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19 January 2022
Selwyn District Council
CHRISTCHURCH

Attn. **Jocelyn Lewes,** Planner

By email only: Jocelyn.lewes@selwyn.govt.nz

Dear Jocelyn

Request for Further Information: Plan Change 82

Thank you for your Request for Further Information dated 13 December 2021. WE have responded to your questions and comments below. I have noted when a response has been provided by a technical expert, for clarity.

For amendments to the application included in this response deleted text is shown as ~~strikethrough~~, and new text is shown as bold/underlined.

Identification of Ownership

1. *In Table 1, the registered owner of Lot 3 & 4 DP 20007 is identified as Gallina Nominees Limited. In paragraph 7 of the application, these titles are identified as the 'former Gallina/Wattie Heinz' site. Council records identify the ratepayer for these titles as Tegal Foods Ltd. Please clarify the owner of Lots 3 & 4 DP 20007.*

Response:

The owners of Lots 3 and 4 DP 20007 are Gallina Nominees Ltd. A Sale and Purchase Agreement is in place with the intended purchasers, Brookside Residential Ltd.

2. *Related to this, please clarify whether the lease mentioned in the application expires in 2022 (as mentioned in paragraph 7 of the application) or in 2027 (as identified on page 6 of the s32 assessment).*

Response:

The lease expires in 2022.

Reverse Sensitivity

3. *Within the plan change request, the potential for reverse sensitivity with Council nearby strategic infrastructure, namely the Pines Wastewater Treatment Plant (Designations D411 and D416) and the Pine Resource Recovery Park (Designation D412) is identified. At paragraph 34, it is identified that, for consistency purposes, the measures proposed in PC73 to address this matter from an odour perspective can be adopted by this request. The ODP goes onto identify a 600m buffer/setback odour constraint, and identifies that dwellings are not permitted in this area, and that no sensitive activities are to be provided for within this same area. Please provide details of where this odour constrained area has been measured from. Please identify what measures proposed in PC73 are proposed to be adopted in relation to this request.*

Response:

The 600m OCA has been measured from the active composting area. This 600m setback OCA does not affect the majority of the PC 82 site, except for a small area on the northwest corner of Brookside Road and Edwards Road. However, the following provisions of PC73 in relation to the Pines Wastewater Treatment Plan and Pines Resource Recovery Park do affect the PC82 site.

Any dwelling, family flat, and any rooms within accessory buildings used for sleeping or living purposes in the Living Z Zone at Rolleston (as shown on the Outline Development Plan in Appendix XX) shall be located outside the 'Odour Constrained Area' as shown in Appendix XX

No residential allotments may be created within 1500m of the Pines Wastewater Treatment Plant buildings (as depicted by the line shown in Figure 1 below) prior to: Certification by Council's Asset manager that the resource management approvals required to enable the Pines Wastewater Treatment Plant to provide treatment capacity for 120,000 person equivalents of incoming flow have been obtained; or 31 December 2025, whichever is the sooner.

Additional provisions in the ODP narrative and rules package are proposed as outlined under 5 for consistency.

4. *At paragraph 50, the Edwards/Brookside Road corner of the plan change area is identified as the western extent to Rolleston's westward growth, as beyond this, "with suitable intervening buffers" are significant parts of the Council's District infrastructure. Please identify what these intervening buffers are and if any are to be identified within the boundary of the plan change request area. Please clarify if it is necessary to identify these within either the ODP (either on the plan or accompanying text) or as a specific provision within the District Plan.*

Response

The reference to 'suitable intervening buffers' is a reference to rural zoned land between the PC 82 Site and the Council's District infrastructure. None is within the boundary of the plan change request area.

5. *Through the hearing process for PC73, proposed provisions were proffered for inclusion within the District Plan that precluded the development of residential allotments within 1500m of the Pines Wastewater Treatment Plant buildings prior to certification by Council's Asset Manager that the resource management approvals required to enable the Plant to provide treatment capacity for 120,000 person equivalents of incoming flow have been obtained or 31 December 2025, whichever is the sooner. Please advise if this measure is also proposed to be adopted in relation to this plan change. If so, please provide a map indicating the extent of the plan change area affected by this measure and identify this within either the ODP (either on the plan or accompanying text) or as a specific provision within the District Plan.*

Response:

This measure is proposed to be adopted for PC82. A map of the extent of the PC82 site affected is provided below. We suggest that the ODP narrative under 'Land Use' is amended to include this map and additional wording at the end of the 'Land Use' section as below.

No residential allotments may be created within 1500m of the Pines Wastewater Treatment Plant buildings (as depicted by the line shown in Figure 1 below) prior to: Certification by Council's Asset manager that the resource management approvals required to enable the Pines Wastewater Treatment Plant to provide treatment capacity for 120,000 person equivalents of incoming flow have been obtained; or 31 December 2025, whichever is the sooner.

Figure 1: Odour Constrained Area and WWTP Setbacks

6. *Please clarify how the land within the Odour Constrained Area identified on the ODP is to be managed and integrated into the development, while ensuring activities sensitive to odour are avoided within these areas.*

    Note:

    i. The full extent of the various Council designations does not appear to be reflected accurately within the plan change request – refer to paragraph 34 below. In responding to the above requests, please ensure that the full extent of the designations are mapped appropriately.

Response:

The Odour Constrained Area affects a very small portion of the PC82 site in the north west corner, as shown on the ODP below (blue hatched arc).

The ODP narrative states

Land Use

The development area shall achieve a minimum net density of 12 household per hectare (hh/ha), averaged over the area of the Site, excluding the area identified as an Odour Constrained Area where dwellings are not permitted. It is envisaged that the land within the OCA can be developed with residential sections given the small size of the setback, with sufficient room to accommodate a dwelling outside the OCA.

For consistency with PC73 an additional Subdivision rule is proposed as below

12.1.4.76b) In relation to the Living Z Zone (Brookside Residential) at Rolleston as shown in Appendix x:

(a) Whether the pattern of development and subdivision is consistent with the Outline Development Plan in Appendix x;

(b) Whether the pattern and staging of development:

(i) In relation to the Living Z zone shown in Appendix x takes into account the upgrade of the Dunns Crossing Road / Main South Road (SH1) / Walkers Road intersection by Council and NZTA, including any land requirements; and

(ii) commences adjacent to Dunns Crossing Road to maximise connectivity and the efficient provision of infrastructure.

(c) The appropriateness of any mechanism proposed to address specific setback or boundary treatment requirements identified within the Outline Development Plan in Appendix x.

(d) How land within the Odour Constrained Area identified within the Outline Development Plan in Appendix x is to be managed and integrated into the development, while ensuring activities sensitive to odour are avoided within this area.

7. *It is noted at paragraph 37 that, if PC73 is approved, it contains a 150m Odour Setback Area from the existing intensive farming operation within this plan change area. As proffered at the hearing, it was proposed that building within this area be a non-complying activity and, within the ODP text, that this restriction be supported by an enduring legal mechanism. As such, the assertion in paragraph 37 that "dwellings are excluded until and if residential subdivision proceeds on the current chicken breeder site or if the chicken breeder site is no longer operating on the site" is incorrect. Further, it is stated that this "request proposes that the removal of the [odour setback area] will enable a more efficient use of the PC73 land for urban purposes" however the request does not include any amendments to this effect. While it is acknowledged that a decision has not yet been made in relation to PC73, should a favourable decision be made in relation to PC73, and Council resolves to accept this plan change (PC82) for notification, please clarify if it is proposed to vary the provisions within PC73 that respond to the existing intensive farming operations with the plan change area.*

Response:

Gallina Nominees Ltd submission on PC73 sought amendments to the PC73 along the lines outlined above. If PC73 is approved but without the amended wording, it is likely that a variation to the provisions within PC73 will not be sought. Building within the OCA can be sought by way of a non-complying resource consent at the appropriate time.

Ecological Assessment

8. *Please provide an ecological assessment of the water race that traverses the plan change area and clarify how this water race is to be treated.*

    Note:

ii. The water race that traverses the plan change area is a continuation of the same water race that traverses the PC73 Holmes Block to the north, and continues along the boundary with the PC73 Skellerup Block before terminating within PC81 to the south. In relation to PC73, and referred to in PC81, feedback from Mahaanui Kurataiao Limited recommended that the infilling of the Holmes Block waterway was avoided and that a minimum 10m setback between all waterways and development be provided. It is also noted that, within the Rolleston environs, some open water areas have been maintained for aesthetic and ecological reasons.

Response:

Mark Taylor of Aquatic Ecology prepared an ecological assessment of the water race which passes through the Plan Change 73. The same water race passes through the PC82 land. His advice with respect to the water race with respect to the PC82 land is attached as **Appendix A**.

Infrastructure

Reserves

9. *There is a conflict in the information provided in the Urban Design Statement (pages 15-16) and in the ODP (both the plan and accompanying text) on the provision of green space for the proposed development. The Urban Design Statement refers to 4 smaller reserves yet there are 5 shown on the ODP. The ODP commentary refers to the distribution being based on 500m walking radius and in the Urban Design Statement the figure of a 400m walking radius is quoted. Please clarify and provide the rationale for the number of "local" reserves, including the function and distribution of these spaces. This should take into account the surrounding reserves and recreation spaces, including those proposed by other plan change requests, noting that the Council's adopted standard is a 500m walking radius.*

Response:

This response is provided by Nicole Lauenstein of a+urban

The figure stated in the Urban Design Statement is a typo and should state 500m walking radius

There are 6 reserves proposed, one larger neighbourhood park in the centre of the site and 5 small pocket parks evenly distributed throughout the remainder of the site. The larger neighbourhood reserve provides the main recreational reserve for the entire ODP area whilst the 5 smaller pocket parks have been strategically located to support medium density areas and to provide open space for generous tree planting to break up the built form. These smaller reserves are approx. 1000-2500m^2 and serve the direct local neighbourhood in very close walking distance. They function as break-out spaces and local neighbourhood meeting places.

Generally, the open space requirement is 1.2ha for every 1000 people. PC 82 will develop approx. 1320 hh/ approx. 3500 people and would normally require 4.4ha of open space. This has deliberately been reduced as Brookside Park, a 10ha recreational reserve is right at the

north-eastern edge of the Site and within a 500m walking distance for up to 25% of the PC area.

To the south, PC 73 also positions reserves within the northern part of the Skellerup Block, again making open space available within an easy walking distance for the adjacent areas in PC 82. For this reason, the proposed 2.5ha of combined reserve areas is considered appropriate for PC 82.

Considering the above all PC82 reserves combined provide approx. 2.0 ha of open space for the entire ODP.

Brookside Park does cater for the need of a large open space in proximity to the Site. The design concept therefore opted for a different approach placing, instead of one single centrally located large reserve, several smaller reserves throughout the site. This will ensure that Open Space/ reserves are distributed throughout the site and assist in achieving a higher amenity in all parts of the PC area.

10. *Please clarify if the diagonal green link to the north east to connect with Brookside Road is a separate green corridor or if it follows alongside a road connection.*

Response:

This response is provided by Nicole Lauenstein of a+urban

This green link is a key element of the design as it provides connectivity from the central green space to Brookside Park the small local commercial area at the corner of Dunns Crossing Road along a natural desire line.

The intention is to integrate this green link within the road reserve where it aligns with local roads but as a separated shared pedestrian /cycle way, pull it through the north-east local reserve and finally continue as a separate, shared path via a cul de sac and exit from the head of the cul de sac at the far north east corner of the Site, opposite Brookside Park.

11. *The request mentions the location of a water race within the plan change area but does not indicate whether this has the potential to be integrated with open space areas. Has this opportunity been considered?*

    Note:

    iii. In terms of the "local" reserves, although the Urban Design Statement talks about reserves providing space to service higher density development, most of these are located in the lower density areas. Some are also close (<300m) to either the central reserve or other existing or proposed reserves, such as that proposed in the adjoining Skellerup Block (PC 73). The assessment requested above should assess distribution and provision standards in consideration of Council's adopted levels of service and take account of existing and proposed reserves in close proximity to the plan change area.

Response:

This response is provided by Nicole Lauenstein of a+urban

Local reserves

The reduced proximity between reserves is intentional as these pocket parks are serving smaller local communities, located at local road intersection to create breaks in the build form and provide informal open spaces for casual meet and greet. They can contain small playgrounds and seating as well as space for tree planting in clusters creating visual focal points.

Water race

The existing water race is part of a longer stock race running along the western edge of Rolleston from SH1 through PC73 (Holmes Block) through part of PC82, it then follows the western boundary of PC73 (Skellerup Block) before terminating in PC81.

The initial investigations undertaken by Mark Taylor have shown some ecological values may be present in the upper reaches of the water race (PC 73 Holmes and PC 82).

Based on my involvement in PC 81 it is my understanding that water flows in the lower parts of the race (PC 73 Skellerup Block and PC 81) are less and can be ephemeral in nature reducing the ecological value.

The retention and integration of a water race into an urban environment is a complex issue with various advantages and disadvantages. A full assessment of the ecological values is therefore critical to inform the decision making process and to ascertain the feasibility of waterway enhancement prior to committing to the retention of the water race.

From an urban design perspective, the following matters also need to be taken into consideration when assessing the suitability of the retention of water races and their integration into a residential area.

- Physical and visual amenity

The retention of a water race adds to the local amenity particularly if it can be integrated into open space/ reserves, green links and road reserves. It not only adds to the visual amenity but also assist with the physical amenity as waterbodies can aid in the regulation of temperature provide movement and sound and provide direct connection to a natural element.

- Local character

Water races are an intrinsic feature of the rural landscape in the district. Retention of the water race creates a tangible connection to the character and history of both the site and the wider Rolleston area. It offers opportunities for unique design elements such as bridges and other crossing points, waterway specific landscaping, meandering movement of the waterway itself, ponding areas, etc

- Ecological values

Water races provide habitat for local flora and fauna. Their ecological value can be further enhanced by transitioning them into naturalised waterways with native planting along the waterway margins.

- Technical and practical matters

Water races within a in a road reserve can pose complications for services, due to potential conflict with perpendicular underground pipes this can create inefficient infrastructure. Above ground multiple culverts for driveway crossings may be required

- Water flow

Water races are part of rural infrastructure and there is no guaranty that water will flow long term with SDC being able to turn water flows off permanently as rural areas no longer require this service. At the end of a water race flows can also be inconsistent this creates uncertainty, and the waterway could become a dry ditch or turn into a weed bed. Certainty of consistent good water flow is essential if a water race is to be integrated into a residential development.

- Health and safety

Water races can carry swift flowing water and vary in depth. To young children they can present a risk of drowning and may require fencing.

- Connectivity

Several bridges or culverts will be needed for pedestrian and cyclist to ensure a good level of connectivity is achieved, otherwise the water race can become a disconnecting element.

- Maintenance /cost

Although retention of water races is often encouraged by local authorities ongoing maintenance and related costs can become an issue long term for council asset management.

There are uncertainties around several of the above matters, in particular around long term water flow, the full ecological values of this particular stretch of the water race , and the lack of detailed design for infrastructure within the plan change area; therefore, at this point the retention of the stock water race has not been included in the proposed ODP.

Discussion between the applicant, SDC, relevant technical experts and MKT should continue to develop the most appropriate solution, which could include:

a. creation of a naturalised waterway within a green corridor

b. retaining part of the water race and terminating it within the plan change area in the form of a landscaped pond within a local reserve.

c. removing the water race but retaining parts of the structure integrated in a local reserve as a historic reference

d. complete removal and infill of the water race

Water and wastewater

12. *Please confirm what consented water consents could be transferred to Council to service this proposed plan change.*

    Notes:

    iv. Rolleston is expected to see significant growth over the next 30 years and, to meet this growth, capacity upgrades are proposed. Recently Council developed the 2021 – 31 Long Term Plan which included budget for further development funded capacity upgrades on the Rolleston water supply. As the township grows the consented allocation will be put under pressure. To ensure that growth is appropriately integrated with the provision of infrastructure, and planned growth is able to be serviced, priority of water allocation needs to be given to those developments within the Rolleston Structure Plan area. If development is to occur outside of the Rolleston Structure Plan area then provision of consented water allocation should be provided by the applicant.

    v. Council is currently completing an updated wastewater master planning for the Southern Rolleston area. Although this master plan doesn't include this proposed plan change area, it will provide some guidance to future servicing options. Please contact the Asset Manager Water Services for further information.

Response:

There are 3 existing water take consents for the PC82 land which can supply approx. 110% of demand for the estimated 1320 lots.

13. *Please advise if there development staging is proposed and if so how will this proceed?*

Response:

No staging is proposed, other than restrictions relating to the roading upgrades and to mitigate odour effects as outlined under 6) above.

Transport

14. *Please confirm how the plan change will ensure development aligns with the intersection upgrades identified in Section 8.3.2 of the ITA. Further, please confirm how the plan change can respond in the instance that the timing of these upgrades is not brought forward.*

Response:

Stantec's response (**Appendix D**) states:

The proposed ODP includes an upgrade of the Dunns Crossing Road / Lowes Road intersection and changes to the Dunns Crossing Road / Brookside Road intersection. The Plan Change will directly contribute to the need for those improvements to facilitate safe and efficient access, particularly as the wider site is developed. The SH1 / Dunns Crossing Road intersection is a critical access improvement in relation to safety and efficiency for the southwest part of Rolleston, on which the Plan Change will rely.

As set out at Page 2 of the Application documents a subdivision rule 12.1.3.50(a) is proposed that requires the following intersection and road network changes be completed prior to any house occupation:

i. the completion of the upgrade to the SH1 / Dunns Crossing Road intersection; and

ii. upgrade to the Lowes Road / Dunns Crossing Road intersection; and

iii. realignment of the Brookside Road at Dunns Crossing Road.

The funding of SH1 / Dunns Crossing Road intersection upgrades has been provisioned as part of the NZ Upgrade Programme Rolleston Access Project.

The Lowes Road / Dunns Crossing Road is an arterial v arterial road intersection planned (included in traffic modelling) even without the PC82 development to support future transport network priorities (as described in the ITA at Section 6.1). Long term funding is indicated beyond the next 10 year period. With the Plan Changes sought in the west of Rolleston contributing to a potential bringing forward of the need, funding would be expected to occur through the Long Term Plan process, with development contributions from growth areas including PC82. A new fourth leg to the intersection will become a development related responsibility, and a private development agreement is expected to be entered into between the developer and Council. If the intersection improvement is not able to be achieved though that process, the ODP and rule provisions would not be complied with and detailed transport assessment would be necessary to support subdivision consent.

The realignment of Brookside Road would be a matter to address through subdivision, as subdivision would be the primary driver for the change. It is expected that would be developer funded through a private developer agreement. If a change to the planned provision for the realignment is necessary, then assessment against subdivision rule assessment matters will be necessary.

For the longer-term upgrades of the Dunns Crossing Road / Burnham School Road and Dunns Crossing Road / Selwyn Road intersections, the improvements have been signalled as necessary by other Plan Changes and included in the Rolleston Transport Model to accommodate general growth. The intersections are arterial route upgrades remote to the PC82 site, and the developer of PC82 land cannot control the delivery or timing of the infrastructure. The most appropriate mechanism will be for the intersections to be incorporated into the Long Term Plan with revised timing as necessary to reflect expected growth. Development contributions can be attributed based on expected contributions of traffic from the new development to the upgrade. As that process sits outside the Plan Change framework, it is not considered appropriate or necessary to tie development timing to the upgrades given the arterial classification of Dunns Crossing Road.

It is considered that other intersections should not be tied to development or development contributions, as they serve other local development access requirements (such as Dunns Crossing Road / PC73 Skellerup Block).

15. *Please confirm how the proposed upgrade for the Goulds Road/Dunns Crossing Road/Selwyn Road intersection will be funded and delivered, noting that it is not funded or programmed in Council's Long Term Plan.*

    Notes:

    vi. Dunns Crossing Road/Selwyn Road upgrade is not programmed or funded by Council.

    vii. Dunns Crossing Road/Lowes Road upgrade is programmed by Council for 2035/36.

    viii. Dunns Crossing Road/Burnham School Road upgrade is programmed by Council for 2035/36, and proposed by PC73 prior to any development.

    ix. Dunns Crossing Road/Main South Road upgrade is funded by Waka Kotahi for 2024.

Response:

Stantec's response (**Appendix D**) states:

With the traffic volumes at the southern end of Dunns Crossing Road and on Selwyn Road in this location being only moderate, it is considered that the increase in traffic resulting from PC82 would not notably bring forward the need for an upgrade.

It is understood from the PC81 RFI response by Novo Group that these intersection upgrades will be carried out by way of developer agreements with the PC70 and PC81 area developers the main contributors given their proximity.

16. *Please confirm how development within the plan change will be delayed until the third party intersection upgrades identified in the ITA, and above, are undertaken.*

    Note:

    x. It is noted that the request proposes to change Rule 12.1.3.50(a) to address some, but not all of the above identified intersections. Council considers that, where it is proposed that the occupation of dwellings should be restricted until such time as infrastructure upgrades have been completed, it is appropriate that any rule proposed to be incorporated into the Subdivision Chapter of the Operative District Plan be clearer than that proposed and provide that no completion certificate be issued under section 224 of the Act (other than for a boundary adjustment or creation of an allotment solely for utility purposes), until such time as the identified works has been completed. See Rule 12.1.3.57A for an example.

Response:

Stantec's response (**Appendix D**) states:

The proposed rule would require the SH1 / Dunns Crossing Road, Dunns Crossing Road / Brookside Road and Dunns Crossing Road / Lowes Road intersections to be upgraded / altered before occupation of any houses on the site and this is considered appropriate. Where that is not achieved, subdivision assessment matters will need to be considered which could include the staging of development.

It is considered that the other intersection upgrades along the Dunns Crossing Road route (Burnham School Road and Goulds Road / Selwyn Road) do not need to delay development of the site given they are arterial road intersections and some distance from the site.

17. *Please provide an assessment of the transport effects of this plan change request on Edwards Road, including the intersection with Ellesmere Junction Road. Where relevant, please also refer to Council Standards and Guidelines in regard to carriageway widths and pavement type.*

    Note:

    xi. The ITA notes that there will be a degree of traffic generated by the plan change that will route via the southern portion of Edwards Road, which is not identified in the ODP as requiring an upgrade. Section 9.3 of the ITA recommends that an assessment be undertaken of the southern section of Edwards Road, including the intersection of Edwards Road and Ellesmere Junction Road, prior to the occupation of any dwellings that may gain access to Edwards Road. It is considered that the assessment of the unsealed section of Edwards Road and the intersection with Ellesmere Junction Road should be undertaken as part of the plan change, as delaying this assessment to future subdivision consent stage is unlikely to allow Council to consider the cumulative effect of full buildout within the plan change area. Further, no mechanism is proposed to require the assessment (as proposed in the ITA) prior to occupation of dwellings. As expressed in x. above, Council considers that any limit on the occupation of dwellings due to infrastructure requirements should be included as a rule in the District Plan.

Response:

Stantec's response (**Appendix D**) states:

The ITA included a recommendation that before any houses are occupied on parts of the site with vehicle access to Brookside Road or Edwards Road, the likely use of Edwards Road to the south of the site and the Edwards Road / Ellesmere Junction Road intersection is considered further. It stated that if this route is likely to be an attractive route, it may be necessary to seal the entire length of Edwards Road and to upgrade the Ellesmere Junction Road intersection.

It is expected that Edwards Road will be an attractive route for some traffic to and from the site and therefore it should be sealed along its entire length. The formation of the road, i.e. whether it is sealed to an urban or rural local road standard, would be agreed with SDC at the appropriate subdivision stage. It is considered that this should be determined before any stages with access to Brookside Road or Edwards Road are developed.

At the same time, is it recommended that a minor realignment is carried out at the intersection of Edwards Road and Ellesmere Junction Road. Edwards Road and the adjacent Selwyn Road approach both meet Ellesmere Junction Road at an awkward, combined intersection leg. It would be preferable for these two approaches to meet separate from Ellesmere Junction Road and then meet that road at a 90-degree angle. This may require some land from the corner of the paddock north of the intersection but is owned by a third party so cannot reasonably be a requirement for inclusion at the Plan Change stage. A suitable mechanism could be requirement for assessment of the safety and efficiency of the intersection as part of subdivision.

Note: the revised ODP narrative includes suitable wording under 'Access and Transport' as below

"The possible need for improvements at the Edwards Road/Ellesmere Junction Road intersection to ensure its safety and efficiency shall be considered at the time of any subdivision which includes property access onto Edwards Road."

18. *Please confirm if PC80 and PC81 are represented in the Rolleston Paramics model used to support this plan change request (PC82) ITA. If they are not, please provide an updated modelling assessment which includes these plan changes. Further, please provide the Paramics model files for review.*

Response:

Stantec's response (**Appendix D**) states:

As set out in the ITA, PC80 and PC81 were not Plan Changes included in the modelling. An additional modelled scenario with all Plan Changes including PC80 and 81 (adopting the same model inputs as included in those assessments) has been carried out. The road network around the site was updated in this scenario to better reflect what is proposed through the Plan Change. The main change was that Brookside Road south-west of Dunns Crossing Road was realigned into the Dunns Crossing Road / Lowes Road roundabout. The roundabout has been modelled as a four-legged roundabout with two through lanes on Dunns Crossing Road and with a left turn lane on the western approach.

The following tables summarise forecast intersection performance and detailed outputs are attached to this document.

- Table 1: The ITA reported performance without PC80, PC81, or PC82
- Table 2: The ITA reported performance with PC82, but does not include PC80 or PC81. It then also includes the incremental change of adding PC80 and PC81 as a new modelled scenario.

Discussion is provided on each intersection below the tables.

Intersection	Base Model (No PC80/81/82)	
	AM Peak	PM Peak
Dunns Crossing / Selwyn Roundabout	4s, LOS A	4s, LOS A
Dunns Crossing / PC73 Northern Road Priority Crossroad	28s, LOS D	20s, LOS C
Dunns Crossing / Boulez Priority Crossroad		
Dunns Crossing / Lowes Roundabout (3-Legged)	11s, LOS B	11s, LOS B
Dunns Crossing / Brookside Priority Crossroad	29s, LOS D	38s, LOS E
Dunns Crossing / Burnham School Signals	15s, LOS B	10s, LOS A
Dunns Crossing / SH1 Roundabout	20s, LOS B	9s, LOS A
Lowes / Tennyson Signals	22s, LOS C	32s, LOS C

Table 1: Base model intersection performance without PC80, PC81, or PC82 (from ITA)

Intersection	With Plan Change (ITA (No PC 80 or 81))		With PC80+81+82 (Additional Model Scenario)	
	AM Peak	PM Peak	AM Peak	PM Peak
Dunns Crossing / Selwyn Roundabout	4s, LOS A	4s, LOS A	4s, LOS A	4s, LOS A
Dunns Crossing / PC73 Northern Road Priority Crossroad	21s, LOS C	19s, LOS C	20s, LOS C	23s, LOS C
Dunns Crossing / Boulez Priority Crossroad	15s, LOS B	12s, LOS B	14s, LOS B	12s, LOS B
Dunns Crossing / Lowes Roundabout (4-legged)	41s, LOS D	15s, LOS B	21s, LOS C	9s, LOS A
Dunns Crossing / Brookside Priority Crossroad	>120s, LOS F	29s, LOS C		
Dunns Crossing / Brookside Priority T-Intersection			30s, LOS D	18s, LOS C
Dunns Crossing / Burnham School Signals	26s, LOS C	10s, LOS A	38s, LOS D	10s, LOS A
Dunns Crossing / Newman Priority			>120s, LOS F	59s, LOS F
Dunns Crossing / SH1 Roundabout	24s, LOS C	9s, LOS A	37s, LOS D	11s, LOS B
Lowes / Tennyson Signals	21s, LOS C	29s, LOS C	31s, LOS C	29s, LOS C
Lowes / Broadlands			>120s, LOS F	59s, LOS F

Table 2: With PC 82 Intersection Performance Scenarios

The Dunns Crossing Road / Selwyn Road roundabout is forecast to operate efficiently in all scenarios given the moderate traffic volumes forecast in that corner of Rolleston.

There is minimal change to the performance of both the PC73 and Boulez Mews priority intersections on Dunns Crossing Road. It should be reiterated that the model includes a crossroad intersection at Boulez Mews but it is proposed that the subdivision road meets Dunns Crossing Road off-set from Boulez Mews which will be a safer and more efficient layout.

Without PC80/PC81 the Dunns Crossing Road / Lowes Road intersection was modelled as a single lane roundabout and without the Brookside Road realignment. With PC80 and PC81 added, the Dunns Crossing Road / Lowes Road roundabout has been modified to include the Brookside Road realignment, dual through lanes on Dunns Crossing Road, a separate left turn lane on the western leg. With these additional changes the intersection is forecast to operate efficiently. There is an acceptable LOS D forecast on the western approach during the morning peak period and on the eastern approach during the evening peak period, with all other approaches having good LOS A, B or C during peak times. The appropriate form of the intersection can be considered further at the subdivision stage and it would be expected that enough land for a dual-lane roundabout is protected through subdivision boundaries. Depending on actual and forecasts development patterns a single lane roundabout may possibly be deemed appropriate initially.

A relatively high volume of traffic is forecast to turn right into Brookside Road from the south during the morning peak period. This is the critical movement for the performance of the intersection with a LOS D. A right turn bay may be appropriate to accommodate this movement and this should be considered during the design of works at the Brookside Road intersection by the site developers. Low delays are forecast for drivers turning out of Brookside Road during both peak periods. It should be reiterated that the recommended removal of the south-western leg of the intersection is a good outcome for the safety and efficiency of the intersection.

The performance of the Dunns Crossing Road / SH1 roundabout deteriorates in the morning peak in particular, with LOS F forecast on the southern approach. The addition of the Plan Change area on the northern side of SH1 results in an increased right turn from SH1 into Walkers Road which opposes the high volume of traffic exiting Dunns Crossing Road. A reduction of approximately 100vph can be seen on the southern approach compared to the analysis presented in the ITA without PC80 and PC81. This will be from traffic re-routing and is likely contributing to the increased right turn demand into Brookside Road reported earlier. The SH1 approaches are both forecast to operate efficiently with LOS A/B. During the evening peak, the roundabout is forecast to operate efficiently on all approaches. It is considered that the SH1 roundabout is a major piece of infrastructure which needs to be designed with enough capacity to accommodate reasonably foreseeable development in Rolleston which is a high growth area.

The performance of the southern approach to the SH1 roundabout in the morning peak is forecast to affect the performance of the Dunns Crossing Road / Burnham School Road intersection. The northbound through traffic on Dunns Crossing Road is forecast to experience LOS D and this deterioration appears to be due to queuing extending back from the SH1 roundabout as there is no increase in the total traffic volume using the signalised intersection (compared to the earlier modelled scenario). The queuing on Dunns Crossing Road would not need to extend all the way back to the Burnham School Road intersection to have an effect on model outputs as the 'vehicle paths' used for measuring performance in the model extend beyond intersections to the next node along the road. In other words, the reported delay for the northbound through movements on Dunns Crossing Road is likely worse than that which would actually be experienced specifically at the intersection.

19. *Please provide the SIDRA model files for the State Highway 1/Dunns Crossing Road/Walkers Road intersection that have been used for the assessment included in the ITA. Further, please confirm that the SIDRA model includes traffic generated by PC80 and PC81.*

Response:

Stantec's response (**Appendix D**) states:

The SH1 roundabout has not been modelled in Sidra for this assessment. The Paramics outputs reported in the ITA indicate that the new roundabout will operate efficiently. The additional tests with PC80 and PC81 are reported above and the Paramics model files are supplied.

20. *Please provide an assessment of the Dunns Crossing Road/Brookside Road (east) intersection, including any interaction (e.g. queuing effects) between this intersection and the proposed Dunns Crossing Road/Lowes Road roundabout. Please also consider and clarify how existing property access on the northern side would be provided. It is noted in the Urban Design Statement that the termination of part of Brookside Road would allow the existing small enclave to the north to be directly connected to the residential development within the plan change area. As the proposed realignment will have a direct impact on land owners in the vicinity, it is not considered appropriate that this be considered at subdivision stage, as suggested in Section 8.3.2 of the ITA, where opportunity for engagement by and with these property owners is not provided for.*

Response:

Stantec's response (**Appendix D**) states:

The northern Dunns Crossing Road approach to Lowes Road roundabout is forecast to operate well, with LOS A in both the AM and PM peak in the latest modelled scenario. There will be approximately 100m between the two intersections in question and therefore the queue north of the Lowes Road roundabout would not be expected to interact with the Brookside Road intersection. The design of the Brookside Road T-intersection should consider whether a right turn bay would be warranted at the intersection to minimise impacts on through traffic.

It will be best for the safety and efficiency of the Dunns Crossing Road / Brookside Road intersection if the south-western leg is severed at the intersection, as indicated below. Some form of vertical obstruction to stop the 'see-through' effect would likely be warranted opposite the intersection. The existing section of road to the south-west which serves 5-6 properties could be stopped at the last driveway, possibly with a turning head as indicated below. The design of this would be considered further at the subdivision stage. It is considered that where and how exactly the cul-de-sac joins the realigned Brookside Road could also be consider at the subdivision stage. The affected residents could be informed that their properties will be served by a low volume local road and they will have safe and convenient access to Dunns Crossing Road via a new roundabout at the Lowes Road intersection.

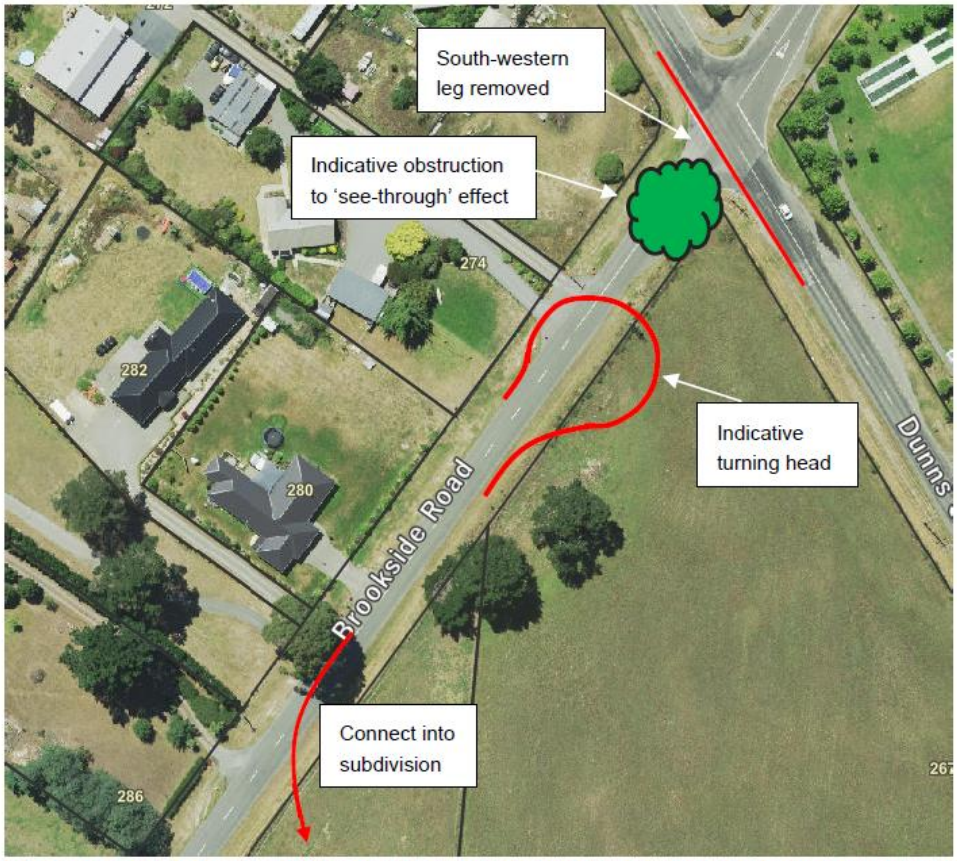

Figure 1: Indicative Sketch of Turning Head and Closure of Brookside Road west at Dunns Crossing Road

21. *Please comment on how this plan change request may affect the future performance of Dunns Crossing Road/Newmans Road and Lowes Road/Broadlands Drive.*

Note:
xii. Based on the reviewers awareness of other plan change requests within the area, it is understood that there are potential performance issues indicated in the Rolleston Paramics model that are not reported on within the ITA accompanying this request.

Response:

Stantec's response (**Appendix D**) states:

Newman Road and Granite Drive are two priority-controlled T-intersections on Dunns Crossing Road between SH1 and Burnham School Road. PC82 will contribute traffic volume increases to Dunns Crossing Road, possibly in the order of 200vph. Other developments in the south and west of Rolleston will also add to traffic volumes on this road as will the SH1 intersection upgrade which will release supressed demand. Given the arterial road status of Dunns Crossing Road, which means its primary function is to carry traffic, and the distance to the Newman Road and Granite Drive intersections from the site, these local road intersections were not included in the ITA traffic modelling assessment.

As reported in the earlier table, the Newman Road intersection was included in the newly modelled scenario. The queuing back from the SH1 roundabout during the morning peak is forecast to extend through the Newman Road intersection, causing delays for northbound traffic and affecting the ability of traffic to turn out of Newman Road. As Dunns Crossing Road becomes busier, levels of service will deteriorate at these local road intersections and that will be up to the road controlling authority to respond to over time. There are alternative access routes from those roads to other classified roads if turning restrictions are put in place.

Lowes Road / Broadlands Drive is an intersection of two classified roads approximately 2km from the site and it is therefore not considered overly relevant to this assessment. The Lowes Road / Tennyson Street intersection was included in the analysis reported in the ITA to show that PC82 will not have a noticeable effect that far into Rolleston. The performance of the Lowes Road / Broadlands Road intersection was included in the outputs for the latest modelled scenario presented earlier. It shows that the intersection will be performing poorly, particularly during the morning peak period, in the future as Rolleston continues to develop and it will likely need to be upgraded.

22. *To assist Council to ensure that the transport network indicated in the plan change request aligns with adjacent future developments being proposed via other plan change requests, please provide an overlay of the OPDs for PC70, PC73 (as modified during the hearing) and this plan change. Please comment on the degree to which the transport network proposed by this plan change request aligns with adjacent future development.*

Response:

Stantec's response (**Appendix D**) states:

The below image shows the three ODPs as requested. The ODP for PC82 has been developed to tie in with the PC73 ODP and it can be seen below that the indicative primary and secondary roads line up between the two sites. The PC82 site does not connect with the PC70 site so the

PC70 ODP is not considered particularly relevant although the overlay does show the CRETS collector road through PC70 lined up with a primary road within PC73.

Figure 2: Overlay of Plan Change ODPs

23. *Please comment on whether a concept design for the Dunns Crossing Road/Lowes Road/Brookside Road intersection has been developed which reflects the assumed form adopted in the SIDRA model, and whether the OPD should identify the need to allow for land protection/vesting to enable this intersection to be formed.*

    Note:

    xiii. It is noted that the existing legal road boundaries at this intersection may mean the intersection needs to be offset from the Dunns Crossing Road centreline.

Response:

Stantec's response (**Appendix D**) states:

A concept roundabout design was not carried out as part of the ITA. The roundabout was modelled as a single lane roundabout in the Sidra modelling reported on in the ITA.

The latest simulation modelling carried out with PC80 and PC81 included indicates that dual through lanes may be required on Dunns Crossing Road at some stage if a good level of service for vehicles is desired representative of the arterial intersection classification. A left turn lane was also included on the western leg.

The following concept sketch shows an indicative roundabout centred to the south-west of Dunns Crossing Road so that it does not impact existing property boundaries owned by third parties. A 20m diameter island has been adopted based on Austroads standards for a dual-lane, arterial road roundabout although that could be reviewed based on the type of heavy vehicles that would use it. Lane configurations would be determined based on detailed assessments at the time if intersection design, and the modelled left turn lane from the west could readily be included as required. The intersection control type would also be subject to road controlling authority investigation noting the roundabout was adopted as the intersection control because it was included in the supplied model, whereas traffic signals could be feasible.

Figure 3: Concept for Lowes Road / Dunns Crossing Road Demonstrating Feasibility

It will be a requirement at the subdivision stage that the proposed boundaries allow for the future intersection form and a refined concept roundabout design will need to be produced at this stage to ensure design requirements such as entry path radii, driver and pedestrian sightlines etc. are achievable. It may be that land requirements for the larger roundabout are protected at the subdivision stage but a smaller roundabout could be constructed initially.

24. *Please explain why cycle facilities are not proposed on Brookside Road and Edwards Road along the site frontage, referring to relevant Selwyn District Council cycle facility standards and guideline.*

Response:

Stantec's response (**Appendix D**) states:

We presume this query is referencing the fact that the internal roads and the Dunns Crossing Road frontage on the ODP are shown with the green 'pedestrian and cycle network' lines whereas the other two frontage roads are not. The intention of this was not to say that there would not be cycle facilities on these frontage roads. We expect that these two frontage roads would be upgraded to an urban standard and whether that includes specific cycle facilities would be a matter for subdivision design. We note that cyclists will be able to connect through the subdivision on local roads and off-road links so cycling volumes on these two frontage roads would be expected to be very low.

25. *There appears to be a conflict in Section 8.2 of the ITA and the ODP in terms of the number and location of roading connections between the area of the plan change and the adjoining roading network. For example, three connections are referenced in the ITA to Edwards Road while only two are shown on the ODP and one connection is mentioned to Brookside Road, while the ODP shows two connections. Please clarify and confirm that the modelling undertaken aligns with the ODP proposed.*

Response:

Stantec's response (**Appendix D**) is:

The traffic modelling was undertaken based on an earlier version of the ODP. As noted, there are minor differences between the local road network adopted in the traffic modelling and that indicated in the ODP. However, it is considered that number of connections to Edwards Road and Brookside Road are not critical to the traffic modelling exercise, with most traffic in the modelling exercise still able to find its way to the main intersections that have been assessed.

As described in the ITA, Brookside Road was not realigned in the simulation model and hence the additional modelling of the Lowes Road roundabout by way of Sidra was carried out. The revised modelling scenario that includes PC80 and PC81 has included the Brookside Road realignment.

26. *Please clarify if direct vehicle access is to be provided for along Dunns Crossing Road. The ODP identifies road frontage upgrades along this road, however Section 9.1.2, paragraph 2, of the ITA, states direct access "could also be provided along the [western] site frontage, however this would need to be considered further at the subdivision stage".*

Response:

Stantec's response (**Appendix D**) is:

We would expect the Dunns Crossing Road frontage to be upgraded to an SDC arterial road standard regardless of whether direct property access is provided. Our view is that direct property access could be provided as has been done on the other side of the road. A benefit of direct property access is that it provides some level of traffic calming. However, we stopped short of stating that direct property access would be provided as we thought this could be considered further at the subdivision stage in conjunction with SDC.

Urban Design

All urban design matters have been answered by Nicole Lauenstein of a+urban

27. *Currently the plan change area is surrounded on three sides by rural land, although there are proposals for residential plan changes to the south and north. In particular the western parts of the PC82 area are a significant distance from the nearest existing residential housing on Dunns Crossing Road. To what extent does the proposed plan change rely on adjacent plan changes to provide a coherent outcome, and what staging or sequencing is necessary to prevent perverse outcomes?*

Response:

There are several plan changes proposing to extend urban development across Dunns Crossing Road. Neither of these is reliant or dependent on the other with regard to connectivity, amenity, access to essential services or access to open space, commercial, community, and education facilities. The fact that these Plan Changes are running to some extent concurrent is beneficial and fill assist in creating a cohesive urban environment west of Dunns Crossing Road with good interconnectivity.

Sequencing stages of development is a standard process and considering the size of the PC area this will apply to PC 82 and ensure coherence within the ODP area as well as coherence across adjacent plan change areas.

The distance between Dunns Crossing Road and Edwards Road is approx. 1.2km or a 6 min walk. To ensure good connectivity to these areas the ODP offers several east-west connections as well as a diagonal route towards Brookside Park. The southwestern corner of PC 82 would logically be developed last with these connections in place to facilitate ease of movement through. To further improve connectivity, implementation of this area could be sequenced so concur with the implementation of the northern part of PC 73 (Skellerup).

28. *While realigning Brookside Road with Lowes Road may make sense in terms of vehicle traffic and effects on intersections, the diagonal alignment of Brookside Road currently provides the shortest and most direct route (or routes) into the town centre which is particularly important for pedestrians and cyclists. It is also arguably one of three diagonal roads in a rectangular township that provide legibility and a sense of place in a flat landscape. Please provide some further analysis of the necessity for this change and how the positive characteristics of Brookside Road might be retained.*

Response:

The re-alignment of Brookside Road is a direct consequence of the traffic design and management, intersection spacing and other technical matters related to managing of vehicular movement.

The road hierarchy elevates Lowes Road over Brookside Road for vehicular movement this allow Brookside road to become a slower less used vehicular route ideal for cycling and walking and it is the most direct route into the town centre.

The redundant part of Brookside Road will be retained as a short local road with a new access point from the new realignment and a cull de sac or 'dead end' for vehicle where it reaches Dunns Crossing Road. Pedestrian and cyclists however will be able to move along the 'old' road alignment retaining the role of Brookside Road as a direct route to the small commercial node, Brookside Park and further along to the towncentre. The 'old Brookside Road' portion will also be retained to service existing dwellings north of the ODP area where required.

29. *The existing poultry farm operations and buildings do not appear to have been considered as part of the receiving environment. To what extent do these affect the analysis of the receiving environment and consequently the changes to landscape character and the visual impact?*

Response:

The poultry farm and associated buildings are part of the PC 82 area and will be removed to make way for the urban development on the site, as such they will no longer constitute part of the receiving environment. Their removal will also eliminate the associated odour constraints which affect PC73.

The visual assessment has taken this change into consideration. Currently the poultry sheds are completely hidden behind large shelterbelts on Dunns Crossing Road and can only be seen through small gaps in the vegetation. However, from Brookside Park and Brookside Road they are clearly visible in the background.

30. *Please provide before and after photo simulations of typical Living Z development with any proposed boundary treatments from viewpoints 5 and 6b.*

Response:

Information regarding proposed boundary treatment along Dunns Crossing Road and Brookside Road can be provided in a simpler format either as schematic cross sections or through description in the ODP narrative and do not require photographic simulations. The production of accurate photo simulations of typical Living Z development with any proposed boundary treatments from these viewpoints requires a high level of resolution of architectural and landscape details. A level of detailed information that is normally not available at a Plan Change phase of a development proposal.

31. *Are any blue networks proposed and how will stormwater off the streets be treated?*

Response:

To ensure consistency between PC 73, 81 and 82, the below response has been taken from the RFI response for PC81:

A Blue network is detailed in the ODP text under the heading Servicing. In respect of stormwater treatment for roads, runoff from hardstand areas and roads will be collected and treated before discharging into ground via soak pits or infiltration trenches. In general, the first flush stormwater runoff will be generally treated through a swale or infiltration basin or proprietary stormwater treatment devices. Stormwater runoff from large rainfall events which exceed the first flush capacity can be discharged directly to ground using rapid

infiltration trenches or soak pits. The detailed design of stormwater management will be determined by the developer in collaboration with Council at the subdivision stage and in accordance with Environment Canterbury requirements.

The above management of stormwater will be located within road reserves, dedicated utility reserves and some conveyance and detention storage may also be integrated along the edge of open space areas to create buffers to private properties.

All of these measure will add amenity value to the development with regard to visual amenity, opportunities for landscaping and assist in the sustainable management of the hydrology of the site.

32. Are any urban ecological or low impact design initiatives proposed?

Response:

In addition to the possible stormwater management areas, the following urban ecological or low impact design initiatives are being considered:

• Low impact urban raingardens on private properties in comprehensive medium density areas to pre-treat roof water and surface water from hard stand areas.

• Locally sourced indigenous planting will be implemented at subdivision stage, and encouraged on private property.

- Naturalisation of the water race, if this is found to feasible, can also be considered an urban ecological initiative.

33. Expert evidence on landscape character and visual impact is generally provided by landscape architects or landscape planners in New Zealand, although on occasion other professionals may be involved as part of a team approach. Please provide evidence of the expert qualifications and knowledge of the author with regard to landscape character and visual impact assessments. Alternatively, a peer review by a qualified and experienced landscape architect may be appropriate.

Response:

David Compton-Moen has provided a peer review, attached as Appendix **B**. Mr Compton-Moen is a registered landscape architect and familiar with Rolleston through his work on other Plan Changes in the area.

Urban Design Statement

34. Figure c on page 5 does not accurately reflect the full extent of the designations associated with the Pines Wastewater Treatment Plant. Designation D416 extends south of the area shown down to Brookside Road, as per the figure below. Please acknowledge the full extent of the various designations associated with both the Pines Wastewater Treatment Plan and Resource Recovery Park and advise if the proximity of the designations, being some 180m from the edge of the plan change area has an impact on the site of the plan change request.

Response:

Figure C on page 5 is a graphic error and will be corrected to include the area D416 all the way to Brookside Road.

The urban design assessment, visual assessment and design concept and ODP where prepared with the full knowledge of the extend of the designations as per Fig 1 below.

The correction to the Fig c therefore does not affect the assessment of the impact of the designations on PC82.

The proximity of the designations, approx. 180m from the edge of the plan change area has no discernible impact on the site of the plan change request.

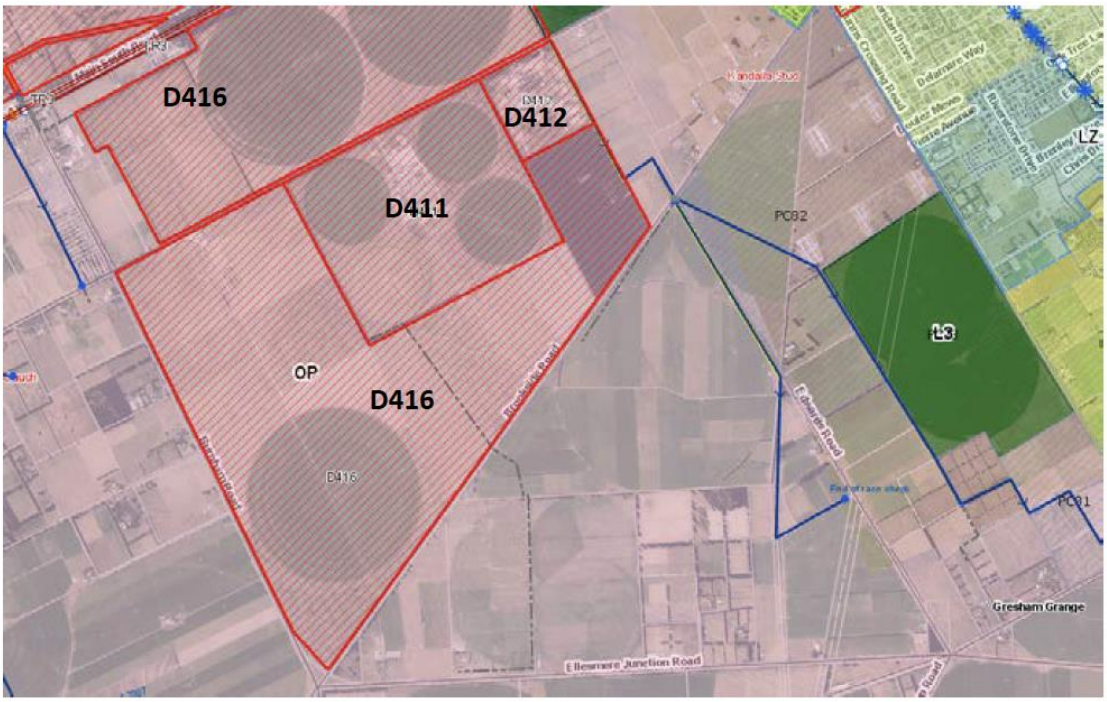

Figure 1 Extent of Selwyn District Council Designations (outlined and hatched in red)

35. *The figure on page 13 appears to indicate that the scale of the Business 1 zones proposed within the plan change area are of a lessor scale than the Business 1 zones proposed by and within PC73. Similarly, the following commentary, from page 12, expresses that "the commercial activities proposed by PC 73 would provide alternative local commercial centres in closer proximity [to the town centre]. The Holmes block commercial area would be located 700m from the northern corner of the Site and the Skellerup Block local commercial area would be approx. 800m away from the south-west corner of the Site. Both areas would be within a 10min walking distance." This commentary appears to consider that the commercial areas proposed within PC73 would be such that they could be at a greater scale than that proposed within this plan change area. However, PC73 seeks to provide the same zoning as proposed by this request, namely Business 1 (Local Centre). Please clarify the nature and scale of the Business 1 zone proposed by this request and amend as appropriate.*

Response

The Business 1 Zone will be a local centre defined in the District Plan as "a small grouping of convenience stores (in the order of 1-5 stores) servicing residents' day-to-day retailing requirements and predominantly draws people from a localised area."

The urban design statement mentions the other two local commercial areas to show how the proposed local centres integrate into the distribution of commercial centres in the western part of Rolleston

36. *On page 18, under the heading Rules to Consider under the Operative District Plan, it is observed that the existing fencing rules within the District Plan create "anomalies for corner sites", creating "visually awkward results". A possible solution is proposed, however this is not reflected in the amendments proposed to the District Plan as part of this request. Please clarify if an amendment is sought to the existing fencing provisions within the District Plan and provide any amendment for consideration.*

Response:

No amendment is proposed to the District Plan as part of this request. However, it is understood that the matter has been raised in a submission to the Proposed Selwyn District Plan Review (Four Star Developments and Gould Developments Ltd submission 456) and can be addressed there. It is not appropriate or necessary to include rule changes as part of PC82 which have District wide application.

Character and Visual Assessment

37. *In Section 3.2, under the heading of Vegetation, reference is made to vegetation types in the surrounding rural residential blocks to the south "on Nobeline Drive". Nobeline Drive is located on the eastern side of the Rolleston township, quite some distance from the site of this plan change request. Please review the assessment under this heading and confirm that it relates to the plan change area and amend as appropriate.*

Response:

This is an error by the author. The assessment has been reviewed and it should state:

'Vegetation types in the rural residential block to the north across Brookside Road are mainly exotic species, with small amounts of native species located near dwellings in private gardens.'

38. *On page 101, the commentary suggest that direct access may not be provided from the west i.e. at the Brookside/Edwards Road intersection, and that rural, open style fencing, combined with landscape planting will act as property demarcation towards the road/rural neighbour to the west. The ODP shows that the road frontages in this location will be upgraded. While the two approaches may not be mutually exclusive, please clarify the response to the road frontage treatments proposed in this location. If fencing and landscaping is proposed, please consider if it is necessary to identify this within either the ODP (either on the plan or accompanying text) or as a specific provision within the District Plan. Please also address the appropriateness of any treatment proposed in light of the*

commentary within the request that the growth of the township to the west is "a logical next step in the sequence of development within the urban growth pattern of Rolleston…".

Response:

Edwards Road will have a mix of access scenarios. Most lots will have access directly from Edwards Road some lots with lots in close proximity to the intersection with Brookside will be internally accessed to stay away from the intersection itself. Lots adjacent to future connections to the west will most likely also be accessed internally. This will create a more varied street scene along Edwards Road similar to urban streetscene within the PC site.

A rural interface treatment consisting of fencing and planting requirements is proposed to ensure a coherent appearance and a high amenity is achieved.

Visual screening of the roof scape and residential buildings towards the rural environment will be provided through layers of tree planting within the road reserve combined with strategic planting of shrubs along private property boundaries.

If fencing is required, this is to be an open style, rural fence. Additional privacy for individual properties can be created through vegetation screening on private property.

The intention of this 'rural interface treatment' is not to fully visually screen the proposed development but to provide some intermittent screening in particular of the roof lines through tree canopies.

This particular landscape treatment has been chosen as it is suitable for rural as well as residential environments. This layered landscape treatment will be of a residential scale and feature several breaks for access to private properties and public surveillance of the street. The intention of this landscape treatment is to provide an urban streetscape and urban edge to the development with some rural characteristics reflective of the nature of the surrounding environment and the rural context of the wider district.

This landscape treatment to Edwards Road has been added to the ODP. Detailed landscape plans will be provided as part of the detailed subdivision design.

39. *Further on page 10, under the heading of North, the commentary proposes that the Brookside Road reserve corridor provides sufficient separation to address any potential reverse sensitivities between the existing rural and proposed residential activities by including generous shrub and street tree planting within the road reserve to partially screen dwellings and break up continuous roof scapes. Please clarify the appropriateness of this in light of comments on page 12 and the figure on page 13 of the Urban Design Statement which suggest that the area to the north, between the PC73 Holmes Block and the plan change area could be a residential infill area in the future. If planting is considered to be required in this area to address any potential reverse sensitivities between the existing rural and proposed residential activities, please clarify if it is necessary to identify this within either the ODP (either on the plan or accompanying text) or as a specific provision within the District Plan.*

Response:

The landscape treatment to Brookside Road follows a similar approach to that of Edwards Road using primarily street tree planting to create layered screening of roof scapes. However, there will be additional landscaping associated with the new road realignment as larger areas within the road become available for planting.

Fencing if required will be limited to open style rural fencing to retain a sense of openness and create a cohesive appearance. Additional planting will most likely establish over time on private properties to provide privacy to north facing outdoor areas of future dwellings and will be controlled through covenants.

Due to the likelihood of larger parts of the land to the north across Brookside Road transitioning into a residential area in the short to medium term this landscape treatment to Brookside Road is to provide an urban streetscape. The intention is to avoid creating a visual edge to the development that turns its back to the road and encourage cohesion and connectivity to occur across the road whilst still providing appropriate visual 'softening' of the built form of the development in particular the roof lines of the new dwellings.

This landscape treatment to Brookside Road has been added to the ODP. Detailed landscape plans will be provided as part of the detailed subdivision design.

40. *On page 15, under the heading Rural neighbours, is it the small rural lifestyle properties to the north across Brookside Road, rather than Dunns Crossing Road, that are being referred to?*

Response:

That is correct - the small lifestyle properties are located on Brookside Road.

41. *In Section 5 Mitigation Measures, although it is identified that the mitigation measures are either covered in the ODP or are already part of subdivision design standards and district planning rules and therefore no specifically tailored mitigation measure are required in relation to the plan change request, it is considered that the following three mitigation matters need to be considered further.*

Response:

An assessment of the suitability of existing trees will be undertaken as part of the detailed subdivision design.

Shelterbelts are generally not suitable for retention and individual specimen trees need to be of good health and should be located within either Open Space areas or road reserves to ensure successful integration.

42. *MM3 seeks that, where practicable, existing individual mature specimen trees may be retained and integrated into the future residential development in suitable locations such as open green spaces, green links or within the road reserve where they can be included without conflict with services and that any decision on any retention of trees should be undertaken at detailed design stage and assessed as part of the subdivision design. Section 3.1 identifies that there are several standalone Eucalyptus trees, 5m to over 15m in height,*

within the plan change area. This would make them significant trees in the context of Rolleston, in terms of height. Paragraph 1972 on page 56 of the application also states that "the plan change seeks to include landscaping within the reserves, and in road corridors, using the existing policy framework (Policy B3.4.33, B4.1.11, B4.2.4, B4.1.13 and Objective B4.2.3)". A number of these policies reference the retention trees on the site as part of new development. Please identify the location of these trees within the plan change area and provide an arborists assessment of the health and suitability of retention of these trees, and any other existing mature trees.

Response:

An assessment of the suitability of existing trees will be undertaken as part of the detailed subdivision design.

Shelterbelts are generally not suitable for retention and individual specimen trees need to be of good health and should be located within either Open Space areas or road reserves to ensure successful integration.

43. *MM7 (rural fencing and planting at rural interface) and MM8 (road boundary treatment to all boundary roads) suggest measures to mitigate any potential effects on the landscape character, landscape values and/or visual amenity. Please clarify if it is necessary to identify these mitigation measures within either the ODP (either on the plan or accompanying text) or as a specific provision within the District Plan.*

Response:

These mitigation measures have been covered in points 38 and 39 and have been identified on the ODP. A consent notice at subdivision stage can also be added if required.

Geotechnical Assessment

Mason Reed from Fraser Thomas has responded to all geotechnical questions as below..

44. *Please comment on the reason why only about 40% of the plan change area (on two of the five titles) has had any site testing made on it. Please advise if, and why, this is considered adequate for the overall area, or please supply additional test information on the remaining areas.*

Response:

As intimated by the peer reviewer, given the nature of the geology of the site, (i.e dense gravels at shallow depths and a deep groundwater table), the site has "a general lack of any issue of geotechnical concern". We concur with the peer reviewer, and although site specific testing would normally be undertaken across the whole site, given the nature of the site geology and the subsoil information provided by existing water bores (which provides good coverage across the whole area of the site), it is likely, in our opinion, that the entire site is underlain by dense gravels, at shallow depths, and that the groundwater table is located at depths in excess of 10 m below the existing ground surface. Based on the foregoing, it is our opinion that the level and nature of the geotechnical investigation provided in the Fraser Thomas Geotechnical Investigation Report, dated 14 October 2021, is suitable for its intended

purpose- which is to provide an assessment of the likely suitability of the subject site, from a geotechnical perspective, for plan change submission purposes.

It should be noted that the level of investigation undertaken by Fraser Thomas, across the entire site, it not considered to be suitable for subdivision application purposes, and that it is anticipated that further geotechnical investigation and appraisal works will be undertaken for the site, in support of any application for subdivision consent, should the plan change be granted. It is anticipated that this further investigation will provide more detailed subsoil information, particularly in the parts of the site with less 'site-specific' subsoil information.

45. Please provide a RMA s106 hazard assessment.

Response:

Conclusions as the suitability of the site, from a geotechnical perspective, (for plan change purposes) are provided in the Fraser Thomas Ltd Geotechnical Investigation Report, dated 14 October 2021. The October 2021 report states:

"In general terms and within the limits of the investigation as outlined and reported herein, no unusual problems, from a geotechnical perspective, are anticipated with residential development at the subject site.

The site is, in general, considered suitable for its intended use, with satisfactory conditions for future residential building development, subject to the recommendations and qualifications reported herein, and provided the design and inspection of foundations are carried out as would be done under normal circumstances in accordance with the requirements of the relevant New Zealand Standard Codes of Practice."

Further to the foregoing, and in order to satisfy the requirements of the Council peer reviewer, with respect to Section 106 of the RMA, it is our opinion that the site can be developed such that the land or any structures on that land would not be subject to material damage by way of erosion, falling debris, subsidence, slippage or inundation from any source, provided the design and inspection of foundations are carried out as would be done under normal circumstances in accordance with the requirements of the relevant New Zealand Standard Codes of Practice, and in accordance with any engineering reports relating to the site .

46. Please advise whether further testing is required at subdivision consent and building consent stages.

Notes:

xiv. The MBIE Guidance for plan change investigations for subdivisions suggests 0.2 – 0.5 deep test per hectare. For 110 hectare, this suggests 22 to 55 tests. The number of tests is therefore adequate, but the coverage is confined to less than half of the overall site area. While Mr McCahon notes that this general area is known for the uniformity of deep gravel dominated soil profile, a relatively deep depth to ground water and a general lack of any issue of geotechnical concern, he notes that professional judgement on adequate testing varies widely. As such, while his preference would be for at least some testing on the untested parts of the site to verify that the shallow soil profile is present, he notes that other's judgement that the available information is sufficient, if this is justified.

xv. While the report concludes that the site is not susceptible to liquefaction due to the deep groundwater and the soil profile, and that an equivalent Foundation technical category TC1 is appropriate, other RMA section 106 hazards are not considered. Although it is most unlikely that any other RMA section 106 hazards are present to the level that would prevent development, this does need to be addressed.

Response:

It is anticipated that further geotechnical investigation and appraisal works will be undertaken for the site, in support of any application for subdivision consent, should the plan change be granted. It is anticipated that this further investigation will provide more detailed subsoil information, particularly in the parts of the site with less 'site-specific' subsoil information.

It is also anticipated that a Geotechnical Completion Report would also be required to be prepared by a suitably qualified and experienced geotechnical engineer, for the construction of any subdivisional development, which will detail any obvious geotechnical risks or identifiable hazards affecting the subdivision and will provide recommendations to mitigate any obvious hazards or identified risks. The completion report will also provide an opinion as to the suitability of any earthfill placed in the subdivisional development, the suitability of the land for residential building construction, and provide foundation design recommendations for each of the lots.

It is conventional for land developers to also provide 'site-specific' Foundation Investigation Reports for each lot, following completion of the subdivision, which are suitable to be provided in support of an application for building consent, and it is assumed that SDC would require a Foundation Investigation Report, for each lot, in support of an application for building consent.

Preliminary Site Investigation (PSI) Report

47. The PSI report provided with the plan change request was reviewed on behalf of Council by Environment Canterbury. No further information is requested following this review.

Note:

xvi. Should the plan change be approved, a detailed site investigation will be required prior to the commencement of any large scale earthworks or constructing occurring.

Response:

Noted.

Economic Assessments

48. The assessment provided with the application by Insight Economics does not acknowledge the proposed Business 1 zoning included as part of the plan change request, and as such does not proffer any assessment in this regard. The assessment provided with the application by Brown, Copeland & Co Ltd does acknowledge the provision of the two Business 1 zones, which are "intended only to meet the convenience needs of the local residents (and possibly some weekend users of Brookside Park) and will be governed as to scope and scale by the controls for Neighbourhood Shopping Centres contained within the

Selwyn District Plan". However, the controls noted that would limit the scale of that retail activity (being a total floor area limited to 450m2, and individual tenancies limited to 350m2) are those for local centres (refer to Rule 22.11.1 in the Operative District Plan). Please clarify and amend as appropriate.

Response:

The proposed two business zones will be local centres not neighbourhood centres, defined as as "a small grouping of convenience stores (in the order of 1-5 stores) servicing residents' day-to-day retailing requirements and predominantly draws people from a localised area." This is consistent with the description of the purpose of these local centres in the ODP narrative under 'Land Use':-

The small local commercial centres are proposed adjacent to the intersection of Dunns Crossing Road/ Lowes Road, and on the proposed central Primary Road by the neighbourhood park, to provide good accessibility and to meet some of the convenience needs of residents in the immediate area.

49. *Please provide an economic and/or retail assessment of the viability of the proposed Business 1 (local centre) zones, taking into account the local and neighbourhood centres that are either zoned or proposed to be zoned by way of the various plan change requests in the vicinity of the site e.g. PC70, PC73 and this plan change itself. Please identify the likely catchment of each of the proposed centres and provide a rationale for the proposed centres within this request. Although located outside of the boundary of the Rolleston Structure Plan, please identify how the proposed centres align with the Centres Strategy contained within the Structure Plan. Please identify if, given the growth to the west of the township proposed by the various plan changes, the location of the neighbourhood and local centres proposed within the structure plan is still appropriate. Please also consider if a hierarchy of centres should be employed through this proposed west Rolleston growth area.*

Response:

Mike Copeland advises as below.

1. For Plan Change 82 provision is sought for up to a total of 450 m^2, with each individual tenancy no greater than 350 m^2 – see paragraph 5.2 of my report. This is consistent with say 1—5 stores (e.g. a dairy, one or two takeaway stores, a café, a hair salon, etc) and certainly would not provide for even a small supermarket or department store – i.e. the types of anchor tenants that might threaten major centres.

2. However such a centre would provide for the day to day convenience needs of local residents and the negate the need for motorised transport to be used to satisfy such needs.

3. Plan Change 82 provides for an additional 1,320 households – i.e. 1,320 x 2.8 persons per household (see paragraph 6.4 of my report) = 3,696, say 4,000 persons. The applicant believes up to 450 m^2 of convenience shopping is viable for 4,000 persons. Plan Change 73 provides for up to 450 m^2 of convenience shopping space for each of the Holmes block (up to 1,150 households or 3,220 persons) and the Skellerup block (up to 950 households or 2,660

persons). Again the applicant considers that such a level of convenience shopping on each of the blocks will be viable and provide for the day to day convenience needs of local residents.

4. Further to the extent that the Plan Change 82 and 73 developments lead to additional residential development within the District (as opposed to displacing or delaying other development within the District) they will add to the critical mass of the District to support Rolleston and other main shopping centres within the District.

We provide further planning related comments with respect to the Rolleston Structure Plan hierarchy of centres below.

Chapter 6 of the Rolleston Structure Plan (2009) – https://www.selwyn.govt.nz/__data/assets/pdf_file/0005/14369/090923-06-CentreStrategy.pdf

includes a Centres Strategy based on a segmented approach illustrated on the diagram below.

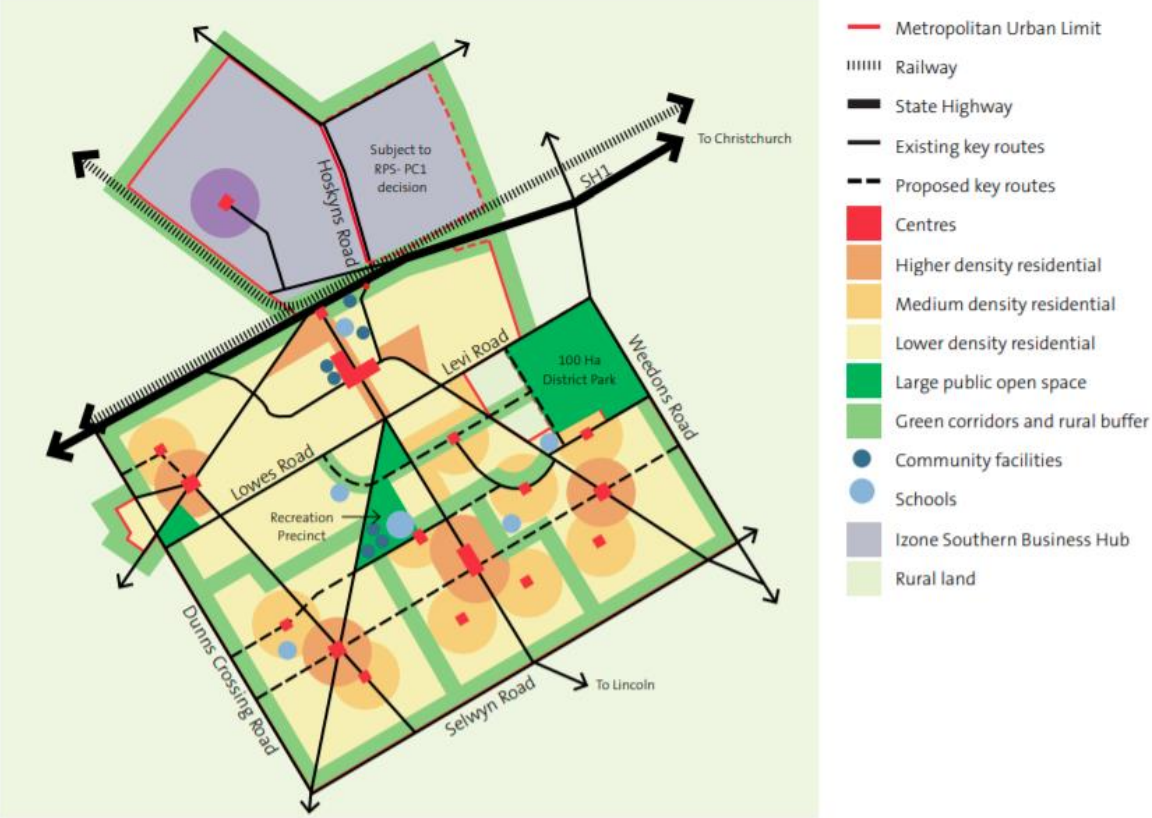

Figure 6.12: Proposed Rolleston Structure Plan Diagram

There is a hierarchy of centres, with the Rolleston town centre being the Key Activity Centre, and below this neighbourhood centres, followed by local centres as illustrated below. The local centres are small scale and provide local convenience needs. Three approximately equidistant neighbourhood centres are shown, located on primary routes, with higher density residential development focussed around each. Local centres support each neighbourhood centre, with some intended overlap in catchments. Medium density residential development is focussed around the local centres.

South Rolleston is being developed by way of existing ODP areas, various private plan changes and two existing Housing Accord Areas (Faringdon and Acland Park) so the centres approach outlined above has not eventuated entirely in the manner outlined in the Rolleston Structure Plan. The Outline Development Plans including local centres are:

PC73 West Rolleston (south of PC82) – see https://www.selwyn.govt.nz/__data/assets/pdf_file/0006/562866/Appendix-1-Proposed-Rules-Package-and-ODPS.pdf (local centre for each of Skellerup and Holmes blocks)

PC70 Faringdon West – see https://www.selwyn.govt.nz/__data/assets/pdf_file/0009/358803/Plan-Change-Request-Hughes-Development-Ltd.pdf Attachment 1 page 4 (neighbourhood centre)

PC 75 south of Branthwaite Drive with frontage to Lincoln Rolleston Road – see https://www.selwyn.govt.nz/__data/assets/pdf_file/0007/570904/Amended-ODP-03112021.pdf (neighbourhood centre)

ODP Area 6 Faringdon – see , https://eplan.selwyn.govt.nz/eplan/#Rules/0/1009/1/7239/0 (neighbourhood centre)

A total of three neighbourhood centres are proposed within the South Rolleston existing ODP and FDA areas, consistent with three proposed under the Rolleston Structure Plan. However, no local centres are proposed (but there are some parts of the FDA area not yet the subject of rezoning proposals).

The Rolleston Structure Plan is now 12 years old and to some extent, out of date. The West Rolleston proposed local centres (west of Dunns Crossing Road) are very small, for local convenience needs only, so do not impact on the Rolleston Structure Plan hierarchy of centres. They are considered appropriate to serve the local convenience needs of the proposed West Rolleston community, reducing the need for private car travel for such purposes.

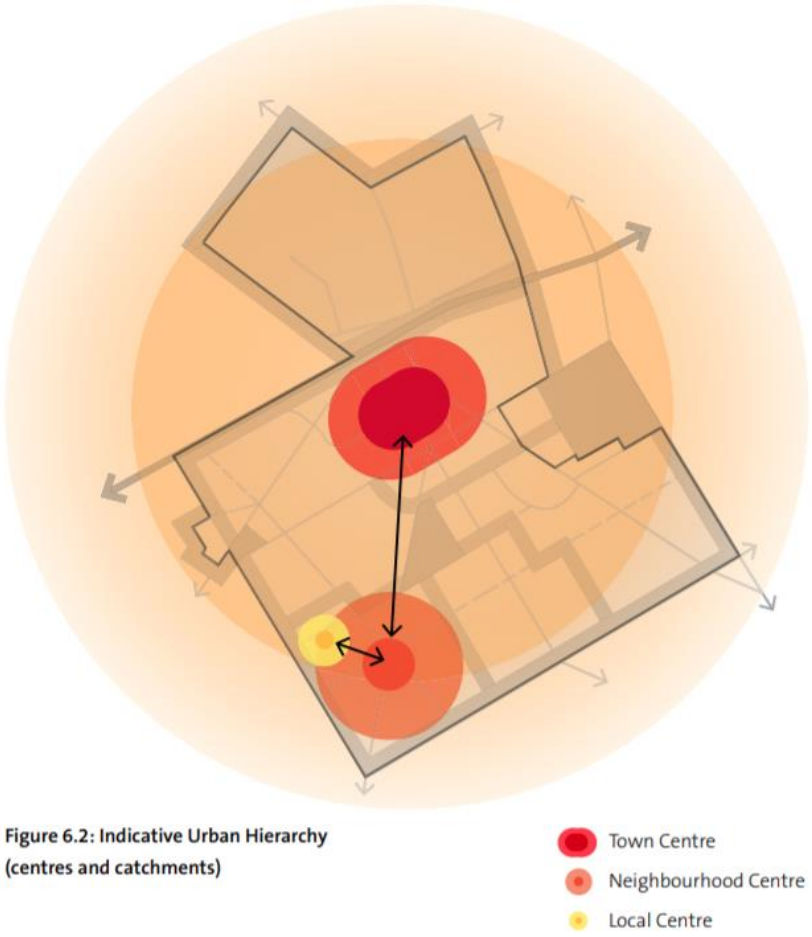

Figure 6.2: Indicative Urban Hierarchy (centres and catchments)

50. *In Section 5.4 of the assessment from Insight Economics, and in paragraph 83 of the application, reference is made to generating employment for "3,065 people years". Please clarify what is meant by this statement.*

Response:

This response has been provided by Insight Economics

People-years is a measure of one-off employment impact, which equals the number of people employed multiplied by the duration of employment. For example, 100 people-years could mean:

- 100 people employed for 1 year,
- 10 people employed for 10 years,
- 20 people employed for 5 years, and so on.

Soils

51. *Please identify the land use classification of the soils within the plan change area. Please also identify the source of the quote included in Section 5.5 Foregone Rural Production in the assessment from Insight Economics.*

Note:

xvii. While the request notes several times that the sites does not contain Land Use Classification 1 – 3 soils, it does not actually identify the land use classification of the soils within the plan change area.

Response:

Soils in the plan change area are Land Use Classification 4 soils[1].

Operative District Plan and Outline Development Plan (ODP)

52. As addressed above, Council considers that, where it is proposed that the occupation of dwellings should be restricted until such time as infrastructure upgrades have been completed, it is appropriate that any rule proposed to be incorporated into the Subdivision Chapter of the Operative District Plan be clearer than that proposed and provide that no completion certificate be issued under section 224 of the Act (other than for a boundary adjustment or creation of an allotment solely for utility purposes), until such time as the identified works has been completed. See Rule 12.1.3.57A for an example. Please provided amended wording to the proposed amendment to Rule 12.1.3.50(a) to reflect this, acknowledging all of the infrastructure upgrades required.

Response:

The following subdivision rule is proposed:-

Subdivision Rule 12.1.3.50(a)

A. No residential allotments may be created and a consent notice or similar mechanism shall be registered on the title of those lots ensuring there are no occupied dwellings with the ODP in Appendix XX prior to:
   (a) The completion of the upgrade to the SH1 / Dunns Crossing Road intersection;
   (b) The completion of the upgrade to the Lowes Road / Dunns Crossing Road intersection; and
   (c) The completion of the realignment of Brookside Road at Dunns Crossing Road;

B. No residential allotments may be created within 1500m of the Pines Wastewater Treatment Plant buildings (as depicted by the line shown on Figure 1 in Appendix XX) prior to: Certification by Council's Asset manager that the resource management approvals required to enable the Pines Wastewater Treatment Plant to provide treatment capacity for 120,000 person equivalents of incoming flow have been obtained; or 31 December 2025, whichever is the sooner.

Matters of discretion used in PC73, slightly changed to apply to PC 82:

12.1.4.76 In relation to the Living Z Zone at Rolleston as shown in Appendix XX (Brookside Residential):

a. Whether the pattern of development and subdivision is consistent with the Outline Development Plan in Appendix XX;
b. Whether the pattern and staging of development:
   i. In relation to the Living Z zone shown in Appendix XX, takes into account the upgrades of the Dunns Crossing Road / Main South Road (SH1) intersection, Lowes Road /

[1] Land Resource Information Systems Portal, NZLRI Land Use Capability, May 2010. Source: https://lris.scinfo.org.nz/layer/48076-nzlri-land-use-capability/

Dunns Crossing Road intersection and the realignment of Brookside Road at Dunns Crossing Road by Council and NZTA, including any land requirements; and

ii. commences adjacent to Dunns Crossing Road to maximise connectivity and the efficient provision of infrastructure.

c. The appropriateness of any mechanism proposed to address specific setback or boundary treatment requirements identified within the Outline Development Plan in Appendix XX.

d. How land within the Odour Constrained Area identified within the Outline Development Plan in Appendix XX is to be managed and integrated into the development, while ensuring activities sensitive to odour are avoided within these areas.

e. For any allotment having land partly or fully within the Odour Constrained Area as shown in Appendix XX, whether a no complaints covenant in favour of the Council is proposed in relation to the operations at the Pines Wastewater Treatment Plant and Resource Recovery Park.

f. The ecological values of the existing water race within the ODP area and the feasibility and desirability of its possible naturalisation and integration as part of the urban environment.

53. *It is also considered that the plan change request will require an amendment to Policy B4.3.77, to identify the specific matters that are identified within the ODP for the area.*

Response:

Policy B4.3.77

Outline Development Plan Area XX (Brookside ODP)

- *ODP Area XX to align with ODP Area 40 – Skellerup Block*
- *Provision of east-west primary road connection from Dunns Crossing Road to Edwards Road*
- *Provision of north-south primary road connection from Brookside Road linking up with ODP Area 40*
- *Provision of a secondary road network internal to the ODP area and also linking to Dunns Crossing Road, Brookside Road and ODP Area 40*
- *Provision of pedestrian and cycle links within and through the ODP to connect to adjoining urban areas*
- *Provision of reticulated water supply and wastewater systems that have sufficient capacity for the ODP area*
- *Provision of a comprehensive stormwater system that has sufficient capacity for the ODP area;*
- *Provision of five local parks and one neighbourhood park*
- *Provision of two local commercial centres, one being in a central location within the ODP area*
- *Provision of Living Z medium density areas around the local commercial centres*
- *Provision of a minimum net density of 12 households per hectare*
- *No sensitive activities to be located within the Odour Constrained Area*
- *No dwellings shall be occupied across the area prior to the completion of the upgrade to the SH1 / Dunns Crossing Road intersection; the upgrade to the Lowes Road/Dunns Crossing intersection; and re-alignment of Brookside Road at Dunns Crossing Road.*

54. *Please clarify how, as expressed in paragraph 203 in the application, the operative "zoning and associated rules (Outer Plains Zone with a minimum lot size for subdivision and a dwelling 20ha)" does not reflect the present intensive shed-based development on Lots 3 and 4 DP 20007. The existing activity would appear to be appropriately reflective of the intent of the operative zoning.*

Response:

Noted. We suggest paragraph 203 be amended to read as follows

203. ~~In summary, the OSDP zoning and associated rules (Outer Plains Zone with a minimum lot size for subdivision and a dwelling 20ha) do not reflect the present intensive shed-based development on the Tegel chicken farm site.~~ There are presently three dwellings on the 46ha **Tegel chicken farm site**. The balance land (64ha) is used for dairy run off and general cropping and grazing, with one further dwelling.

55. *The ODP text states that the area comprises "approximately 109.7737 hectares…" The area stated is precise, rather than approximate. For the purposes of the accompanying text to the ODP, Council is comfortable if the text states that the area comprises "approximately 110 hectares". Please amend the ODP accordingly.*

Response:

The text has been amended accordingly to 'approximately 100 hectares'.

56. *The ODP should also be amended to reflect any matters raised in the points in this request for further information.*

    Note:

    xviii. It is noted that through the Proposed District Plan process, Council is seeking to establish a consistent ODP design with an approach to minimise features on an ODP and utilise assessment considerations in supporting text. While this is a request to change the Operative District Plan, please be aware that alignment of the ODP design may be sought as this request progresses.

Response:

An amended ODP and narrative is attached as **Appendix C.**

Consultation

57. *Please advise if the request has been provided to Mahaanui Kurataiao Limited for their comment and provide a copy of any feedback received.*

Response:

A copy of PC82 has been forward to MKL for their feedback. No feedback has been received to date.

58. *Please provide evidence of any consultation with the land owners affected by this request.*

Response:

The landowners comprising the PC82 site are fully aware of PC82 and are fully supportive of the PC82 application. Neighbouring landowners will be informed of PC82 through the RMA plan change process.

We trust that this satisfies your further information request. Should further clarification or information be required, please don't hesitate to contact the undersigned.

Yours sincerely

FIONA ASTON

Principal Planner

Appendices

Appendix A	Ecology Response to PC 82 RFI
Appendix B	PC 82 Landscape and Visual Assessment Peer Review
Appendix C	Revised ODP and Narrative
Appendix D	Stantec Traffic Response to PC 82 RFI