# Appendix 3: Supporting Technical Report



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**To:** Selwyn District Council

From: Hugh Nicholson, Urban Designer

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Re: DPR-0209 Lincoln Rezoning Request for Proposed Selwyn District Plan

Urban Design and Landscape Review

#### 1.0 BACKGROUND

1.1 Submission DPR-0209 to the Proposed Selwyn District Plan (PSDP) seeks to rezone 17.26 ha of land along Allandale Lane zoned for rural uses to a general residential zone in accordance with a proposed Outline Development Plan (ODP).

- 1.2 I have been asked by the Selwyn District Council to carry out a peer review of the expert evidence relevant to urban design or landscape matters. As part of the peer review, I have assessed the appropriateness of the proposed rezoning against the relevant strategic directions in overarching documents. I have identified any information gaps in the relevant expert evidence, and where appropriate recommended changes to proposed ODP in order to better achieve the desired strategic directions.
- 1.3 My assessment does not consider the urban form implications for Greater Christchurch.

## 2.0 STRATEGIC DIRECTIONS

In my peer review I have drawn strategic directions on good urban form from three sources, the National Policy Statement on Urban Development (**NPSUD**), the Canterbury Regional Policy Statement (**CRPS**) and the proposed Selwyn District Plan (**proposed SDP**), all of which provide overarching guidance.

- 2.2 The **NPSUD** seeks to provide "well-functioning urban environments" that enable more people to live near a centre or employment opportunities, and which are well serviced by public transport<sup>2</sup>.
- 2.3 In particular the **NPSUD** promotes urban environments that provide good accessibility between housing, jobs, community services, and natural and open spaces, support reductions in greenhouse gas emissions, and are resilient to the likely effects of climate change<sup>3</sup>.
- 2.4 The **CRPS** seeks to manage the urban form and settlement pattern of Christchurch through the consolidation and intensification of urban areas.
- 2.5 The objectives of the **CRPS** direct that residential development should be of a high quality and incorporate "good urban design"<sup>4</sup>.
- 2.6 The **CRPS** also seeks housing developments that give effect to the listed principles of good urban design, and to those in the NZ Urban Design Protocol 2005. These principles refer to the need for well-integrated places that have high-quality connections including walking, cycling and public transport, and that are environmentally sustainable<sup>5</sup>.
- 2.7 The strategic directions of the **proposed SDP** seek that "Urban growth is located only in or around existing townships and in a compact and sustainable form that aligns with its anticipated role"<sup>6</sup>.
- 2.8 The urban growth policies in the **proposed SDP** seek to establish high-quality urban environments by "maintaining the amenity values and character anticipated within each township" and "preserving the rural outlook… through appropriate landscape mitigation… or development controls at the interface" with rural environments<sup>7</sup>.
- 2.9 The urban growth policies in the **proposed SDP** also direct that the zoning of land demonstrates how it will integrate with existing urban environments including "prioritising accessibility and connectivity between the land and adjoining neighbourhoods, commercial centres, …reserves, and community facilities, including education… and health services", and "requiring safe, attractive and convenient transport infrastructure that promotes walking, cycling,

 $<sup>^{\</sup>mbox{\tiny 1}}$  National Policy Statement on Urban Development 2020, Objective 1, p.10

<sup>&</sup>lt;sup>2</sup> Ibid, Objective 3, p.10

<sup>&</sup>lt;sup>3</sup> Ibid, Policy 1, p.10-11

<sup>&</sup>lt;sup>4</sup> Ibid, Objective 6.2.3 Sustainability

<sup>&</sup>lt;sup>5</sup> Ibid, Policy 6.3.2 Development form and urban design

<sup>&</sup>lt;sup>6</sup> SD-UFD-01 Compact and Sustainable Township Network

<sup>7</sup> UG-P10 Urban Form

- and access to public transport and public transport facilities to encourage energy efficiency and improve peoples' health and wellbeing "8.
- The residential objectives in the **proposed SDP** direct that a "range of housing typologies and densities are provided" and that "increased densities occur in close proximity" to activity centres, public transport and open spaces<sup>10</sup>. They also require that "residents have access to a range of community, recreation, education, health, and corrections activities and facilities that support… the residential amenity"<sup>11</sup>.
- 2.11 The **Lincoln Structure Plan** (adopted in 2008) identifies the northern half of the site for conventional residential development and the southern half for a stormwater management wetland system (see Figure 1)<sup>12</sup>.

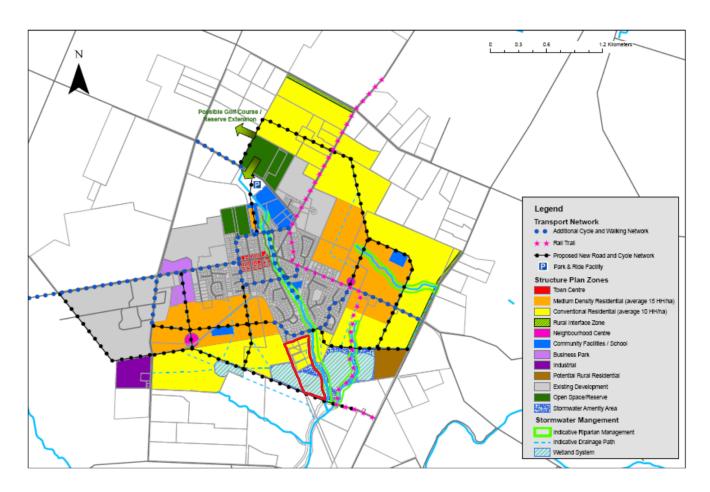


Figure 1: Lincoln Structure Plan 2008 with site outlined in red

<sup>8</sup> UG-P12 Urban Form

<sup>&</sup>lt;sup>9</sup> RESZ-03 Residential Objectives

<sup>&</sup>lt;sup>10</sup> RESZ-04 Residential Objectives

<sup>&</sup>lt;sup>11</sup> RESZ-07 Residential Objectives

<sup>&</sup>lt;sup>12</sup> Lincoln Structure Plan, Selwyn District Council, 2008, page 14

- 2.12 Drawing on the strategic directions outlined above I have reviewed the urban form proposed in DPR-0209 in terms of:
  - a. the extent to which it creates a consolidated and compact urban form, and the spatial distribution of densities;
  - b. the level of connectivity with the existing urban environment;
  - c. the accessibility to a range of services using a range of travel modes including walking, cycling and public transport;
  - d. The residential amenity values and character, and the treatment of the urban / rural interface.

#### 3.0 EXISTING ENVIRONMENT

- 3.1 The site is currently used for rural lifestyle purposes with seven dwellings and one unoccupied section. It is bounded by Liffey Stream to the east with an established riparian margin, and the Lincoln Wastewater Treatment facility to the west. To the north the site is bounded by established residential development which extends to the east beyond Liffey Stream.
- The land to the south is currently used for rural purposes but an application to rezone the land for residential purposes (PC69) is currently under appeal.

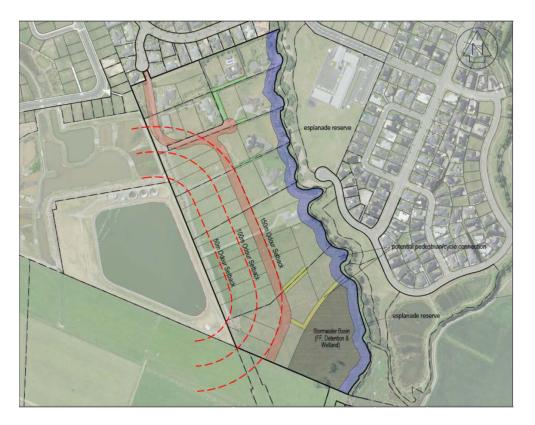


Figure 2: Impact of Odour Control Setbacks on possible development

3.3 The size of the odour control setback from the Lincoln Wastewater Treatment plant would affect the capacity of the site for development.

#### 4.0 COMPACT URBAN FORM

- 4.1 I have considered the site under two scenarios, one with and one without PC 69 being approved.
- 4.2 If PC69 is not approved the site would be surrounded on two sides with urban development, on one side with urban stormwater and wastewater infrastructure, and on one side with rural land including a legal road (Moirs Lane). In my opinion it would be appropriate to develop the site more intensive residential use to the north and stormwater treatment facilities to the south as envisaged in the Lincoln Structure Plan. Without the connection to the south provided by PC69 a lower density such as Low Density Residential (LRZ) may be appropriate.
- 4.3 If PC69 is approved the site would be completely surrounded by urban development and urban stormwater and wastewater infrastructure and the current rural lifestyle uses would become more of an anomaly. I consider that a more intensive General Residential Zoning (GRZ) would be appropriate if PC69 is approved.
- 4.4 There are a range of benefits from increased density<sup>13</sup> including:
  - a. *Social:* improving social interaction and diversity, improving access to and viability of community services;
  - b. *Economic*: improving the economic viability of development and infrastructure;
  - c. *Transport*: supporting increased usage of public transport and reducing car travel;
  - d. *Environmental*: increasing energy efficiency and decreasing resource consumption and pollution, reducing demand for land.
- 4.5 Both the LRZ and GRZ are relatively low-density forms of development at between 10 and 12 households per hectare. In Christchurch the minimum density in residential suburban areas is 15 households per hectare, with minimums of 30 households per hectare in medium density residential areas, and 50 households per hectare in the central city.

<sup>13</sup> Carmona, M., Heath, T., Oc, T., Tiesdell, S., Public Places, Urban Spaces: The Dimensions of Urban Design, 2006, Architectural Press, p.183

#### 5.0 CONNECTIVITY

- 5.1 Connectivity refers to creating streets that are joined together in city-wide networks that provide more choices, and support increased resilience and safer places<sup>14</sup>. Well-connected street networks support walking and cycling.
- The ODP proposes a single north-south local road largely through the centre of the site, with an esplanade reserve along the Liffey Stream and a walking cycling trail along the northern edge of the stormwater management area.
- 5.3 If PC69 is not approved the connectivity of the site is *low* but could be significantly improved by:
  - a. Providing a mid-site pedestrian / cycle connection from the local road across the Liffey Stream and esplanade reserve to connect with the existing walkway that starts at Jimmy Adams Terrace and provides direct access to Ararira Springs Primary School and a walking / cycle route to the town centre;
  - Provide pedestrian / cycle access along the full length of the northern edge of the Stormwater Basin and connect the northern end into the existing track network on the eastern side of Liffey Stream;
  - c. Re-aligning the southern end of the local road to directly connect with the legal road (Moirs Lane) in the southern corner of the site to future proof the possibility of a connection in the long term.
- If PC69 is approved the connectivity of the site would be *moderate / high*. Given the limited number of road connections into the PC69 it is likely to become a well-used link between the old and new parts of Lincoln. The ODP would be improved by:
  - a. Provide a mid-site pedestrian / cycle connection from the local road across the Liffey Stream and esplanade reserve to connect with the existing walkway that starts at Jimmy Adams Terrace and provides direct access to Ararira Springs Primary School and a walking / cycle route to the town centre;
  - b. Provide pedestrian / cycle access along the full length of the northern edge of the Stormwater Basin and connect the northern end into the existing track

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<sup>&</sup>lt;sup>14</sup> People Places Spaces: A design guide for urban New Zealand, Ministry for the Environment, 2002, p.32

- network on the eastern side of Liffey Stream and the southern end into the PC69 track network:
- c. Retain the original Allandale Lane alignment along the western boundary to minimise the effects of through traffic on the development and utilise land under the odour control setback. A simple loop road off Allandale Lane could provide access to the development.

### 6.0 ACCESSIBILITY

- Accessibility relates to providing access to public services and facilities particularly within easily walkable or cyclable distances<sup>15</sup>. The New Zealand Household Travel Survey (NZHTS) found that the average walking trip was 1.0km, and the average cycle trip distance was 4.0km<sup>16</sup>.
- The site is approximately 1.2 kilometres from the town centre and public transport routes. If a connection across the Liffey Stream was provided the site could access a pleasant and enjoyable pedestrian / cycle route alongside the Stream into town.
- 6.3 With the connection across the Liffey Stream the site would have good access to Ararira Springs Primary School and the recreational walking and cycling trails to the south of the township and the Lincoln Rail Trail.
- In my opinion the proposed site would have a *moderate-high* level of accessibility to public services and facilities.

#### 7.0 RESIDENTIAL AMENITY AND CHARACTER

- 7.1 The site has the potential to provide a high standard of residential amenity with good access to the Liffey Stream, the Rail Trail and the Lincoln town centre.
- 7.2 There are potential adverse effects from the Lincoln Wastewater Treatment facility next door which could reduce the level of residential amenity. The applicant has proposed a 50 metre odour control setback while PC69 adopted a 150 metre setback. Although the size of the setback affects the capacity of the development, I consider that from an urban form perspective either setback would allow for positive outcomes if the land was rezoned.

<sup>&</sup>lt;sup>15</sup> New Zealand Urban Design Protocol, Ministry for the Environment, 2005, p.21

<sup>&</sup>lt;sup>16</sup> New Zealand Household Travel Survey, Ministry of Transport, 2015-2018, <a href="https://www.transport.govt.nz/statistics-and-insights/household-travel/">https://www.transport.govt.nz/statistics-and-insights/household-travel/</a>

#### 8.0 RECOMMENDED CHANGES TO THE ODP

8.1 If the Commissioners are of a mind to approve the rezoning request I recommend that the following changes are made to the ODP.

If PC69 is not approved:

- a. Adopt a residential zoning of LRZ
- b. Provide a mid-site pedestrian / cycle connection from the local road across the Liffey Stream and esplanade reserve to connect with the existing walkway that starts at Jimmy Adams Terrace and provides direct access to Ararira Springs Primary School and a walking / cycle route to the town centre;
- Provide pedestrian / cycle access along the full length of the northern edge of the Stormwater Basin and connect the northern end into the existing track network on the eastern side of Liffey Stream;
- d. Re-align the southern end of the local road to directly connect with the legal road (Moirs Lane) in the southern corner of the site to future proof the possibility of a connection in the long term.

If PC69 is approved:

- a. Adopt a residential zoning of GRZ;
- b. Provide a mid-site pedestrian / cycle connection from the local road across
  the Liffey Stream and esplanade reserve to connect with the existing
  walkway that starts at Jimmy Adams Terrace and provides direct access to
  Ararira Springs Primary School and a walking / cycle route to the town centre;
- c. Provide pedestrian / cycle access along the full length of the northern edge of the Stormwater Basin and connect the northern end into the existing track network on the eastern side of Liffey Stream and the southern end into the PC69 track network;
- d. Retain the original Allandale Lane alignment along the western boundary to minimise the effects of through traffic on the development and utilise land under the odour control setback. A simple loop road off Allandale Lane could provide access to the development.

## 2.0 CONCLUSION

2.1 In my opinion the proposed rezoning would contribute to a compact or consolidated urban form for Lincoln, and would have *low* to *moderate* levels of connectivity (depending on the status of PC69), and *moderate-high* levels of accessibility.

**Hugh Nicholson** 

**Urban Designer I Landscape Architect**