be provided for within the variation area, and a consent will be required for this from the Canterbury Regional Council.

46. Stormwater management will be subject to further investigations, design and review

should the proposed rezoning be supported and development progress to

engineering approval stage.

Conclusion

47. The submitter proposes that stormwater treatment and disposal would be provided

for within the development. Conveyance and treatment system approval will be

subject to an engineering approval process.

48. Consent for treatment and discharge will be required by the submitter from the

Canterbury Regional Council.

Water races

49. Water races have primary purpose of providing water for stock needs, but are also

utilised in some areas as an amenity feature. This includes providing manmade

wetland and pond features.

50. The submitter has not identified any water races within the variation area. Where

they exist on the boundary of, or within the land, it may not be possible to close them.

Conclusion

51. The position and management of water races can be more appropriately addressed

through the subdivision consent and engineering approval process.

Hugh Blake-Manson

10 March 2023

4415 17 February 2023 GEOTECH

Selwyn District Council PO Box 90 Rolleston

Attention: Justine Ashley,

Dear Ms Ashley,

RE: Proposed District Plan – Variation 1
V1 - 0025 Your Section Ltd
148,156,178 Lincoln – Rolleston Road & 487 Weedons Road
Geotechnical Evidence Peer Review

Geotech Consulting has been asked to carry out a peer review on the geotechnically related evidence submitted in support of the re-zoning of land to Medium Density residential Zone (MRZ) in the Proposed District Plan. The review is an assessment of the evidence presented and the appropriateness of the submitted land use for the site. Any information gaps are to be identified.

The geotechnical evidence submitted on behalf of Your section Ltd is

- Geotechnical report for Proposed Plan Change, 148, 156, 178 Lincoln Rolleston Road & 487 Weedons Road, dated 7 September 2022, by Miyamoto for Your Section Ltd
- Geotechnical report for Proposed Plan Change, 6/487 Weedons Road, dated 7 September 2022, by Miyamoto for Your Section Ltd

The two reports cover adjacent properties for a total area of about 24.6 hectares. It is essentially flat land in agricultural use.

1. Geotechnical Investigation Reports

The two reports are very similar with just some difference in reported testing on site. The combined testing carried out on the site consists of 20 test pits to between 0.6m and 1.3m depth, and 9 hand auger boreholes to between 0.3m and 1.6m. This is supplemented with 7 hand auger tests on site from NZGD and 8 well logs from the Ecan database, either on or close to the site. The testing shows consistent soil profiles with topsoil over sandy and silts to between 0.3m and 1.6m depth where medium to very dense gravels are found, continuous for many metres. The groundwater table is reported at about 6m depth from the Ecan well logs.

Liquefaction is assessed as a low risk given the gravel soils and depth to water table, with an equivalent TC1 Foundation technical category. Other natural hazards are summarized and are either not present or can be easily mitigated. Foundations to NZS3604 are suggested as being suitable for the ground conditions.

Andrew Hurley E-mail ahurley@geotech.co.nz
Nick Traylen E-mail ntraylen@geotech.co.nz
Ian McCahon E-mail mccahon@geotech.co.nz

The report concludes that the site is suitable for the proposed plan change use in terms of geotechnical constraints.

2. Conclusion

The number of tests more than fulfils the MBIE recommended number for a site of this size. Although most of the tests are shallow, the deeper well-logs demonstrate a consistent deeper soil profile. The evidence submitted is sufficient to demonstrate that the proposed residential land is geotechnically suitable for development. The higher structures possible for MRZ zoning may impose greater loading on the soils than for normal housing, but the shallow gravel can easily support shallow foundations to such buildings. No further information is required for Variation 1 consideration.

Yours faithfully

Geotech Consulting Limited

JFM Cahon
Ian McCahon

4415 18 February 2023 G E O T E C H

Selwyn District Council PO Box 90 Rolleston

Attention: Justine Ashley,

Dear Ms Ashley,

RE: Proposed District Plan – Variation 1
V1 - 0084 Applefields Ltd
11 & 12 / 478 Weedons Road, Rolleston
Geotechnical Evidence Peer Review

Geotech Consulting has been asked to carry out a peer review on the geotechnically related evidence submitted in support of the re-zoning of land to Medium Density residential Zone (MRZ) in the Proposed District Plan. The review is an assessment of the evidence presented and the appropriateness of the submitted land use for the site. Any information gaps are to be identified.

The geotechnical evidence submitted on behalf of Applefields Ltd is

Geotechnical report for Proposed Plan Change, 11 & 12 / 487 Weedons Road, dated 8
September 2022, by Kirk Roberts Ltd for Applefields Land Development Ltd. (note the
address is incorrectly numbered in the title)

The report covers adjacent properties Lot 7 DP 47839 & L:ot 2 DP 514579 with a total area of about 6.24 hectares at the corner of Lincoln-Rolleston and Selwyn Roads with access off Weedons Road. It is essentially flat land in agricultural use.

1. Geotechnical Investigation Reports

The report is a desk top study; no site testing was carried out. It summarises available information including NZGD borelogs all some distance to the northeast and west (incorrectly identified in the report), and some Ecan well logs, including one on site. The shallow tests show topsoil on silt & sand to a maximum depth of 1m over gravel. The on-site well log reports "clay and sand" to 3m over gravel continuous to at least 42m. Geological maps indicate Holocene age river deposits. The groundwater table is reported at 10 – 15m depth from the Ecan well logs.

Liquefaction is assessed from a 2006 report, which is now somewhat dated, particularly being pre-2010-11 earthquakes, and the 2012 report, both of which indicate low probability of liquefaction. The report considers an equivalent TC1 Foundation technical Category for the site.

Andrew Hurley E-mail ahurley@geotech.co.nz
Nick Traylen E-mail ntraylen@geotech.co.nz
Ian McCahon E-mail mccahon@geotech.co.nz

Natural hazards are considered either not present or readily mitigated by appropriate engineering. There is some minor flood inundation possible, but again this can be mitigated with appropriate design. The report concludes that the site is suitable for the proposed plan change use in terms of geotechnical constraints.

2. Discussion

The desktop study is lacking in some detail. The subsurface information included does in fact nicely bracket the site, giving greater confidence than if it was all from one direction, as incorrectly implied in the text. The ground conditions are all consistent, except that the well-logs indicate a greater thickness of silt & sand over the gravel that the other tests, which in this locality has little significance except perhaps requiring somewhat lower bearing pressures under shallow foundations. We do not have any issue with the conclusion that the site is equivalent TC1, but the report lacks any site specific reference, such that the predominantly gravel soils and depth to water table makes liquefaction very unlikely.

3. Conclusion

Although there has been no site testing for this report, the number of borelogs referenced meets the MBIE recommended number for a site of this size. The evidence submitted is sufficient to demonstrate that the proposed residential land is geotechnically suitable for development. The higher structures possible for MRZ zoning may impose greater loading on the soils than for normal housing, but the shallow gravel can easily support shallow foundations to such buildings. No further information is required for Variation 1 consideration.

Yours faithfully

Geotech Consulting Limited

JFM Cahon Ian McCahon 4415 17 February 2023 G E O T E C H

Selwyn District Council PO Box 90 Rolleston

Attention: Justine Ashley,

Dear Ms Ashley,

RE: Proposed District Plan – Variation 1
V1 - 0093 Brendean Drive Rezoning Group
Brendean Drive, Nobeline Drive, Lincoln – Rolleston Road & Weedons Road
Geotechnical Evidence Peer Review

Geotech Consulting has been asked to carry out a peer review on the geotechnically related evidence submitted in support of the re-zoning of land to Medium Density residential Zone (MRZ) in the Proposed District Plan. The review is an assessment of the evidence presented and the appropriateness of the submitted land use for the site. Any information gaps are to be identified.

The geotechnical evidence submitted on behalf of the Brendean Drive Rezoning Group is

- Geotechnical Investigation Report for Stage One of Proposed Subdivision of Lot 2 DP 9745 & Lot 1 DP 416195, Weedons Road, dated 30 August 2013, by Land Development & Exploration Ltd, for Bussell Development.
- Geotechnical Investigation Report for Stage Two of Proposed Subdivision of Lot 2 DP 9745 & Lot 1 DP 416195, Weedons Road, dated 30 August 2013, by Land Development & Exploration Ltd, for Bussell Development.

The two reports cover an approximately rectangular block of land extending between Lincoln – Rolleston Road and Weedons Road and were prepared for the subdivision of the land into 15 four hectare lots.

These geotechnical reports were reviewed by GCL in 2013 (GCL letter 14 October 2013, appended). We concluded that the reports met the intent of the MBIE guidelines, that the liquefaction hazard was low, and that the equivalent TC1 Foundation Technical Category was appropriate. The reports include an assessment of natural hazards. Although the reports were prepared nearly ten years ago, the subsurface conditions or natural hazards will not have materially changed and we consider that these reports can still be relied on for plan change use.

The current zoning submission covers 13 adjacent properties for a total area of about 52.86 hectares, most of which is within the area of the two geotechnical reports. The current area covers Lots 1- 6, 10-12, 14 & 15 of the 2013 subdivision (DP 475510). Two properties in the submission at 3 & 4 / 487 Weedons Road are not within the report area.

Andrew Hurley E-mail ahurley@geotech.co.nz
Nick Traylen E-mail ntraylen@geotech.co.nz
Ian McCahon E-mail mccahon@geotech.co.nz

Given the general consistency of the sub surface conditions in Rolleston, including this area, and our knowledge of this being confirmed by geotechnical data to the south of the site and the two land parcels not covered by the geotechnical reports, we consider that the reports are sufficient to demonstrate that the proposed residential land is geotechnically suitable for development. The higher structures possible for MRZ zoning may impose greater loading on the soils than for normal housing, but the shallow gravel can easily support shallow foundations to such buildings.

No further information is required for Variation 1 consideration. However, additional geotechnical testing and reporting will be necessary at any eventual subdivision consenting stage.

Yours faithfully

Geotech Consulting Limited

JFM Yahon
Ian McCahon



Peer review of submission expert evidence lodged in response to Variation 1 for Rolleston

Prepared for Selwyn District Council

Final

3 March 2023



Authors Derek Foy

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Disclaimer

Although every effort has been made to ensure accuracy and reliability of the information provided in this report, Formative Limited and its employees accepts no liability for any actions or inactions taken based on its contents.

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1 Introduction

This report reviews submissions made to request rezonings under the Variation 1 to the Proposed Selwyn District Plan ("PDP"). The submission that require review were identified by Council officers, and are those that contain some coverage of economics issues. Two such submissions were identified for our review in Rolleston, as identified in section 1.2.

1.1 Objectives

The objectives of this report are to:

- review the identified submissions.
- assess the appropriateness of the land to be re-zoned in line with the relief sought in the submission.
- identify any information gaps in the expert evidence or any other matters required to assess the appropriateness of the land to be re-zoned.

1.2 Report structure

This report as structured as follows:

- Section 2 NPS-HPL
- Section 3 V1-0025 Yoursection Ltd
- Section 4 V1-0084 Applefields Limited.



2 NPS-HPL

The National Policy Statement on Highly Productive Land ("NPS-HPL") was released on September 18 2022, after the IPI was notified in August and submissions were lodged. That means that submissions and their associated expert evidence did not have the opportunity to respond to issues that arise out of the objectives, policies, and rules in the NPS-HPL. In this section we summarise some of the key issues arising from the NPS-HPL from an economics perspective.

First we note that the soil productivity on a site, which is measured in terms of Land Use classification ("LUC"), will vary spatially across the land on each of the requested rezoning sites, and the appropriateness of each rezoning request will need to be assessed individually, based on the range of soil characteristics on each site, the location of each site, and the proposed activity.

A key issue arising from the NPS-HPL is the tension created between that statement and the NPS on Urban Development ("NPS-UD"). The NPS-UD requires local authorities to "at all times, provide at least sufficient development capacity to meet expected demand for housing and for business land over the short term, medium term, and long term". That sufficient capacity is a core thread of creating the well-functioning urban environments that are the overarching objective of the NPS-UD. The key from that policy is that the NPS-UD effectively requires a minimum, not maximum, amount of development capacity.

In contrast, the NPS-HPL requires that use of HPL is minimised:

- "Tier 1 and 2 territorial authorities may allow urban rezoning of highly productive land only if:
 - (a) the urban rezoning is required to provide sufficient development capacity to meet demand for housing or business land to give effect to the National Policy Statement on Urban Development 2020; and
 - (b) there are no other reasonably practicable and feasible options for providing at least sufficient development capacity within the same locality and market while achieving a well-functioning urban environment; and
 - (c) the environmental, social, cultural and economic benefits of rezoning outweigh the long-term environmental, social, cultural and economic costs associated with the loss of highly productive land for land-based primary production, taking into account both tangible and intangible values."²

² NPS-HPL clause 3.6(1)



¹ NPS-UD Policy 2

"Territorial authorities must take measures to ensure that the spatial extent of any urban zone covering highly productive land is the minimum necessary to provide the required development capacity while achieving a well-functioning urban environment".3

This indicates that there should be a balance between providing sufficient development capacity to meet NPS-UD obligations, yet not providing too much so as to meet NPS-HPL obligations. This implies that when HPL is present, there should be a 'sweet spot' where just enough, but not too much, HPL is made available for development. So while the NPS-UD alone does not impose minima, as pointed out by some submitters, it cannot always be a case of "more is better" when HPL is in play. Much of Selwyn is HPL (LUC 1-3), so this issue will be widespread when assessing the submissions, and because the NPS-HPL came into effect after submissions closed the issue has not been assessed in submissions.

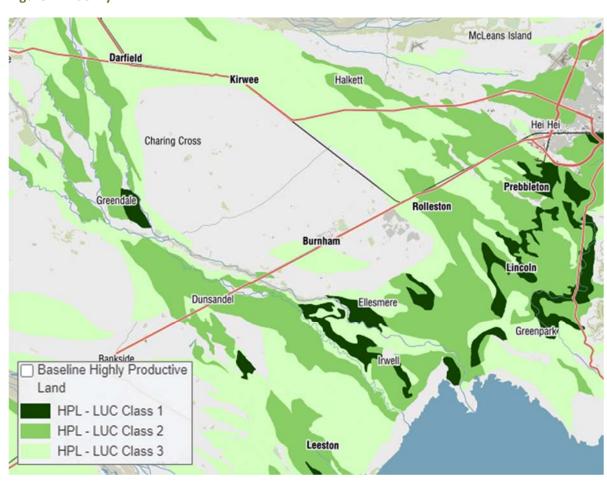


Figure 2.1: Selwyn HPL⁴

⁴ https://ourenvironment.scinfo.org.nz/maps-and-tools/app/Land%20Capability



³ NPS-HPL clause 3.6(5)

3 V1-0025 Yoursection Ltd

3.1 Decision sought

This submission seeks that the land at 148-178 Lincoln Rolleston Road, Rolleston (the "Yoursection site") be changed from General Rural Zone ("GRUZ") as notified to Medium Density Residential Zone ("MRZ"). The proposal would enable the development of an estimated 310 residential dwellings. The submission supports the proposed rezoning to MRZ of the land subject to plan change 75, opposite the Yoursection site on Lincoln Rolleston Road.

The submission opposes in part the ODP/DEV-RO10 provision for a neighbourhood centre on Lincoln Rolleston Road and suggests that Rule 13.1 be amended for any areas zoned as Neighbourhood Centre ("NCZ") or Local Centre ("LCZ") to be subject to the provisions of the Business 1 Zone.

The submission was accompanied by a planners (s32) report, and other technical reports (infrastructure, geotechnical, soil contamination, transport, landscape and visual assessment, urban design, economic, and soils).

3.2 Geographic area

The geographic area subject to the requested zoning was shown in Figure 1 of the s32 report and a Figure in the a+urban design statement, which are reproduced as Figure 3.1 and Figure 3.2. The Site is approximately 24.18ha, and is across the road from (east of) land that is proposed to be zoned MRZ, including PC75 and PC78 (Figure 3.2 and Figure 3.3).

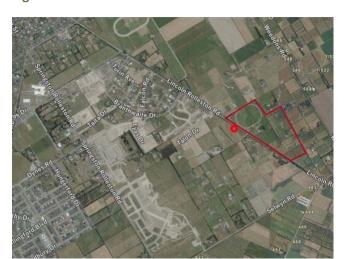


Figure 3.1: 148-178 Lincoln Rolleston Road Yoursection site

⁵ Insight Economics Ltd, 8 September 2022. Economic Assessment of Submission Seeking to Rezone Land in Rolleston.



Immediately north of those two plan change areas is the Falcons Landing residential subdivision which is progressively being developed. Land to the east of Lincoln Rolleston Road is currently mainly used for rural and rural residential activities. The lots immediately adjacent to the Yoursection site are located within the Urban Growth Overlay ("UGO") of the PDP.





Figure 3.3: Rolleston township plan change overview⁶



 $^{^{6}}$ Insight Economics, 8 September 2022. Economic Assessment of Submission Seeking to Rezone Land in Rolleston, Figure 4



The Site has also been designated to provide for growth within the regional planning framework, being both within the Projected Infrastructure Boundary ("PIB") and defined as a Future Development Area ("FDA") within the Canterbury Regional Policy Statement (Map A - Greenfield Priority Areas and Future Development Areas).

The Yoursection site is currently used for cropping and pastoral grazing and rural residential activities, and includes a private horse training track in its northern part. To the north, PC71 was approved on 10 August 2022, and is proposed to accommodate a supermarket (Pak'n Save) and residential development that will expand the urban area from Levi Road to the northern boundary of the Yoursection site.

3.3 Submission points

The submission and its associated expert evidence makes the following points relevant to assessing the economic merits of the submission:

- Additional housing supply enabled through the re-zoning will contribute towards improved housing affordability due to catering for different types of housing.
- Council's estimates of residential demand are low in comparison to recent household growth and residential building consent trends and the likely capacity appears to be overstated. For these reasons, the District needs to identify more land to meet NPS-UD obligations and encourage competitive behaviour to enable the efficient operation of the land market.
- Re-zoning the Yoursection site will generate strong economic benefits, including:
 - A substantial and direct boost in market supply to meet current and future shortfalls.⁷
 - Encouraging land market competition delivering new sections quicker and for better average prices.
 - Supporting greater local retail and services provision by achieving greater critical mass, through not only having a greater number of households in the township. But also reducing the average sales prices of homes, thereby freeing up money for spending on other goods and services. The greater critical mass will help Council and the community to achieve their aspirations for a renewed town centre.
 - One-off economic stimulus of developing the land and constructing the dwellings, across an assumed three year construction period of \$23m in regional GDP, 230 FTEs, and an increase in household incomes by \$10m per annum.8

⁸ Ibid, page 23



⁷ "Economic Assessment of Submission Seeking to Rezone Land in Rolleston", 8 September 2022, Insight Economics, page 1

- Increasing the District's rating base.9
- Economic benefit to the landowners from developing the property. 10
- There may be the following limited costs:
 - The Yoursection site is fully comprised of highly productive land and versatile soils as defined by LUC Classes 1 and 2. However, the soils assessment¹¹ points out that there are a number of constraints to using the land for farming activities, including existing uses and land fragmentation, and reverse sensitivity issues from dust, chemical applications and noise. After removing areas that cannot be farmed, it is estimated that there will be a loss of 21.3ha of versatile soils, representing a reduction of 0.015% in Selwyn and 0.0025% in Canterbury. After considering all other lost versatile soils since 2018, the loss of soils would represent a cumulative loss of 0.71% in Selwyn and 0.12% in the Canterbury Region.
- Growth to the north of Rolleston township is limited due to the State Highway and railway which forms a boundary, meaning that land for residential activity in Rolleston is more likely to be located south of the highway.
- The Yoursection site is located in an area that has been identified for future urban development which provides a strong indication that urban growth is expected to occur in this location. The subject site is directly opposite the urban expansion areas of PC75 (280 dwellings) and PC78 (750 dwellings). In addition other areas nearby including PC71 and Falcon's Landing are also proposed to be re-zoned to MRZ.
- The Yoursection site is located 2.5-3.5km from the Rolleston town centre which has shops, services, schools, and other community facilities.
- Further relief sought includes:
 - Insert the ODP appended as Attachment 2 as a new Rolleston Development Area in Part 3 of the PDP.
 - Amend the proposed Plan provisions as detailed in Attachment 1.
 - Adopt any alternative or consequential changes necessary to give effect to the relief sought in this submission.

3.4 Further submission points

There were no further submissions on submission V1-0025.

¹¹ Reeftide Environmental & Projects, 6 September 2022. Assessment of Potential Loss of Productive Land.



⁹ Section 32 report, Table 3

¹⁰ Section 32 report, Table 3

3.5 Response to submission points

We generally accept the Insight Economics assessment that the Selwyn demand and supply projections that are publicly available are now somewhat dated, and recent high growth requires a revision of future expectations and the substantial changes suggested in the PDP, IPI, and multiple approved Private Plan Changes that have significantly changed the local planning framework. Below we respond to that matter, which forms the core of Insight Economics' assessment.

3.5.1 Updated Selwyn Growth Model

The Insight Economics assessment refers to the Greater Christchurch Housing Development Capacity Assessment 2021 ("HDCA"), and he has assessed how recent changes might have affected the HDCA's conclusions. As Insight notes, since the HDCA assessment was completed (in 2020)¹² there have been significant changes to Selwyn's residential land market, including significant population growth, increased demand for new dwellings and industrial land, and a new expectation about sustained higher future rates of growth. There have also been multiple changes to the local planning framework which have significantly change the development potential in the district.

We agree with Insight Economics' observations about these changes, and believe that the HDCA no longer represents the best estimate of future land demand and supply, and therefore updated model output is needed to appropriately understand the current demand-supply balance and future adequacy of supply. There have also been more recent changes to legislation and the local planning framework, ¹³ and these will have a significant bearing on future land supply in Selwyn (and the wider Greater Christchurch Partnership), and have driven the need for an updated growth model.

Selwyn District Council ("SDC") has also been aware of that need, and hence commissioned a major update to the Selwyn Capacity for Growth Model ("SCGM").¹⁴ That update, the SCGM 2022 was completed after the Insight Economics report was completed, and we acknowledge that Insight has not had the benefit of access to the new SCGM outputs given their recent (December 2022) completion.

The updated SCGM includes revisions to both residential land demand and supply:

On the demand side, recent rapid population growth has led to a significant upwards revision to projected future growth, to ensure that future demand is not understated, and to provide a robust basis for assessing the adequacy of future residential supply.

¹⁴ The SCGM 2022 is accompanied by a report: "Selwyn Residential Capacity and Demand – IPI and DPR 2023 Economic Assessment", Formative Limited, February 2023



¹² The 2019 assessment for Selwyn was completed in 2020 and incorporated in the 2021 HDCA

¹³ Intensification Planning Instrument - Variation 1 to Proposed District Plan.

On the supply side the SCGM contains data current to late 2022 about the number of remaining vacant residential-zoned lots in Selwyn, taking into account the rapid uptake rates Insight Economics refers to that have occurred since the HDCA 2021 data was collected, and also taking into account new residential zoning that has been required since the Insight Economics report was completed.¹⁵

The new MRZ residential zoning has been required in response to the Resource Management (Enabling Housing Supply and Other Matters) Amendment Act 2021 ("EHA"). The EHA requires two key changes which can be expected to increase the quantum of residential capacity in Selwyn's urban areas:

- The mandatory introduction of the Medium Density Residential Standard ("MDRS").
- The requirement to develop an Intensification Planning Instrument ("IPI") which expedites the intensification in Policy 3 of the NPSUD (relating to permitted residential density in and around centre zones).

Those two changes are being advanced through Variation 1 to the Proposed Selwyn District Plan (Part A). Variation 1 (notified 20 August 2022) as notified will result in most of the residential zones throughout Selwyn's three large towns having medium density standard rules applied, and will increase by a considerable amount the plan enabled residential supply in Selwyn. None of that additional capacity is reflected in the Insight Economics assessment, nor could it have been, given it post-dates that assessment. However, the additional capacity has been accounted for in the SCGM update.

Other important changes incorporated in the SCGM update include:

- The changing of zoning in the District to match the National Planning Standards, which has resulted in some increase in developable capacity.
- Several developments have been brought forward by Covid-19 Fast-track Act.
- ❖ A number of private plan changes have been approved.
- The density of development occurring in the District has increased, which has resulted in an increase in what can be reasonably expected to be realised in future developments.
- The sales value, construction costs and lot values have all increased, which on balance will have resulted in more capacity being feasible in the District.
- Statistics New Zealand has released (December) new population projections, which account for growth experienced in Selwyn.

† Formative

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¹⁵ dated 5 August 2022

3.5.2 Selwyn residential land demand and supply

A core focus of the Insight Economics assessment was the need for additional dwelling capacity in Selwyn, to provide for the strong population growth that is occurring in the district, and that is projected to continue to occur. Below we respond to the Insight Economics assessment, and the submission generally, using findings of the updated SCGM.

The theoretical residential capacity modelled in the SCGM is very large across the entire District, and we acknowledge that much of the theoretical capacity is not expected to be commercially feasible in the coming three decades, or reasonably expected to be realised. The increase in capacity that has been required in the IPI is much larger than expected demand, which means that it is likely that only a small share of the capacity will be developable in the coming three decades. Also we note that the assessment of commercial feasibility shows that a large share of the intensification potential will not be financially feasible, which is driven by a number of reasons (e.g. such as existing value of dwellings).

Nevertheless, the new MRZ will contribute to a significant increase in capacity across the District. Also, as the Insight Economics report notes, there have been a number of private plan changes in progress that may contribute to providing additional dwelling capacity in Selwyn. The updated SCGM accounts for these, as well (only in the long-term) as additional residential land supply from Selwyn's Future Urban Development Areas ("FUDAs").

The Insight Economics report states that it is inappropriate to include capacity of the FUDAs given clauses 3.3 and 3.4 of the NPS-UD, which require that an assessment of sufficient capacity must be plan-enabled and infrastructure ready. Those clauses allow land to be included in the calculation in the long term if it is "identified by the local authority for future urban use or urban intensification in an FDS", ¹⁶ and "development infrastructure to support the development capacity is identified in the local authority's infrastructure strategy (as required as part of its long-term plan)." ¹⁷ The FUDA areas in Selwyn that have been included in the SCGM are identified in OurSpace (the FDS covering the relevant parts of Selwyn), are inside SDC's infrastructure boundary, and are noted in Growth Overlay areas of the PDP, hence are expected to be (or actually already are) serviced with infrastructure.

While many of the observations Insight Economics makes about the HDCA 2021 are valid, the updates they indicate are required (as driven primarily by significant recent growth) have been recognised and accounted for in the SCGM update, which indicates that demand is much better aligned with supply than the Insight assessment suggests. We note that 2021 assessment was conducted as the global pandemic reached New Zealand. At this time, Greater Christchurch Partnership and SDC elected to use a medium-high projection, which was a position that acknowledged the level of growth that had

¹⁷ NPS-UD clause 3.4(3)(c)



¹⁶ NPS-UD clause 3.4(1)(c)

been observed in Selwyn, but was cognisant of the widely held expectations that the border closure and the impacts of the Covid19 pandemic would slow national and local growth. As it transpired the border closures and Covid19 pandemic had minimal effect on the growth in Selwyn, with residential development continuing at high levels.

The SCGM 2022 assessment no longer uses the medium-high projection and we have advised Council to plan using the high growth projection. We acknowledge that no other Tier 1 council has adopted a high projection as their baseline for planning, however, we consider that Selwyn is in a unique position and there is a risk that demand continues at high levels, which Council should plan for.

The SCGM 2022 concludes, in relation to Rolleston, that:

- There is total plan enabled capacity of 69,330 dwellings. Of that total, 6,550 are assessed to be feasible to develop within the next decade (the NPS-UD medium term), and 14,900 will be feasible in the long term. Much of the plan enabled capacity is in new growth areas, and so should fairly accurately reflect actual capacity.
- The high growth scenario is the most appropriate to use, so as to be conservative and have a reduced likelihood of understating future growth. Under the high scenario there is projected to be demand for an additional 6,980 dwellings in Rolleston in the medium term (10 years), and 18,200 in the long term (30 years, averaging 607 new dwellings per year)¹⁸. This would mean that Rolleston would grow by 181% in the coming three decades, which is equivalent to 3.5% per annum.
- There is not enough supply to meet projected demand in the medium and long terms. However, we note that there is projected to be only a shortfall arising toward the end of the long term, sometime after the year 2047. While this point is nearly three decades away, it is a situation that should be monitored and if more supply does not come online, and growth exceeds the high projection, then the Council may need to provide more capacity.

The SCGM 2022 further concludes, in relation to Selwyn as a whole, that:

There is total plan enabled capacity of 144,800 dwellings. Of that total, 15,660 is assessed to be feasible to develop within the next decade (the NPS-UD medium term), and 29,420 will be feasible in the long term. In total the assessment shows that less than 11% of total plan enable capacity is feasible in the medium term and 20% in the long term.

¹⁸ Includes the required Competitiveness Margins defined in the NPS-UD



- Under the high growth scenario there is projected to be demand for an additional 12,550 dwellings in Selwyn in the medium term (10 years), and 32,760 in the long term (30 years).
- Supply is more than enough to meet projected demand in Selwyn as a whole in the short and medium terms, but not the long term, with demand excepted to exceed supply by around 2050. However, as has been seen since the earthquakes, Covid19, and recent weather events, the demand situation can change rapidly with people changing preferences to live in new locations than was previously anticipated. This inherent uncertainty is important issue for Selwyn, while the Council is required by the NPS-UD to update the assessment of demand and supply every three years we support Council's proactive stance of updating the assessment more regularly. This will ensure that the Council can pivot and change to match demand needs as they arise.

We note that these SCGM Selwyn demand projections are similar to Insight Economics' projections (e.g. from table 2 of that report).

While the SCGM concludes that supply is more than adequate to provide for future demand through to the end of the medium term, both in Rolleston and wider Selwyn, there is projected to be a shortfall towards the end of the long term, and as the Insight Economics report notes there can be benefits of providing additional capacity, notwithstanding our discussion later in this section about the NPS-HPL. Those benefits can include greater competition in the residential land market, and improved housing affordability, and, as the Insight Economics report notes, a larger future population provides greater critical mass to support locally a wider range of goods and services, resulting in more efficient access for local residents.

Given those potential benefits, and the high rate of growth projected in Selwyn generally, and Rolleston in particular, we agree that the additional supply that would be enabled by the change requested in the Yoursection submission would be appropriate from an economics perspective, subject to NPS-HPL considerations, and other considerations about location. We address those matters below.

In our opinion the Yoursection site is an appropriate location on which to accommodate future residential growth. The site is within the UGO area¹⁹ and the projected infrastructure boundary, which indicates that SDC envisages that urban growth will be appropriate in this location at some point in the future. The Site is also opposite plan changes 75 and 78, and is close (to the south) of the large PC71 area.

¹⁹ Insight Economics, 8 September 2022. Economic Assessment of Submission Seeking to Rezone Land in Rolleston, Figure 5



As discussed in section 2, the NPS-HPL requires that when HPL is present, that there should be a balance between providing sufficient development capacity to meet NPS-UD obligations, yet not providing too much so as to still meet NPS-HPL obligations. So while the NPS-UD alone does not impose minima, as pointed out by some submitters, it cannot be a case of "more is better" when HPL is in play. From the SCGM output, there will be adequate residential land supply enabled without enabling residential development on the Yoursection site, however that does not preclude urban rezoning of the site because under clause 3.5(7)(b)(i) the site is within a UGO, and therefore identified for future urban development, and therefore not restricted from development under the requirements of the NPS-HPL.

Taking all of these factors into consideration, we agree with the Insight Economics report's conclusions that:

- The requested rezoning represents additional dwelling capacity that will contribute to enabling future adequate supply of residential land in Rolleston, and Selwyn
- There will be a range of economic benefits of the requested zone change, and
- There are no material economic costs of the requested zone change.



4 V1-0084 Applefields Limited

4.1 Decision sought

This submission seeks that the land at 11/478 and 12/478 Weedons Road, Rolleston (the "Applefields site") be rezoned from GRZ as notified to MRZ. The proposal will enable the development of an estimated 90 residential dwellings.

The submission was accompanied by planning, economics, traffic urban design, infrastructure, and geotechnical reports.

4.2 Geographic area

The geographic area subject to the requested zoning was shown in Figure 2 of the submission, which is reproduced as Figure 4.1. The site is approximately 6.24ha, inside the south-eastern boundary of the UGO in the PDP (Figure 4.2). Immediately to the north is the Yoursection Ltd land which has submitted under Variation 1 to be rezoned for MRZ to provide for up to 310 residential dwellings. We note that the Insight Economics economics assessment assesses a geographic area that takes in the Yoursection site as well as the Applefields site, instead of referring to the latter alone.

The Applefields site is currently used for residential lifestyle units.



Figure 4.1: Applefields site (478 Weedons Road, Rolleston)²⁰

²⁰ Applefields submission, Figure 1



Figure 4.2: Applefields Site (11/478 and 12/478 Weedons Road) and surrounding plan change sites



Figure 4.3: Applefields Site within south-eastern Rolleston²¹



²¹ Figure 3 Rolleston Structure Plan, Applefields Submission



4.3 Submission points

The submission and its associated expert evidence make the following points relevant to assessing the economic merits of the submission:

- Additional housing supply enabled through the re-zoning will contribute towards improved housing affordability due to catering for different types of housing. Evidence presented in other hearings has demonstrated an urgent need to bring more land online for development in the Rolleston market as soon as possible.
- Council's estimates of residential demand are low in comparison to recent household growth and residential building consent trends and the likely capacity appears to be overstated. For these reasons, the District needs to identify more land to meet NPSUD obligations and encourage competitive behaviour to enable the efficient operation of the land market.
- Re-zoning the Applefields site (in conjunction with the Yoursection site) will generate strong economic benefits, including:
 - ❖ A substantial and direct boost in market supply to meet current and future shortfalls.²²
 - Encouraging land market competition delivering new sections quicker and for better average prices.
 - Supporting greater local retail and services provision by achieving greater critical mass, through not only having a greater number of households in the township. but also reducing the average sales prices of homes, thereby freeing up money for spending on other goods and services. The greater critical mass will help Council and the community to achieve their aspirations for a renewed town centre.
 - One-off economic stimulus of developing the land and constructing the dwellings. Insight Economics has combined the economic effects of developing both the Yoursection Ltd site to the north of the Applefields site with the Applefields site in their assessment. The combined effect is estimated as an increase in regional GDP of \$90m, 880 FTE years, and household incomes of \$40m across the development timeframe²³. Of those total estimates, the Applefields site makes up \$20m regional GDP, 190 FTE years, and \$10m household incomes.
- There may be the following limited costs:

²³ Ibid, p14



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²² Insight Economics Ltd, 16 September 2022. Economic Assessment of Proposed Rezoning in Rolleston, p10.

- There is a possibility that the proposed development will need to consider how to respond to any reverse sensitivity effects from the Poultry operation located south west of the Applefields site (Figure 4.4).
- Further relief sought includes:
 - Insert an Outline Development Plan ("ODP") with a narrative for Rolleston X Development Area.
 - Remove the UGO and make changes to the PDP to be consistent with the changes sought.

Figure 4.4: Poultry farm location, south Rolleston²⁴



Figure 3: Location of neighbouring poultry farm

4.4 Further submission points

There were no further submissions on submission V1-0084.

4.5 Response to submission points

The Applefields submission is subject to a very similar range of economics considerations as the Yoursection submission, and accordingly the two submissions were supported by very similar Insight Economics reports. We have responded in detail to the Yoursection submission (in section 3.5 above), and our findings there apply to Applefields as well, as summarised below:

²⁴ a+urban, 15 September 2022. Applefields Rolleston South-east Residential Development Proposal Urban Design Statement. Appendix 9, Figure 3.



- We agree with the Insight Economics report's assessment of recent high demand for residential land in Rolleston, and Selwyn, and the updated SCGM accounts for recent changes in the residential land market.
- The updated SCGM concludes that supply is more than enough to meet projected demand in the short and medium terms, and insufficient toward the end of the long term in both Rolleston and Selwyn in order to meet obligations under the NPS-UD, and, as Insight Economics notes, the NPS-UD sets minima, not targets.
- We agree that the requested zone change would give rise to a range of economic benefits.
- The Applefields site is an appropriate location on which to accommodate future residential growth. The site is within an area identified to accommodate future urban growth, and so Is not subject to a development restrictions under the NPS-HPL.

Taking all of these factors into consideration, we agree with Insight Economics' conclusions that:

- The requested rezoning represents additional dwelling capacity that will contribute to enabling future adequate supply of residential land in Rolleston, and Selwyn
- There will be a range of economic benefits of the requested zone change, and
- There are no material economic costs of the requested zone change.

