

BEFORE THE SELWYN DISTRICT COUNCIL

IN THE MATTER of the Local Government Act 2002

AND

IN THE MATTER of a submission by Dryden Trust
on the draft Rural Residential
Strategy 2013

**STATEMENT OF EVIDENCE OF NICOLE LAUENSTEIN
FOR DRYDEN TRUST**

10 APRIL 2014

1. QUALIFICATIONS AND EXPERIENCE

- 1.1 My name is Nicole Lauenstein. I have the qualifications of Dipl. Ing Arch. and Dipl. R.U.Pl. (equivalent to a Master in Architecture and Urban Design) from the University of Kaiserslautern / Germany. I am an elected member of the Urban Design Panel in Christchurch and a member of the Urban Design Forum UDF. Before moving to New Zealand I was a member of the BDA (German Institute of Architects).
- 1.2 I have practised as an urban designer and architect for the past 15 years in Germany, Spain, Australia and New Zealand. The first five years I established my own architectural and urban design practice in Germany, the last 10 years I have been a director of a + urban based in Christchurch.
- 1.3 In both practices I have undertaken many projects combining architectural and urban disciplines. Projects have varied in scale and complexity, and have included urban revitalisation of city centres, development of growth strategies for smaller communities, architectural buildings in the public realm and private residential projects in sensitive environments.
- 1.4 Prior to my arrival in New Zealand I worked for several European architects and urban designers and was involved in a range of urban studies and rural area assessments for the governance of the individual federal states in Germany, investigating urban sprawl of major cities such as Frankfurt, Darmstadt, Rostock and the effect on the urban and rural character. This work included developing mechanisms and criteria to facilitate sustainable development. Other work for private clients consisted of the design of sustainable developments in sensitive areas with very stringent development guidelines.
- 1.5 Since moving to New Zealand I have been involved in architectural and urban design consultancy for several architects and planners, including a large urban study and concept plans for the regeneration of the Walsh Bay area in Sydney with Peddle Thorpe Associates and consultancy to Boffa Miskell Christchurch on urban research and design and development for rural townships.

- 1.6 I have also been Faculty Director of Architecture at the Design and Arts College of New Zealand, taught as a guest lecturer at Christchurch Polytechnic for architecture and urban design and at Lincoln University Landscape Architecture Department teaching urban design at graduate and post graduate level.
- 1.7 I have a good understanding of the local and wider Christchurch area through professional involvement in public and private plan changes and urban design consultancy on projects in Lincoln, Rolleston, Taitapu, Ohoka, Cust, Rangiora and Kaiapoi.
- 1.8 My experience includes working on growth strategies for urban and peri-urban areas including rural and urban residential developments with a mixture of densities from low, medium to high. I have prepared several urban analysis, development strategies and design concepts for urban and rural residential areas within the Canterbury region (Lincoln, Rolleston, Taitapu, Ohoka, Cust, Rangiora, Kaiapoi, Lake Hood, Akaroa, Ashburton).
- 1.9 My most recent urban design and architecture work includes:
 - a. Papa Otakaro Avon River & East/North Frame concept design, Christchurch Central City;
 - b. Kirimoko residential development in Wanaka - Stage 2;
 - c. Urban analysis and strategic plans related to submissions to the Selwyn District Council Rural Residential Strategy (RRS);
 - d. Masterplans for Greenfield development in Lincoln (Flemington);
 - e. Mixed Use development on Hagley Avenue, Christchurch;
 - f. New Tait Building and Masterplan, north west Christchurch;
 - g. Several commercial and residential 'rebuild' projects in Christchurch;
 - h. Master Plans for Inner City block infill and brown field conversions in Christchurch;
 - i. ODPs for rebuild projects in the Christchurch CBD.
- 1.10 Although this is a proceeding under the Local Government Act 2002, I nonetheless confirm that I have prepared this evidence in accordance

with the Code of Conduct for Expert Witnesses (Environment Court Consolidated Practice Note, November 2011). The evidence I will present is within my area of expertise, except where I state that I am relying on information provided by another party. I have not knowingly omitted facts of information that might alter or detract from the opinions I express.

Background

- 1.11 I was engaged by the Dryden Trust a few months ago to investigate the development options for its 36ha site (**the Site**) in the south of Rolleston that provide a strategy for the owner to develop the Site into rural residential properties that can be integrated into a denser medium density residential environment, as anticipated by the Rolleston Structure Plan, in the future.
- 1.12 Due to my involvement in the Rolleston Structure Plan, the subsequent Plan Change 7 and the original Master Plan for the Fosters Block to the west of the Site, I have a clear understanding of aspects which contribute to urban fabric in this area. I have continued to observe the development and growth pattern of Rolleston since the Christchurch earthquake, and through several extended visits to the Site, the wider community and Rolleston township I have gained a good understanding of the current as the future development expectation Rolleston structure plan places on the land.

2. SCOPE OF EVIDENCE

- 2.1 My evidence will address:
 - a. Introduction Rural Residential issues;
 - b. 4ha lots - benefits and issues;
 - c. Peri Urban rural residential;
 - d. Urban growth;
 - e. Urban form;
 - f. Site and location;
 - g. Context;

- h. Neighbouring developments;
- i. Rolleston Structure Plan;
- j. Development potential/options pre-2028;
- k. 'Do nothing' - benefits and issues;
- l. Rural residential development;
- m. Future proofing;
- n. Development strategy/proposal;
- o. Overarching structure;
- p. Future proof plan Medium Density;
- q. Identifying rural residential lots and building areas;
- r. Planning mechanisms; and
- s. Landscape buffers, edge treatment and reverse sensitivity.

3. ANALYSIS, METHODOLOGY AND BEST PRACTICE

3.1 In my analysis I have considered best practice guidelines from the Ministry for the Environment reference document such as:

- a. Urban design protocol;
- b. Urban design toolkit;
- c. Process strategy and action - creating great places to live work and play, liveable urban environments;
- d. A design guide for urban New Zealand - people, places and spaces;

As well as the guiding principles and outcomes of the Draft Rural Residential Strategy (**RRS**) and Land Use Recovery Plan (**LURP**).

3.2 The urban design protocol identifies a combination of design processes and outcomes known as the "7 Cs" - seven essential

design qualities that create quality urban design: context, connectivity, character, choice, creativity, custodianship and collaboration. Although they are not the only contributors that make up the complexity of an urban fabric, they are nationally recognised principles and provide a good general checklist of qualities that need to be considered for quality urban outcomes.

- 3.3 I have also considered the Greater Christchurch Urban Development Strategy which provides important information on the wider context of Rolleston with regard to all aspects of growth management such as transport, housing, open space, rural residential activities, culture and heritage, activity centres and their connection to Christchurch, integrated landuse, stormwater treatment, connectivity of green networks and sustainability in the widest sense.
- 3.4 I have also taken guidance from the references to urban design matters in the LURP and the RRS. In particular the RRS provides clear guiding principles and outcomes for rural residential development and its relationship to existing townships, as well as location criteria (**Appendix 1**), discussion of urban and rural character and values, growth-related issues analysis and a variety of relevant urban design and land development matters.
- 3.5 Finally I have taken guidance from the Rolleston Structure Plan with regard to the accommodation of future growth in Rolleston including future circulation networks, open space strategies, density allocation and distribution, landscape value and urban/rural character.
- 3.6 I have read the Officer's Report and will respond to outstanding matters related to urban design and urban planning at the end of my evidence unless they have been sufficiently addressed in earlier paragraphs. I have also informally (via phone) spoken to Gaby Wolfer, urban designer at the Selwyn District Council, on matters related to the ODP 11 and the CRETS Road incl. linkages to the north but not specifically about this proposal.

4. **INTRODUCTION - RURAL RESIDENTIAL**

- 4.1 The LURP only considers the earthquake recovery period to 2028 to manage rural residential development. The RRS, however, needs to

take a longer-term approach in addressing the peri-urban areas and consider the long-term environment post-2028. Thinking within time frames of 14 years is a very short timeframe in urban and in planning matters and will not suffice to address matters such as urban form and consolidation of urban and rural which establish over longer periods of time.

4.2 The RRS is an important document to manage rural residential development in the Selwyn district. There has been an evolution of documents and there are variety of references and directions in the LURP and Chapter 6 of the RPS to be taken into account but in essence it all comes down to managing rural residential development in particular in peri-urban areas for very clear and good reasons:

- a. Allow a range of choices of housing types;
- b. Avoid inefficient use of land and infrastructure;
- c. Protect future urban expansion options;
- d. Manage potential conflict with rural character and rural activities;
- e. Monitor supply and uptake of rural residential activity;
- f. Consolidate rural residential development and avoid dispersal.

4.3 The RRS has identified several Rural Residential typologies, has correctly chosen the most appropriate typology for peri-urban areas Peri-urban rural residential type and decided on a selected few locations where these should be implemented in the next five years until the next review. This in itself is a first step forward introducing an appropriate type of rural residential development in peri-urban land, but does not really manage the rural residential issues highlighted earlier. It leaves all the remaining peri-urban land unmanaged under the same regime of the 4ha block as before which will continue to cause the issues the RRS is meant to tackle.

- 4.4 If the RRS is to really manage rural residential development it should take the opportunity and responsibility to address all peri-urban land within the area identified within the LURP with the aim to guide rural residential development where suitable, to preserve urban growth paths and constrain urban and rural residential development where this is required.

- 4.5 The officer in paragraph 1.13 sums up the main outcome the strategy aims at achieving:

One of the primary outcomes that SDC is aiming to achieve through the Strategy is to ensure that rural residential areas are able to be integrated with urban forms to achieve servicing efficiencies and community outcomes. Of equal importance is to ensure that rural residential locations do not:

- *undermine future consolidated settlement patterns*
- *derogate the function, form and character of townships*
- *hinder future residential growth paths*
- *reduce rural amenity, diminish the productive capacity by intensifying larger rural land holdings or to undermine rural or the rural environment and adverse reverse sensitivity effects*

- 4.6 Peri-urban land is defined as the land immediately around the perimeter of urban settlement. It is the area under most development pressure from both, urban and rural residential developments as it offers logical growth paths, can be connected to the urban infrastructure, allows for good access and connectivity and provides space right at the interface between urban and rural environments. At the same time, the peri-urban area has to perform other important urban functions. It needs to provide a discernible edge to the urban form, which in many cases is not well articulated and it needs to create a buffer to the rural activities to manage reverse sensitivities which cannot be addressed within the confined space of smaller urban lots. These, sometimes conflicting, requirements make development in the peri-urban areas more challenging but also makes appropriate management of those areas most important.

5. 4HA RURAL RESIDENTIAL LOTS - BENEFITS AND ISSUES

- 5.1 The peri-urban land around townships sits within the Inner Plains IP, which allows 4ha lots to be established as of right so they are the natural fallback position for all peri-urban land. However, 4ha lots are neither rural nor residential, they fall into a category that puts the

majority of the 4ha land into a holding pattern. The size makes agricultural use unsustainable, but makes them at the same time too large for residential use, which tends to establish itself at around a maximum of 2000 – 3000m² all inclusive – dwelling and associated access and domestic curtilage. In summary, it often is a waste of productive land.

- 5.2 As a result 4ha properties adjoining the urban limit of a township where services are available are often under pressure to further subdivide to make the remaining land viable and efficient. 4ha lots that are more remote from rural towns tend to make better use of the remaining land and experience less pressure to subdivide.
- 5.3 4ha blocks are very difficult to intensify in density and retrofit with additional roading and infrastructure whilst integrating existing dwellings, which has been shown in several cases in the district and is currently the case with ODP 11 in Rolleston.
- 5.4 Depending on access, dwelling location and orientation setbacks etc. some 4ha lots are able to adapt to further infill but the majority are not set out to provide good links across boundaries to neighbours and create severe problems in connectivity. 4ha lots are by nature rural in character and mostly 'self-contained'. They establish independent of each other at different times creating an introverted environment. If they are to be further subdivided to accommodate growth, they struggle to integrate and tend to create many cul-de-sacs, easements and back properties as each property tries to either maximise their yield whilst avoiding legal conflicts and time delays and others try to protect their rural outlook, status quo and/or future ability to subdivide. As such they are unsuitable to accommodate future urban growth paths without serious compromise..
- 5.5 The 4ha block does also not assist in curbing urban sprawl, as the remaining mostly 'unused' land is often an incentive for owners to further subdivide their land to maximise its development potential resulting in piecemeal developments.
- 5.6 In para 4.39 section 4 of the Draft RRS it states:

The Commissioners found that there was a clear indication from the evidence presented that people were seeking one of the following two categories of land holding for rural residential purposes:

- (a) *parcels ranging from between 0.5 to 2ha that could support the running of a few animals and/or an extended garden or orchard*

OR

- (b) *parcels ranging from between 0.2 to 1ha for a 'larger lot' lifestyle. The reasons given for the preference for either of the two above categories were that the people seeking the property tended to have off-site employment, and had time constraints that precluded their ability to maintain larger land holdings.*

Size

- 5.7 Rural residential in the wider Christchurch area has become synonymous with either the 4ha property or the smaller sized lifestyle block. However, the table below clearly indicates that rural living is more about the lifestyle qualities rather than the need for land used for small-scale farming or other specific agricultural activities. This is also supported by the trend towards smaller rural residential lots.

Ranking	Reasons
1	Rural or country living
2	Peace and quiet, tranquility
3	Space, privacy, openness, no close neighbours
4	Clean air, no smog
5	Safe and healthier place to raise children
6	Learn about farming
7	Can have animals
8	Less pressure, relaxing
9	Wanted a larger section than you get in a city or
10	Place to retire

Table 3 (RRS page 40): Top 10 reasons for choosing a lifestyle block

- 5.8 This is a clear indication that within peri-urban environments directly adjoining urban limits the peri-urban rural residential development is the more desirable typology.

6. PERI-URBAN RURAL RESIDENTIAL - BENEFITS AND ISSUES

- 6.1 The RRS discusses a variety of rural residential typologies such as hamlets, clusters and farm parks – these are either smaller independent nodes or enclaves as part of rural/farming environments. They are surrounded by large areas of rural land and are not ‘attached’ or in proximity to urban areas, which makes them inappropriate for peri-urban land.

The RRS defines peri urban as:

“Peri-urban environments occur where rural and urban activities merge at the interface between Townships and the countryside”

- 6.2 This typology of peri-urban rural residential development provides a more appropriate and sustainable rural residential environment using less land whilst offering the benefits that people seek when opting for a rural residential lifestyle. The figures below (RRS page 25. Fig. 8 and 9) show the gradual decreasing density distribution from urban to rural and places the peri-urban rural residential developments with a density of 2 hh/ha at the interface between rural and urban environs.

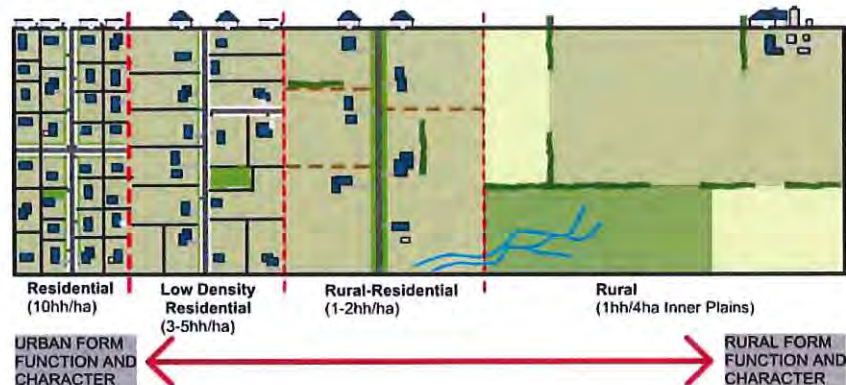


Figure 8: Land use spectrum

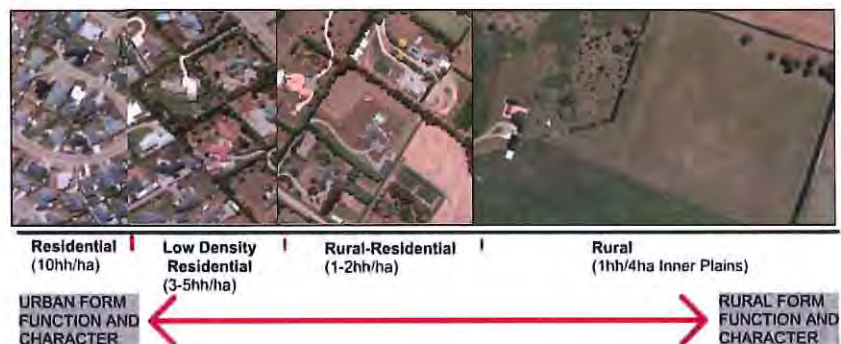


Figure 9: Photos illustrating the land use spectrum

6.3 The RRS concludes in section 5 (5.3) that 'the peri-urban form of rural residential development that integrates with townships is the most sustainable typology within the area of the district that is subject to the LURP', as it will deliver the following benefits:

- *Proximity to Townships promotes social wellbeing through the ability to access open space reserves, community facilities, employment opportunities and social networks*
- *peri-urban nodes are better able to provide integrated living environments that reflect the peace, quiet, 'openness', 'ruralness' and privacy that residents expect*
- *peri-urban nodes are better able to deliver efficiencies in the provision of infrastructure due to increased proximity to reticulated services*
- *sensitive gateways to Townships are able to be avoided, with there being opportunities to integrate rural residential areas into both the rural and urban environments through semi-formal links, riparian margins, ecological corridors and 'greenspace' networks*
- *the absence of topographical and natural features to screen intensified development results in alternative typologies that are severed from settlements having a greater risk of adversely affecting the visual distinctiveness of the open rural landscape through the 'domestication' of productive rural land holdings*
- *peri-urban nodes can take advantage of definitive boundaries to manage growth and reduce the risk of urban sprawl, with appropriate location selection enabling long term residential growth paths to be preserved*
- *appropriate densities, layouts, development controls and mitigation measures can deliver the anticipated rural residential character, which is distinct from conventional urban environments or rural land holdings*
- *localised natural features, greenbelt buffers, design elements and interface treatments are able to make rural residential areas distinctly different from rural and urban areas and to reduce the blurring of the rural/urban boundary of Townships*
- *typologies that are consolidated and integrated with settlements are better able to avoid 'ribbon' development, adverse reverse sensitivity effects with productive rural land uses and strategic infrastructure and to assist in achieving compact urban forms for existing residential settlements*

6.4 In these statements the RRS introduces the concept that peri-urban rural residential development is not only more desirable than 4ha blocks at the perimeter of townships, but it also introduces the concept of using peri-urban rural residential development to contain urban sprawl, achieving a compact urban form as well consolidating rural residential development.

- 6.5 The RRS from an urban perspective peri-urban rural residential developments require connectivity, access and circulation patterns that are to some extent similar to the adjacent urban networks but have a more generous size/spacing and more rural feel and character. Peri-urban rural residential developments therefore have the ability to structurally integrate to a sufficient level so as to become part of the built fabric and to assist in defining the urban form of a township. This connectivity to the urban environment is what differentiates this denser type of rural residential form from the more independent larger 4ha lot.
- 6.6 Whilst peri-urban rural residential developments can structurally integrate into the urban fabric of a township they still remain distinctly different in visual and physical amenity and character. As such they are well suited to constrain urban sprawl where discernible boundaries to urban development are missing unless they are intentionally designed to accommodate further infill (that is, future proof).
- 6.7 To clarify this point; there are two different categories of peri-urban rural residential development:
- a. Peri-urban development that is intended to create a clear boundary to urban development in a sense creating a 'developed rural residential buffer'. This type of peri-urban development provides:
 - i. An underlying structure (roading, services, lot layout and connectivity) that connects the development to the township but does not allow further physical connections to the rural surroundings to discourage sprawl;
 - ii. Creates clear landscape buffers to the rural interface to mitigate potential reverse sensitivities;
 - iii. Supports or creates clear gateways into the township.
 - b. Peri-urban development that is intended to preserve a future urban growth path for the rural township. This type of peri-urban development requires:

- i. An underlying structure (roading, services, lot layout and connectivity) that connects the development to the township and is future proofed, so it does allow further physical connections to its surroundings and residential intensification to an urban density should this be required.
- 6.8 It is important to state here that the future proofed typology is not an interim or transitional development, it is not a 'placeholder for urban development still to come. As growth is dynamic some peri-urban areas might develop into urban densities. Future proofing' is simply to preserve the option for the Council to rezone for urban purposes at some future date if it so chooses. But there is no expectation or guarantee if or when this will happen. The sites are being developed with a long-term rural residential character, but in a manner that retains the option for future urban intensification, if/when the Council desires this.
- 6.9 The RRS has not identified these inherent characteristics of the peri-urban rural development form and has therefore restricted the use of peri-urban development to small pockets where no future growth paths have been identified and discernible boundaries to the urban form are already established. This results in the majority of the peri-urban land that is under most development pressure to remain unmanaged.
- 6.10 Using this rural residential development type to its full potential gives the planning authority tools to properly direct urban and rural residential growth into the most appropriate locations on the perimeter of rural townships and also gives clear direction to landowners in peri urban areas how their land is to be treated and what type of development is to occur should they choose to develop. Providing this level of certainty does not 'open up' all peri-urban land for development, it just indicates what type of peri-urban development to consider. Plan changes, ODPs and other requirements still apply and give the planning authority controls over timing and all other detail.
- 6.11 From an urban design perspective this level of certainty will assist with the strengthening of township boundaries, containing urban sprawl and guiding development. For that reason all peri-urban that falls into the criteria below should 'in principle' be included in the RRS as peri-

urban residential development to ensure it is managed appropriately – peri-urban land that:

- has clearly been identified as an urban growth path (i.e. structure plan).
- is a potential growth path for future urban development based on the preferred long-term growth strategy and preferred urban form.
- needs to be developed to create a preferred urban form.
- has no discernible boundaries towards the urban environment where urban development needs to be constraint and is therefore vulnerable to urban growth pressure.
- has no obvious constraints to development (i.e. flooding, geotech) and is therefore vulnerable to urban growth pressure.

6.12 Proactively managing the vulnerable peri-urban area is prudent, and good urban planning and best urban design practice. Identifying peri-urban land 'in principle' for peri urban rural residential development, unless strong discernible boundaries already exist between the rural and urban environment, would enable the Council to differentiate the peri-urban development from the standard 4ha rural residential development and utilize it to either future proof existing growth paths or curtail urban growth, both in the interest of strengthening urban form.

6.13 The additional benefits of the peri-urban rural residential form are that it will provide the more desirable smaller sized rural residential lifestyle in a more consolidated form with less rural residential dispersal in the long term.

7. URBAN GROWTH

7.1 As both of these terms growth and form are frequently used in the RRS and other planning documents, I consider it important to explain them from an urban design perspective which needs to be taken into consideration when planning documents are to guide the physical and visual urban and rural outcomes.

7.2 Urban growth is dynamic and in parts a reactive process. Growth paths can to some extent be pre-planned through large scheme and structure plans, ODPs etc., but also occur naturally in the form of gradual expansion, infill and intensification. There are different types of growth:

- a. larger block /Greenfield developments;
- b. gradual linear and/or concentric expansion of a settlement;
- c. infill/ intensification of existing areas; and
- d. landuse change i.e., Brownfield developments.

7.3 All of these growth patterns combined form part of a healthy urban growth strategy. Greenfield growth tends to be of a more speculative nature (development driven), is often of a larger scale and 'starts from scratch' providing new facilities and resources. Natural growth patterns tend to be more gradual and more complex combining many parameters such as availability, location, quality and affordability - and in particular proximity and connectivity, as existing features and services tend to be built on or extended compared with building new ones. Brownfield conversion is in itself not really growth but change of use. It can however result in the increase of residential activity – similar to infill and intensification. Depending on scale it builds on existing features and services and/or introduces new facilities and resources.

7.4 Desirable urban growth pathways are generally easier to identify with certainty but are much more difficult to manage and implement with certainty, as they rely on the willingness of private owners to develop, the acceptance and demand of the market and many other constraints such as financial, infrastructure and time related factors. I am not an expert in market trends so will not comment on this part of growth behaviour nor am I sufficiently knowledgeable in the technicalities of financing and servicing growth. However, an urban growth path will always put pressure on the land that is closest to its current urban limit, on peri-urban land, as it is the most natural and efficient way to grow unless specific discernible boundaries or constraints exist.

- 7.5 Structure plans are the main tools to manage the anticipated growth and this has been done for Rolleston, Lincoln and Prebbleton, where the development pressure is the highest in the district. But these Structure Plans by their nature are urban plans and only address matters concerning the urban form and function within the new urban limits and zoning. They are not in sync with the existing landuse or the environment on other side of the line, the peri-urban land. But they do heavily rely on the peri-urban land to work in partnership and provide the necessary response such as forming a boundary, dealing with reverse sensitivity, allowing for future growth, forming gateways etc.

8. URBAN FORM

- 8.1 There is no one form that fits all. On flat terrain urban form is often concentric as it maximises efficiency, achieves 'proximity' and connectivity but there are many variables that affect the urban form, natural features, economics, hazards and constraints, planning regimes, ideologies and many more. Albeit slow, urban form is also dynamic and changes in response to events, growth patterns and major planning changes. Regardless of these dynamics urban form should always be legible, discernible and as compact as possible to remain efficient. Although cities and townships with a good urban form share many common elements, every place has its own distinct characteristics and its urban form needs to be assessed on its own merit within its context.
- 8.2 The one thing all urban form has in common is that it needs to be legible and consolidated and for that it requires limits, boundaries or edges. For these boundaries to be legible they need to be defined. This naturally occurs through either a strong natural feature which in itself is a boundary (i.e. mountain, a river, the coastline) or smaller changes in the environment which become thresholds that need to be crossed/passed through to go from one to the other i.e., stream, a contour change, strong vertical elements against uninterrupted open space, such as trees and dense vegetation. Abrupt change and contrast are the two elements that create boundaries and are most successful at defining and containing urban form.

- 8.3 A distinct change in the character of development can also create such a contrast, change or threshold. Peri-urban rural residential developments have the ability to create such distinctly different environments. Whilst they can connect physically to the township they provide their own distinctive rural character which differentiates them from the urban environment and assists in the creation of buffers, gateways and thresholds from rural to urban.

9. SITE AND LOCATION

Refer to graphic supplement location and site plan GS1

- 9.1 The Dryden Trust owns 36.22 ha of land located on Springston Rolleston Road, south Rolleston (**the Site**). The Site is currently zoned Rural Inner Plains and adjoins the LZ Deferred Zone to the north. It is mainly used as a dairy runoff block and is surrounded by 4 ha rural lifestyle blocks to north, east and west, and by agricultural land to the south.
- 9.2 Within the context of Rolleston this is a large site in single ownership, which allows for a cohesive, comprehensive and coordinated development avoiding the common issues that arise with piecemeal developments of either small individual sites or compromises that have to be entered into as a result of multiple ownership. Resulting in isolated one-off often introverted or gated communities lacking in connectivity.

Location criteria

- 9.3 The Site has not been identified as a preliminary peri-urban rural residential site by the Draft RRS, although it meets many of the location criteria. The main reason for the exclusion of the Site from the RRS seems to be the fact that the site is part of the future urban growth path of Rolleston. RRS defines peri urban as:

Peri-urban environments occur where rural and urban activities merge at the interface between Townships and the countryside

And concludes that (section 5):

"A peri-urban form of rural residential development is the most sustainable typology within the area of the district that is subject to the LURP, when compared to alternatives."

And in Appendix 1 Location Criteria for Rolleston (Appendix 1, page 10) states that rural residential locations should:

"adjoin the residential priority areas and Living zoned land; and (b) be consistent with the urban settlement patterns and strategic planning outcomes outlined in the Rolleston Structure Plan and the Growth of Township objectives and policies of the District Plan"

- 9.4 The Rolleston Structure Plan identifies the Site as a potential future growth path and in order to accommodate this future urban growth the RRS has taken the position to avoid peri-urban rural residential development on the Site. From a purely 'technical planning' point of view this position of 'do nothing' is understandable. However, avoiding development in the case of this Site is not preserving the future growth path. 'By default' the Council would rely on the fall back position of standard 4ha rural residential developments to provide an appropriate underlying ownership structure, connectivity and rural character to preserve this future growth path. However, 4ha rural residential layouts have proven to be very difficult to integrate or transform into successful urban environments for many reasons such as connectivity, character and core underlying structure should this be required in the future.

10. **ROLLESTON STRUCTURE PLAN AND FUTURE GROWTH**

Refer to graphic supplement structure plan GS 2 and GS 3

- 10.1 The Structure Plan, as the name states, provides the overarching structure for Rolleston and directs future urban growth. The RSP has identified the Site as a greenfield area for future urban growth with a mix of landuses and provides general guidelines and structures for development including a key road, generic cycle and pedestrian connections, generic open spaces, green and blue networks and the a overall development pattern land use and densities, i.e., commercial areas, and educational facilities and residential areas with densities of ranging from low 10 to 20hh/ha.
- 10.2 Currently, most urban growth in Rolleston relies on such large Greenfield developments identified by the Structure Plan and based on the RRS approach of avoiding future growth path will not allow for a varied, gradual and natural growth pattern. New rural residential areas have either been located to the far east and far west of Rolleston (PC8 and 9 and RRS) and 4ha rural residential blocks will

most likely be directed beyond the final urban limit of the RSP, south of Selwyn Road, isolated from the township particularly if the blocks between the CRETS road and Selwyn Road fail to deliver as urban growth paths.

- 10.3 As the Site is a future 'Greenfield' site the Structure Plan does not provide specific guidance for the Site and leaves it to the standard Greenfield development process of ODP, resource and subdivision consents etc., to sort out the finer detail. This leaves the Site vulnerable to 4ha rural residential development that is unsuited for future intensification and will undermine the outcome successful implementation of the Structure Plan itself.
- 10.4 This is not a criticism of the Rolleston Structure Plan. I point this out to highlight the difficulty in managing the implementation of structure plans and the necessity to have practical and realistic strategies that transition and integrate land use and density patterns from one to the other over time, in areas where growth can logically be expected or has been directed.
- 10.5 To ensure that development on the Site can be integrated into the growth expectations of Rolleston as set out in the Structure Plan, the Site needs to be 'future proofed'. Which means the following matters that have been covered to a generic level by the structure plan need to be investigated further, addressed from the outset and mechanisms need to be put in place to safeguard their spatial and physical requirements, should they need to be implemented:
 - a. Road hierarchy, access and circulation, location and road alignments, location internal links, type and location of all connections beyond the Site.
 - b. Type and location of pedestrian and cycle network into and through the site.
 - c. Type, extend and location of stormwater management areas.
 - d. Type, size and location of additional open spaces, reserves and pocket parks to support the increased density.

- e. Typology and location of 'higher density' developments.
- f. Type and location of non-residential functions.
- g. Type and location of edge treatment to mitigate reverse sensitivity.

Most of these elements do not have to necessarily be resolved completely but they have to be resolved sufficiently so they can be 'placed'.

- 10.6 Areas on the outskirts of rural townships (that is, those areas outside Greenfield Priority Areas and the urban limits) that are earmarked for future 'growth' can currently develop into 4ha blocks which do not provide adequate measures to ensure that they can be intensified in the future. This has the potential to undermine the long-term outcomes sought by the individual structure plans.

11. CONTEXT

- 11.1 Understanding the wider context of the Site and the immediate neighbourhood are key to a well-integrated and responsive design solution. The following paragraphs investigate urban structural elements outside the Site that inform the design strategy and future master plan.

Neighbourhood - Refer to graphic supplement context plan GS 4 and GS5

- 11.2 **East** – predominantly rural land used for farming with two rural residential dwellings to the northeast. In comparison to the western edge, this eastern edge has no road boundary and any development will need to address potential reverse sensitivity effects from the rural land use.
- 11.3 **South** – rural land part of the Dryden trust and mainly used as a dairy runoff block. Development on the Site will have to address potential reverse sensitivity effects that could arise as a result of residential activities established adjacent to rural land.

- 11.4 **West** – Springston Rolleston Road forms the direct western edge to the Site with two lifestyle blocks occupied by dwellings at the northern corner. It is to be expected that the immediate neighbours to the ~~east~~ *west* will change in the near future into medium density residential developments as Farringdon extends further west.
- 11.5 The key east-west road connection is via the new CRETS road connecting Goulds Road with Lincoln Rolleston Road. The CRETS Road works as a southern collector linking the proposed business/commercial areas and is expected to carry a significant traffic volume. Together with Springston Rolleston Road it will be the key road connection for development on the Site.

West – Farringdon Refer to graphic supplement GS 5a

- 11.6 Farringdon (refer to graphic supplement DRAFT GS 5a) is a recent large scale residential development to the south of the new central Rolleston Park and recreational areas filling the block between Goulds, Dynes Road and the new CRETS road and continues to extend towards Springston Rolleston Road. Farringdon is a classic greenfield development with the benefits of good circulation patterns and connectivity to neighbouring developments and activities. It offers a variety of lot sizes ranging from approximately 400 to 800m² with land and design built packages as well as the standard lot. However, it also shows the current downside of such greenfield developments such as monotonous housing developments with large single-storey dwellings on smaller lots in response to providing a density of 15 hh/ha based on a, in my opinion, flawed Medium Density design model.

NORTH - Refer to graphic supplement GS 5b

- 11.7 **North** - rural residential dwellings on a variety of lots within the current urban limit identified as an immediate growth path for Rolleston. The Council is currently undertaking consultation on their DRAFT ODP for Area 11 (**ODP 11**).
- 11.8 OPD 11 clearly shows the difficulty in retrofitting a 4ha rural residential environment into a well functioning low to medium density urban environment. This is due to ownership structures, house locations, related domestic curtilage, complex access arrangements, building setbacks and orientations as well as established landscape patterns

(shelterbelts), and new finer-grain urban layout and circulation which has to weave around obstacles. Open spaces are difficult to achieve in the right places or sizes and opposition of existing landowners arises as they are 'pushed out' of the denser residential area or lose their rural outlook. At the same time the new residential layout development tends to be compromised having to work around the existing dwellings and curtilage and boundaries as the original 4ha lots were never set out to integrate into a medium density layout and therefore lack the capacity and flexibility (and often owners' willingness) to adapt.

- 11.9 The Rolleston L2 Outline Development Plan GS5 together with the far-advanced Farringdon development plans provide a good level of information and certainty about the future context and connections to the north and west of the Site. Towards the east and south the development of the Site will need to provide for new connections that are consistent with the expectations of the Rolleston Structure Plan. Future developments to the south and east will then be able to built on these connections.

12. DEVELOPMENT POTENTIAL/OPTIONS

- 12.1 I do not want to reiterate the earlier discussion on benefits and issues regarding the rural residential typologies but wish to highlight the important aspects of this rural residential discussion as they relate to the Site.
- 12.2 The Site is unique in that it is a large site, within the Rolleston growth area, is in single ownership, and the landowner wants to develop it for residential purposes. It has the rare potential to generate a comprehensive and cohesive masterplan for a whole suburb with a variety of densities, landuses community facilities parks and reserves etc. However, as the Site is not part of the current urban limit development, options for the large site are limited.

'Do nothing and wait' – benefits and issues

- 12.3 The approach to 'do nothing' and continue using the land for agricultural purposes until the land is 'legally' opened up for future growth might seem at first glance a good solution as it allows the

entire block to be developed as one entity for medium density purpose. However, in the past such single large greenfield developments have also shown significant shortcomings due to their impact on urban form and speculative development nature with somewhat 'forced' versus organic growth pattern and timelines.

- 12.4 With medium density 15-20 hh/ha developments establishing along the northern edge and along parts of the western edge of site the potential for reverse sensitivity needs to be considered and in particular odour and dust. Medium density environments, and particularly those with a higher density over 15 hh/ha, tend not to have sufficient space on private land to accommodate appropriate setbacks or other measures to address the reverse sensitivity. This leaves the responsibility for addressing these effects either in the public arena via providing buffer zones in the form of public open space, or in the form of deferred development. Neither delivers a good long-term solution as they are either difficult to integrate, implement or finance without the loss of amenity, quality or value.
- 12.5 'Doing nothing' also carries the risk, and a high likelihood, of 4ha rural residential development occurring in the interim. Resulting in a similar patchwork of smaller properties with multiple ownership continuing to compromise future development and associated problems Rolleston has experienced in the past.

Standard 4ha rural residential lots

- 12.6 4ha per residential unit is currently the allowed fall-back for this Site. This outcome does not require future proofing or indeed make any reference to the outcome the Rolleston Structure Plan envisages for the Site in the future. Circulation would be mainly related to access formations off the existing main road and servicing would most likely be achieved property by property, on-site without necessarily establishing a proper network. Dwelling locations will be informed by the access location, and building size, orientation and curtilage will be solely in response to the climate and dwelling itself with no consideration for neighbours as these are too far separated to have an influence. This will not result in a suitable lot layout, circulation, servicing approach or dwelling arrangement and typology for future Medium Density environment.

12.7 An indicative but realistic layout plan for 4ha lots in line with the requirements of the IP rules has been considered and disregarded as the following issues have been identified that would compromise any future intensification.

- a. No diagonal connection through site as properties predominantly squared;
- b. Very rigid boundary alignments resulting in a very gridded future layout;
- c. No green network as no correlation/connection of landscaping between curtilage/garden;
- d. Size of properties encourages further planting of shelters which will create a nice amenity but also a strong compartmentalisation of the block;
- e. Access predominantly off existing road and CRETS road creating difficult ownership/easement patterns for a comprehensive future development;
- f. No internal connections to aid future connectivity;
- g. No links to neighbouring properties to south and east;
- h. Domestic curtilage of 4ha houses too large for future integration;
- i. Servicing of lots on an individual basis (septic tanks) limited correlation between roading and services;
- j. No integrated stormwater system and retention which could lead to no space available in the appropriate location for future stormwater treatment if this is to occur on Site.

Future proofing the proposed Site

- 12.8 This particular strategy is based on the requirements the RSP puts upon the Site to generate a medium density urban environment that can provide a density of approximately 17hh/ha. This type of medium density requires a high level of connectivity, a variety of public open spaces, a network of services with sufficient capacity as well as a denser lot layout with lots ranging in sizes from 350 – 1000m². The core structures of such a medium density built environment are different to the core rural qualities and structures and it is therefore not possible to transform from one to the other without compromise unless this intensification has been considered as part of the rural residential layout. Experience shows that when urban growth pushes into existing rural residential areas it creates major problems for the urban environment. Retrofitting particularly struggles with finding the space for a well connected public environment (streets and open space), meeting the density requirements, working with the existing dwellings and established curtilage and the capacity and dimensions of existing services pipes.

The design strategy ~~step by step~~

steps 1 & 2

- 12.9 This design strategy is intended to demonstrate the process how a future proofed design is constructed. The strategic plans are not final masterplans but provide the structure and information to further develop into masterplans for an actual development. Such masterplans would then underpin an ODP for the entire Site which would undergo a standard Plan Change process. As a result the information and plans provided in the Graphic Supplement attached to this evidence are to be read as examples of a future proofed design strategy for the site and not as final masterplans.

Step 1 - structure and layers

Refer to graphic supplement plan GS 6 and GS7

- 12.10 The starting point for the future proofed peri-urban rural residential development is the Rolleston Structure Plan overlay as the overarching spatial structure to ensure future connections, landuse and densities, key circulation patterns and the green and blue network become integral parts of the design and layout .

12.11 This is followed by further development of these key elements of the Structure Plan to a level of detail that allows decisions to be made on general type, size and location of those elements that are key to supporting a medium density environment, for example:

- a. Establish road hierarchy to the level of detail where road reserve widths are locked in;
- b. Establish exact location of open space and green connections so they can be implemented and kept free of build development;
- c. Identify key infrastructure and services routes and establish the required capacity to support medium density living;
- d. Identify the type and requirements for stormwater management for the potential Medium Density development and locate the treatment area and stormwater conveyance areas to ensure they are not build upon;
- e. Identify other important elements/qualities (such as pedestrian and cycle connection, viewshafts, existing landscape features to be retained) to a level of accuracy so that they can be located/placed with certainty to ensure these qualities 'survive' and guide the development process.

Step 3 - future proof plan – Medium Density base plan

Refer to graphic supplement plan GS8

12.12 This second step establishes the urban base plan containing all the important urban elements that underpin a medium density development in accordance with the Rolleston Structure Plan intentions, for example:

- a. Develop an urban residential layout based on the detailed elements mentioned above, in particular ensure that medium density development requirements are met.
- b. Provide appropriate responses to existing neighbourhoods and existing networks – connectivity, circulation networks, green network, consider external viewshafts into the site and carefully integrate existing dwellings along the edges of the Site.
- c. Build on existing landscape features, viewshafts from the Site and site contours, apply best urban design practice and principles.
- d. Introduce a medium density layout and typology suitable for the Rolleston environment.

Step 4 – identifying peri-urban rural residential structure areas
Refer to graphic supplement plan GS9

- 12.13 Create a peri urban rural residential subdivision layout (with a minimum 5000m² average lot size) based on the 'future proofed' Plan and identify areas that require 'designation' to ensure the future implementation of roading, open spaces and connections can occur if required. Allow for larger lots to 'absorb' specific green links, open spaces buffer areas etc.
- 12.14 Identify individual building areas, appropriate setbacks, access ways and domestic curtilage for each rural residential lot to ensure it can successfully integrated into a medium density environment should this be required.

Step 5 – planning and legal mechanisms

- 12.15 Provide planning and legal mechanisms to ensure that designated areas are protected. This is an important aspect of the future proofing approach and will be further discussed in the legal and planning evidence.

Step 6 – Landscape buffers, edge treatment reverse sensitivity

- 12.16 Provide permanent and/or interim solutions for edge treatment where reverse sensitivities may arise as a result of rural activities adjacent to residential activities. This is an important aspect and needs to be addressed carefully to ensure the solution works for both layouts RR

and MD. There are several solutions which can be used individually or in conjunction with each other:

- a. Areas within the Site to remain a 'landscaped buffer' including stormwater areas;
- b. A road along the southern boundary creating a bigger setback to the rural environment;
- c. Shelter belts along the southern/eastern boundary;
- d. Large properties along the rural interface and building areas with a large setback to the rural boundary.

12.17 The solutions above are general approaches and reverse sensitivities are site-specific matters that will be considered in detail in the later plan change process. The importance at this stage of the design strategy is to ensure that a general solution is identified and sufficient space allowed for it. The proposal proposes to retain the southern shelter belt and has considered a larger setback from the southern boundary, the exact location of the southern road would also be tested and adjusted northwards if more distance to the rural activity is required. The land to the south is ^{not} also owned by the ^{Dryden Trust} Dryden Trust and reverse sensitivity measures could be located on the adjacent land such as i.e., additional planted buffer

Final step - Rural Residential Masterplan

12.18 The design strategy provides the information to feed into the final Master Plan for the rural residential layout, where all aspects are worked through in detail such as protecting viewshafts, internal and external cycle and pedestrian links, exact road alignment and widths, building setbacks and landscaping, etc. I need to emphasise that for the purpose of this evidence, the design strategy has not been taken through to that level of detail as this would be a much bigger task given the size of the Site, and is not really the purpose of this RRS hearing process. Such specific provisions will be made at a later stage as part of a plan change process and in consultation with the

council and other professional input. The purpose of the strategy is to illustrate how the future proofing 'works' in practice.

12.19 Matters that have already been identified and where taken into consideration but have not been specifically identified on the strategic plans in the Graphic Supplement are:

- expansive distant views from the site to the Southern Alps and the Port Hills,
- views to tree clusters to the north and northwest, reference points
- existing landscape features to be retained, predominantly the gentle contour changes within the Site, existing shelterbelts,
- natural drainage patterns of the site,
- sense of openness and ruralness to the south and east to be experienced within the site through generous open space and views into the rural landscape

12.20 These elements are particularly important as they encapsulate the rural character of the site and are the key drivers for the rural residential design. It is the role of the Master Plan to build the rural residential layout and landscape treatment around these core characteristics of the Site and ensure they become an integral part of the design.

Not future proofing

12.21 Developing this peri-urban site, a future growth path for Rolleston, and **not** future proofing is not in accordance with best urban design and planning practice as it undermines the urban design intentions and outcomes of the Rolleston Structure Plan.

13. RURAL RESIDENTIAL ISSUES TO CONSIDER

13.1 The majority of the rural residential issues identified in the Draft RRS (page 27) are unlikely to apply in the long term as the Site is intended as a future growth path for Rolleston. However, should the urban density not intensify to the anticipated level and while the Site is

developed as a peri-urban rural residential environment, it needs to meet rural residential development expectations and criteria and therefore needs to negotiate some of the issues as they concern the Site.

Potential Issue: Loss of rural landscape values, dilution of contrast

- 13.2 Rural residential development can contribute to a loss of rural landscape, character and amenity values through the 'domestication' of farmland, dilution of the rural context of settlements and derogates the contrast between rural and urban forms of development.
- 13.3 Rolleston already has a distinct point of difference to other rural settlements and townships due to its size and its location, which makes it a key centre in the district attracting a lot of investment and growth in residential and commercial markets. This has significantly changed the character of the township over the last 5 to 10 years. Rolleston is fast becoming a self-sustaining centre with significant increases in densities and activities - giving Rolleston more of an increasingly urban character, which in return increases the contrast between the growing township and the surrounding rural environment.
- 13.4 To further protect the rural landscape values and productivity of the remaining rural land urban sprawl beyond the anticipated future urban limit as identified in the Rolleston Structure Plan, urban sprawl needs to be avoided. The proposal is consistent with this as it will create a clear contrast between the urban and rural environment. Such visual contrast can be best created through distinct contrasts in density and land use, including methods such as:
 - a. the introduction of clear gateways in and out of the urban areas through the threshold;
 - b. providing a contrast in streetscape by introducing environments that are designed to a human scale and slower travelling speed;
 - c. the use of strong structured landscaped treatment to the south to create

discernible contrast and boundary to the development around to form a threshold; and

- d. enabling views onto taller community buildings such as churches, halls from rural approaches to create visual and physical focal points and destinations.

In summary –

- 13.5 A medium density urban environment requires a higher level of connectivity, a variety of public open spaces, a network of services with sufficient capacity as well as a denser lot layout. The core structures of such a medium density built environment are different to the core rural structures and it is therefore not possible to transform from one to the other without compromise unless this intensification has been considered as part of the rural residential layout. Experience shows that when urban growth pushes into existing rural residential areas it creates major problems for the urban environment as it has to adapt to the rural structures which results nearly always in a reduction in density, a lack of urban amenity, illogical circulation patterns along rural boundaries, and almost always results in a serious lack of connectivity. The most effective tool to prevent urban sprawl is to enable urban infill.
- 13.6 A peri-urban rural residential development on this Site with a average density 2hh/ha and lot sizes ranging from 0.2 to 2ha, by its nature already creates the main supporting structure with better circulation patterns, connectivity, dwelling typology and in particular it introduces a servicing and infrastructure network similar to that required by urban developments. If it is specifically designed from the outset through design, planning and legal mechanisms, it can be future proofed to become a successful medium density urban environment should this be required but can also continue to exist as a peri-urban rural residential environment.
- 13.7 Planning sensibly for the possibility of future urban development by ensuring that such opportunities are not precluded through poor design or failure to identify suitable areas for rural residential development does not equate to an area being regarded as in

transition to full urban development. The Dryden Trust land will remain zoned Inner Plains. The Rural Residential Strategy will not change this. A merits-based assessment would still need to be undertaken prior to any rezoning occurring via a private plan change for rural-residential purposes. Even if rezoning to Living 3 were successful, there are further actions required before the land could then be made available for urban development. It is clearly not in an active process of change.

14. URBAN DESIGN MATTERS RAISED BY THE OFFICER'S REPORT

14.1 The Officer's Report opposes the inclusion of the nominated land for the following reasons:

- a. *The locations fail to accord with the RRS13 Locations Criteria, specifically those requiring rural residential development nodes to avoid locations that are obvious growth paths and to be consistent with the urban settlement patterns and strategic planning outcomes outlined in the Rolleston Structure Plan and the Growth of Townships objectives and policies of the Selwyn District Plan.*

Response

14.2 I note the development fails to accord with this criteria as the criteria in itself is not logical. The requirement from the LURP is to preserve urban growth paths but in the planning context of the Site under the IP rules this option does not exist. Avoidance is not possible as 4ha rural residential developments are allowed. Future proofing peri-urban development therefore provides a better way to preserve the growth path.

14.3 Avoidance also carries a second risk that of isolating other rural residential development, existing and future, to the south and east if the anticipated urban growth does not eventuate. This would leave a large undeveloped or underdeveloped site between the urban development edge and the next rural residential developments creating many of the issues of isolation, distance, lack of consolidation, undermining urban form, lack of integration etc.

- b. *Rural residential development in these locations could significantly complicate future residential development, which is discussed in detail under the 'Strategic Management Of Rural Residential Activities' section of this report.*

Response

- 14.4 Rural residential development in these locations could significantly complicate future residential development - this would be correct for development that has not been future proofed. The peri-urban rural residential typology however, has strong similarities to core urban structures whilst retaining a rural character and amenity. These structural similarities make the future proofing process fairly straightforward.
- 14.5 In paragraph 3.35 to 3.37 the Officer's Report states:
- 3.35 *ODP's do not provide sufficient surety in respect to how and when residential development will occur. This is because the SDP requires subdivisions that are not in general accordance with the operative ODP to be assessed as a discretionary activity.*
- 14.6 This is a planning aspect but does imply that it is a matter of detail within the management of ODPs and not a matter of ODPs per se not being able to provide certainty
- 3.36 *As a consequence, roading layouts, housing densities and other aspects of the residential land adjoining "future proofed" areas may be amended in the future, which could undermine the integration, connections between residential and rural residential development areas, and the provision of transportation networks, water and wastewater utilities and open space reserves. This is evidenced in the Farrington subdivision in Rolleston, where significant amendments have been made to the operative ODP due to a change in land ownership. This has resulted in relatively significant changes to housing densities and layouts, and amended infrastructure services.*

- 14.7 The level of information that is required to create a well integrated layout for the Site that is future proofed is already available – with regard to urban design matters the key elements of the ODP deal with matters of connectivity, links to the neighbourhood, overarching movement patterns and circulation efficiencies, roading hierarchy and density distribution, green networks etc. All these matters are sufficiently covered in the available documents, such as the RSP, the Rolleston L2 ODPs to ensure that connections to the existing immediately adjacent development areas can be established with a sufficient level of certainty. In addition thorough urban context analysis and site analysis will ensure that a future proofed plan also responds to aspects that are not covered in these documents.
- 14.8 Where areas are not yet developed their development sequence most likely puts them behind the development of the future proofed Site i.e. the eastern and southern neighbours. Future developments on these sites have the ability to respond to the connections and characteristics of the future proof plan and would also follow the overarching Structure Plan. This is after all the purpose of the Structure Plan
- 14.9 The specific case of Farrington is not a good example to compare this process with. The initial layout that informed the development to the south of Dynes Road was developed in the absence of a Structure Plan or ODPs of the adjoining, already developed areas. Farrington, being a Greenfield development by its very nature starts from fresh – like a tabula rasa approach that ‘attaches itself to existing edges the edges and roles out like a carpet’. The future proof proposal has a very different approach and aims to achieve a more natural growth pattern that builds and grows from within.
- 3.37 *In my opinion, rural residential development should not be dictating residential outcomes. This is particularly important in the context of the Dryden Trust (S36) submission because the land directly adjoins a primary road to service the wider community of Rolleston. Any rural residential development within the alignment of such a significant road at the time the land is rezoned and subdivided to residential densities could present significant issues to the Council in its capacity as an infrastructure service provider, developers, land owners and the wider community.*
- 14.10 This is unclear to me, but I assume that this is a reference to the CRETS Road. The CRETS Road alignment is currently being developed as part of ODP 11 process and will be resolved ahead of any designs for the Site. This will allow the development to consider

and resolve all the requirements of this important arterial road so it integrates well. Currently the favoured alignment by the Council is not through the Site but to the north within the confines of ODP11. The initial proposal has however allowed for a road of this stature to be included should they be required.

The future proof plan has allowed for the inclusion of the CRETS Road to indicate that this can be accommodated should it be required.

- c. *The inclusion of the land could define the south-eastern edge of the township as a transition to the rural land holdings between Rolleston and Lincoln townships. However, the nominated locations both sit within the longer-term residential growth path of Rolleston, with rural residential development creating relatively isolated nodes that would not be integrated with the township for some time into the future. This applies to the nominated land holding as there is no surety when the adjoining residential land will develop. This isolation would not be remedied until the sequencing of development proposed for Rolleston extends down to Selwyn Road.*

Response

- 14.11 'creating relatively isolated nodes' - developing the Site for rural residential activities would not create "relatively isolated nodes". The Site would develop logically in stages from existing connections to the west and north. The Council is currently advancing ODP11, which will bring the urban fabric right to the Site's doorstep. Good connectivity is one of the key elements of the proposed future-proofing, and in my view a Site, in the context of Rolleston, which is proximate to the following places is not in isolation:

- i. The aquatic centre (2km);
- ii. Existing Medium Density residential development (1.2km);
- iii. The commercial centre of Rolleston (2.5km);
- iv. A primary school (2km);
- v. The new Rolleston Park (1km); and
- vi. A potential workplace at I-zone (no more than 4km).

(All measured from the centre of the site as the crow flies)

'This isolation would not be remedied until the sequencing of development proposed for Rolleston extends down to Selwyn Road' -

- 14.12 This is incorrect, the connectivity is to the north and east via Springston Rolleston Road and ODP area 11 as well as via CRETS Road to Farrington. Which are all part of earlier sequences.

d. Inclusion of the land holdings represents interim development, with any rezoning to rural residential densities in advance of residential densities being inconsistent with the LURP and failing to give effect to Chapter 6.

Response

- 14.13 Development of a peri-urban rural residential scale with a density of 1-2 hh/ha will create an underlying structure, lot layout, connectivity and circulation pattern that can integrate well into an urban form. However, future proofing peri-urban rural land does not mean that the land has to, or will be developed into urban densities. It means it can be developed if that is required and appropriate. The additional 'layer' of future proofing a peri-urban rural residential layout will give the added certainty that it can gradually intensify into a low density urban character without adversely affecting the character of either the rural or the urban environments.

e. There is sufficient Living 3 zoned land and land supported for inclusion in the Strategy within Rolleston that better aligns with the Locations Criteria to provide housing choice in the short term than the nominated sites, with on-going monitoring and reviews determining the necessity and appropriateness of additional sites within the suggested five year timeframe.

Response

- 14.14 Land supported for inclusion in the RRS for Peri-Urban rural residential development has been included as a result of private plan changes already underway prior to the LURP, and not necessarily due to the fact that it better aligns with the location criteria than others. This is not to say it should not be included. Each land parcel needs to be considered on its merits in relation to the new criteria imposed in the LURP/RPS.

There is sufficient Living 3 zoned land ...to provide housing choice in the short term –

- 14.15 The officer's comment here is also a reference to timing or the release of land for periurban development. It is important to separate the two issues of guiding development typology and timing development. To

ensure development delivers the right outcome landowners need to know far in advance what kind of development if they decide to develop is appropriate. This is the best strategy to ensure urban form, consolidation and growth strategies are implemented as the right expectations and responsibilities are communicated clearly. Timeline can then be added as a secondary overlay. Timelines can then be adjusted to respond to other factors without compromising the overall urban outcome. It is a lot easier to shift timelines than to change typologies. The benefit of separating these elements is that it secures the urban form in the long term and still gives sufficient flexibility and control to ensure that other aspects such as infrastructure and other demands can be addressed.

- 14.16 A review of the RRS in five years is generally a good approach and will assist in improving the RRS and ensure it remains valid and appropriate. It also allows making adjustments to respond to the emerging growth patterns since the 2010/2011 earthquakes. But as the draft RRS only addresses and resolves a minor part of the existing peri-urban land, it means that in five years' time this entire exercise will have to be repeated to compensate for the inadequacy of the current RRS. This could be avoided if the Draft RRS appropriately includes criteria to consider all peri-urban land now, and either definitely include or exclude the land for peri-urban rural residential development based on the two peri-urban rural residential typologies presented earlier. I am not suggesting that all peri-urban land be identified for development in the short term, but that all peri-urban land be identified as land that if it is developed should be developed as peri-urban rural residential instead of 4ha lots. The review in five years could then focus on ironing out details such as timing, evaluation and refinement of future proofing requirements, protection of landscape values, formation of gateways etc.

15. CONCLUSION

- 15.1 The RRS has taken the important requirement of 'preserving' future growth paths and interpreted it as 'avoiding' all development, including development which future proofs, which by default pushes the peri-urban land to be developed as 4ha blocks which is the least desirable outcome for peri-urban land. The outcome is development, which is difficult to connect to or integrate into an urban form, and ultimately constitutes rural residential sprawl, which blurs the edge between rural and urban characteristics.
- 15.2 I believe the particular criteria to avoid future growth path needs to be revised to state preserve future growth paths and the RRS needs to include the option of development in future growth paths to preserve through future proofing.
- 15.3 Considering this, the Site should be included as a preliminary site as it meets the relevant criteria and should be developed as a future proofed peri-urban rural residential development to 'preserve' the potential future growth path in the short and long term.
- 15.4 To ensure the Site contributes to the urban form it is important to avoid it becoming the default standard 4ha development, which is very problematic to integrate and retrofit. The proposed future proofing of the peri-urban development in the short term is therefore a better approach to preserve this future growth path. That is not to say that all land in future urban growth paths should be developed immediately or at all, it just should be identified as land that if it is to be developed as rural residential it has to be future proofed peri-urban rural residential development.
- 15.5 The Officer's Report has identified very important issues with regard to future growth patterns and the necessity to contain/control urban sprawl. There is however a discrepancy between the approach taken by the RRS and Officer's Report, and standard best practice in the urban design field. The RRS only addresses a minor segment of the entire peri-urban land, where best practice would expect that a RRS having to consider the criteria listed in Chapter 6, Policy 6.3.9 would address all peri-urban land with a consistent short and long-term approach giving more certainty that the desired outcome is achieved.

15.6 This particular Site is a good example of periurban land that should be futureproofed periurban development as it offer clear advantages in the context of the urban form and growth pattern of Rolleston

- a. Retains certainty as well as flexibility for long-term planning and urban growth paths.
- b. Locates peri-urban rural residential in an appropriate location for it to connect and integrate well with the existing urban fabric.
- c. Allows the Site to respond flexibly to urban growth pressure and demands.
- d. Avoids retrofitting of services, roading resulting in difficult and inefficient layouts.
- e. Implements the key elements of the structure plan at an early stage encouraging appropriate movement patterns, connections and development patterns within the rural environment that are similar to the Medium Density development patterns.
- f. Allows the site to grows at a natural pace and in a more natural pattern avoiding large greenfield developments that have the tendency to create unbalanced urban forms pulling development into a specific direction.
- g. Creates an appropriate RR environment in the interim with strong links to the Rolleston township avoiding the unnecessary use of rural land due to providing smaller lifestyle blocks.
- h. Creates more a more diverse Medium Density environment with a variety in lot

sizes, streetscapes and house designs, due to larger sections (from original 5000m² lots) mixing with Medium Density terrace housing - avoiding the monotony of current subdivision design.

- i. Provides rural residential lifestyle in the interim in a concentrated area, avoiding rural residential sprawl along the approaches to Rolleston.
- j. Avoids the default position of 4ha rural residential with the associated issues.
- k. Provides a solution to a 'systemic problem' and timing issues created by the LURP, RSP, and RRS when applied together, without undermining their respective intended outcomes.

- 15.7 In summary, the Draft RRS in section 4 and 5 provides a good analysis of the rural residential tensions, issues and challenges, and presents the peri-urban rural residential option as a potential solution. The majority of the benefits of peri-urban rural residential development are clearly identified, so are the rural landscape values that need to be protected. However, the RRS and the officer's report fail to recognise the true potential peri-urban rural residential development offers to provide an even 'sharper' tool to control and direct growth on the perimeter of rural townships. Through the RRS, the Council has the opportunity to look further into the relationship between the peri-urban land, natural urban growth patterns, urban form and consolidation and the necessity to control urban and rural sprawl – identifying a few parcels to be developed as peri-urban rural residential will not solve the rural versus urban tension. The RRS needs to provide a solution for peri-urban land, which will otherwise continue to be under development pressure.

Nicole Lauenstein

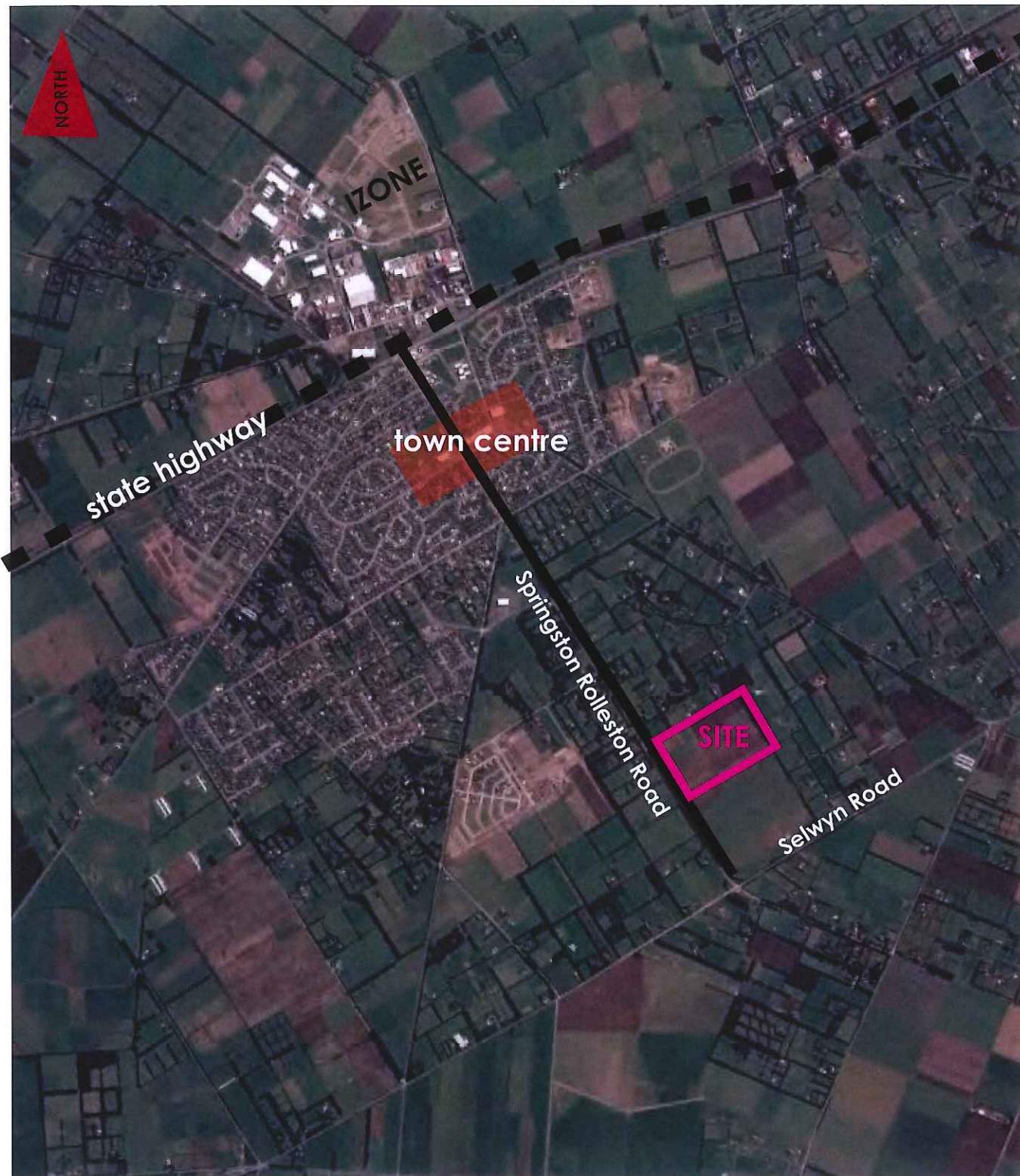
10 April 2014

URBAN DESIGN EVIDENCE
Nicole Lauenstein

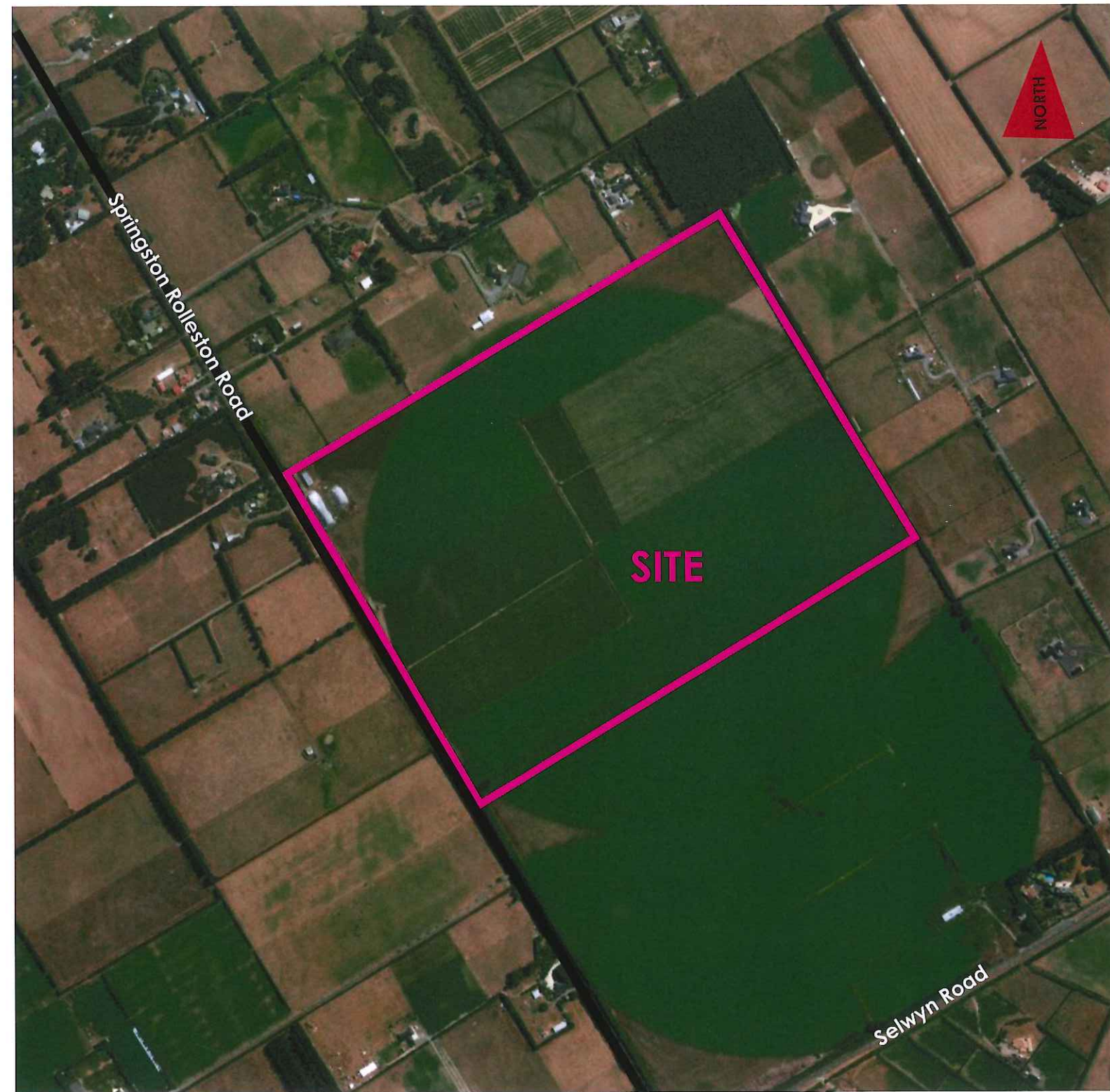
GRAPHIC SUPPLEMENT

Dryden Trust

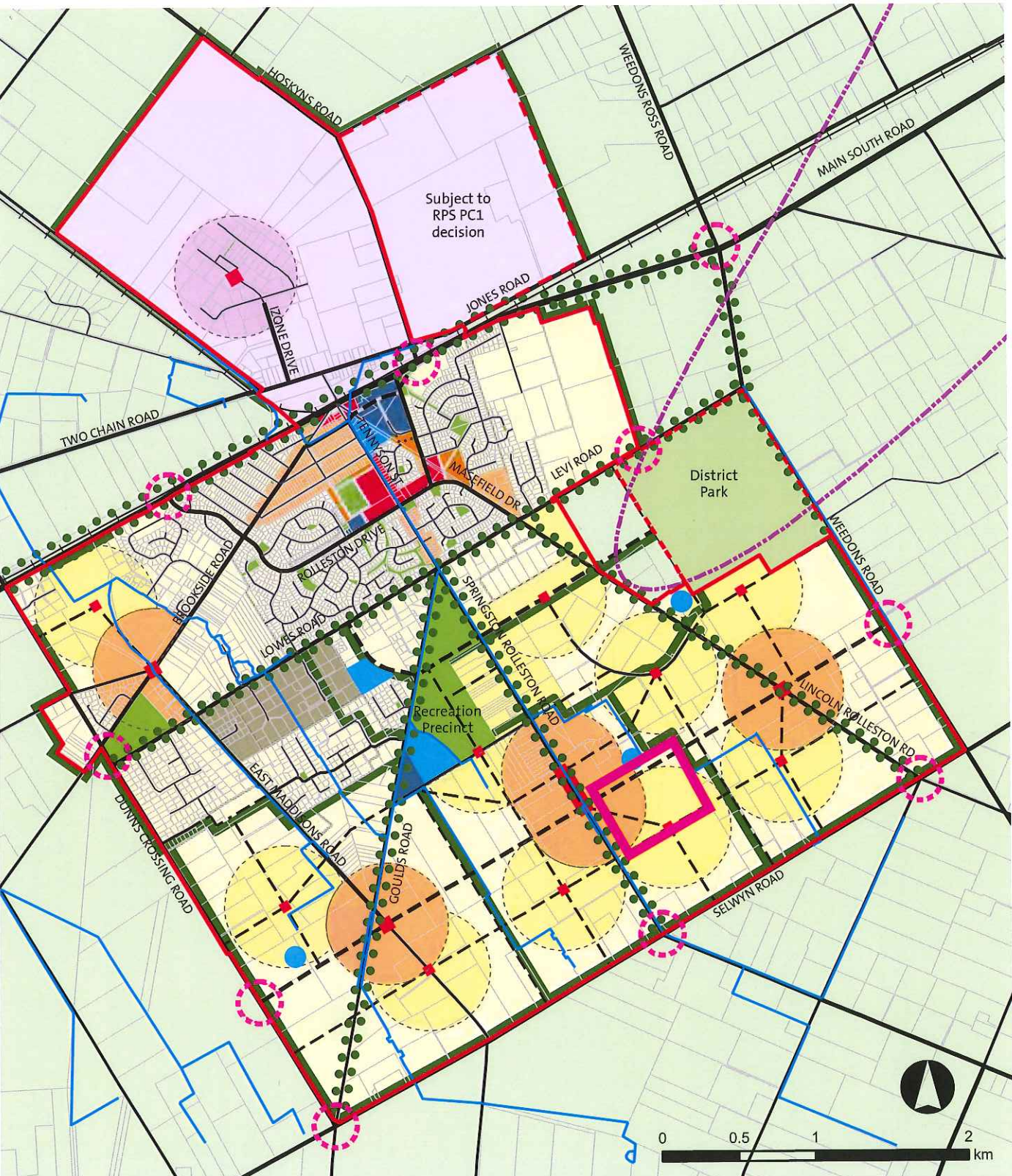
SDC Rural Residential Strategy
HEARING



LOCATION



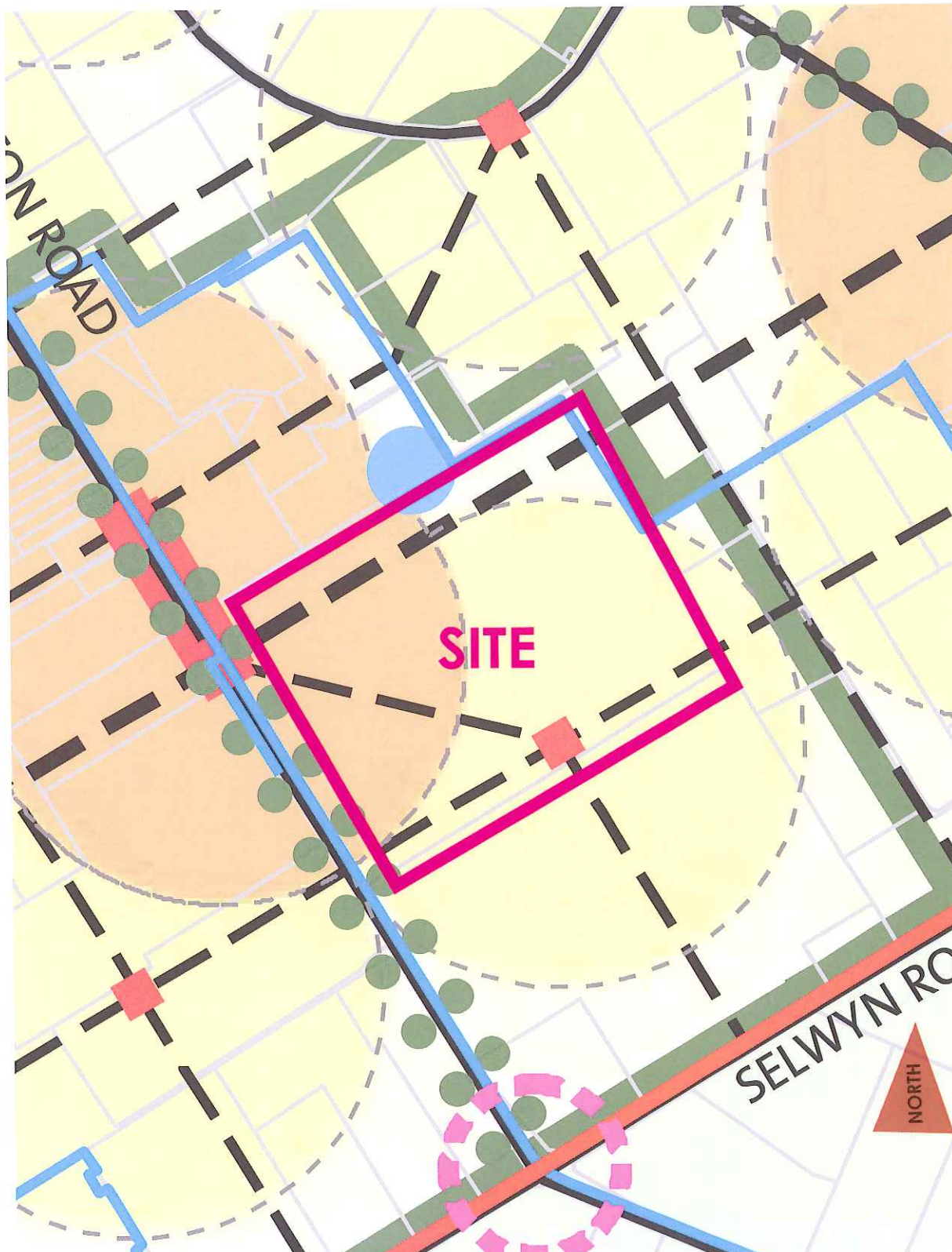
SITE



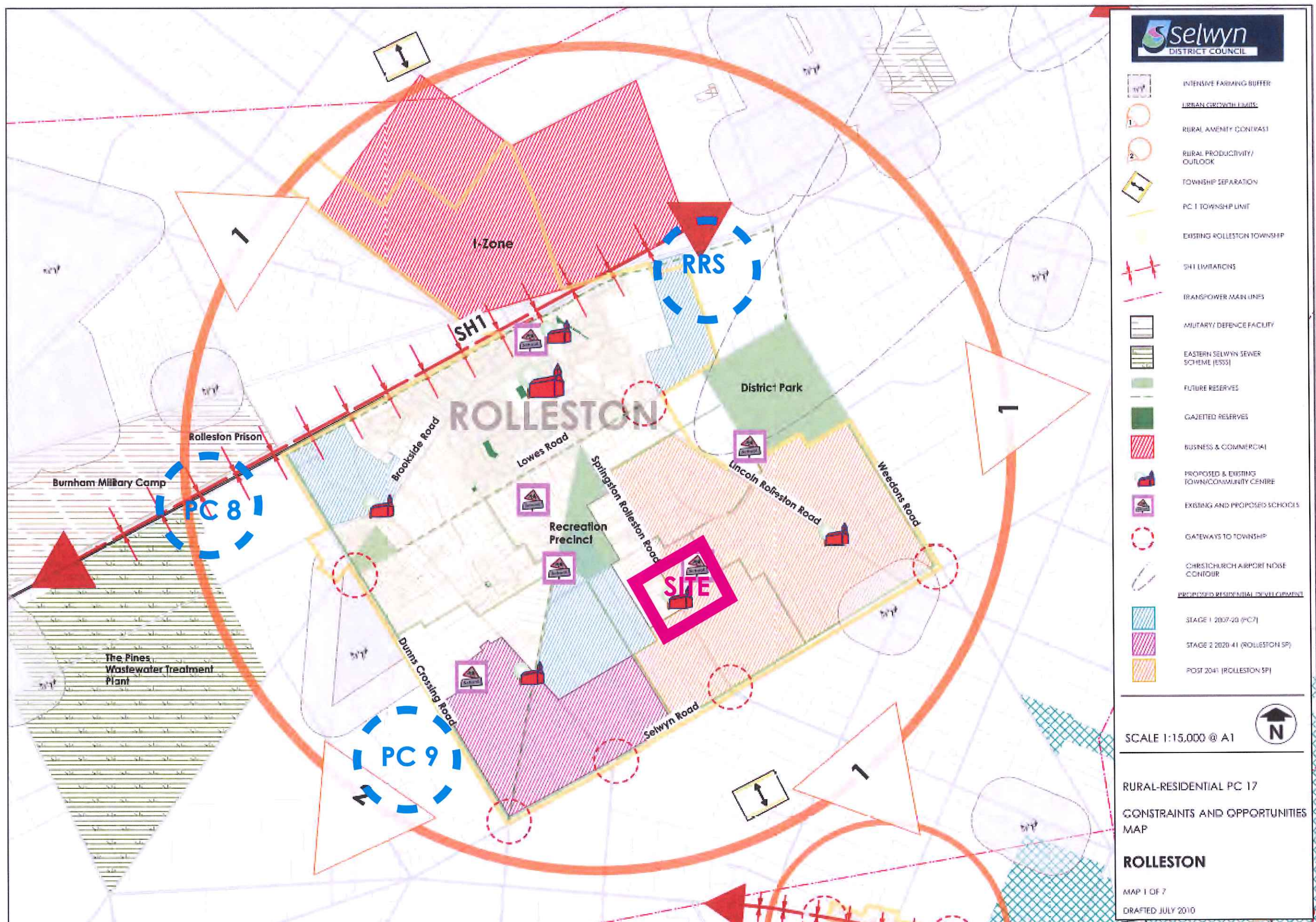
ROLLESTON STRUCTURE PLAN

Rolleston Structure Plan

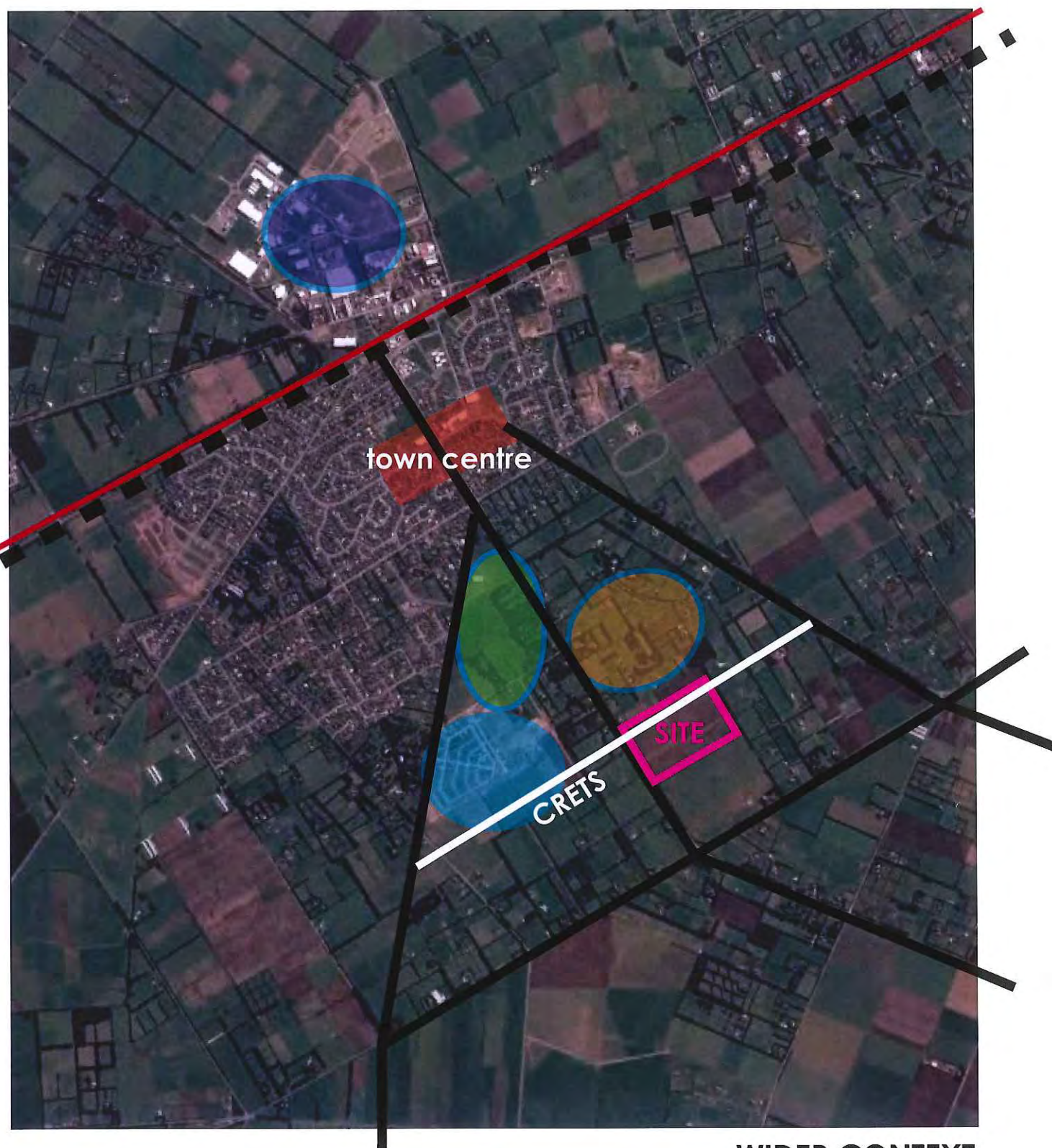
- Study Area
- Railway
- National Arterial
- Main (primary) roads
- Proposed main (primary) roads
- Local (secondary) roads
- Proposed local (secondary) roads
- Local (minor) roads
- Walking and Cycling Link
- Town Centre
- Neighbourhood Centre
- Local Centre
- Comprehensive Housing
- Medium Density Residential (20HH/Ha)
- Medium Density Residential (15HH/Ha)
- Low Density Residential (10HH/Ha)
- Low Density Residential (7HH/Ha)
- Community Facilities
- Education Facilities
- Green Corridors and Green Belt
- District Park
- Recreation Precinct and Reserves
- Rural land
- Avenue Planting
- Izone Southern Business Hub
- Water Races
- Noise Contour
- 5 Minute Walk (400m)
- Key Gateways



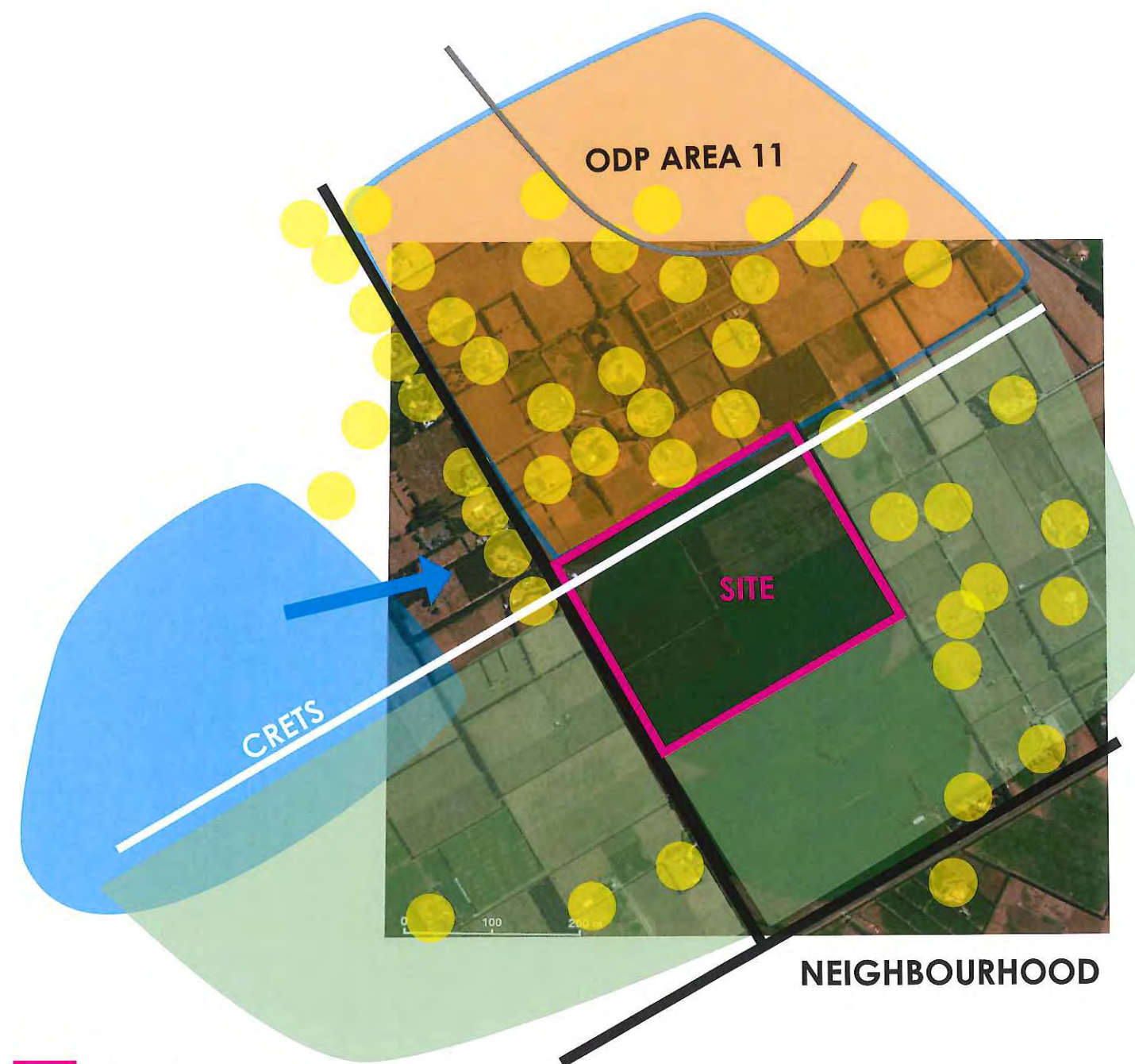
ROLLESTON STRUCTURE PLAN



RRS APPENDIX 2 STUDY AREA MAP 28 PERI_URBAN CONTEXT ROLLESTON and rural residential locations overlay



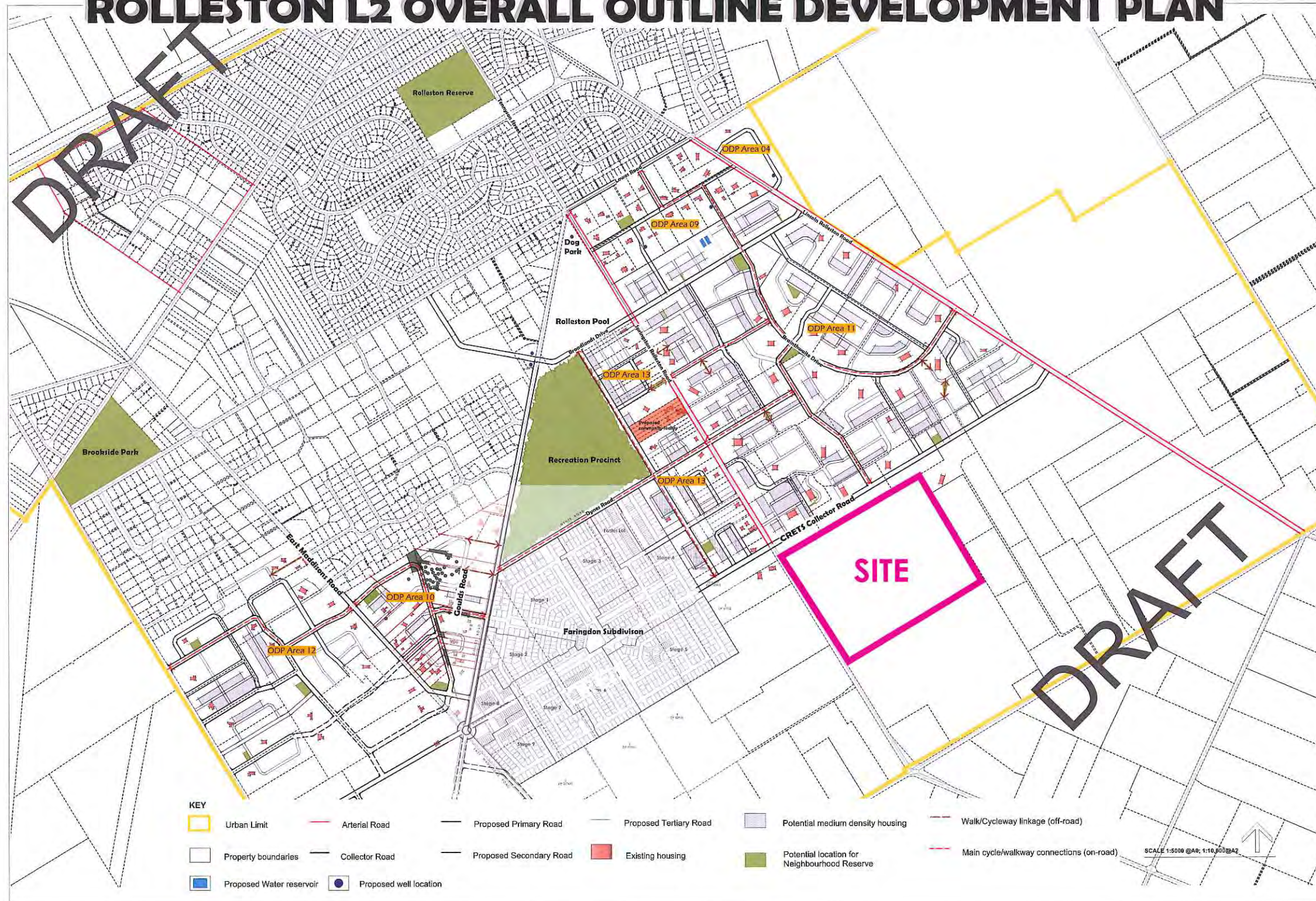
WIDER CONTEXT

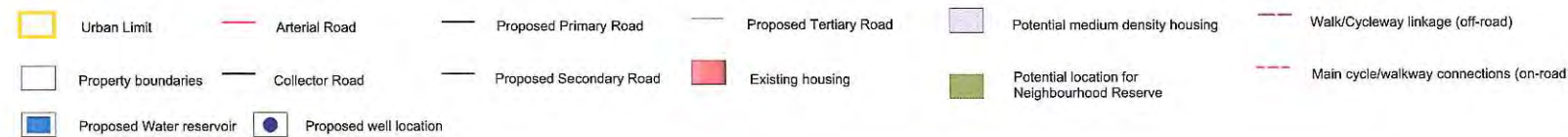
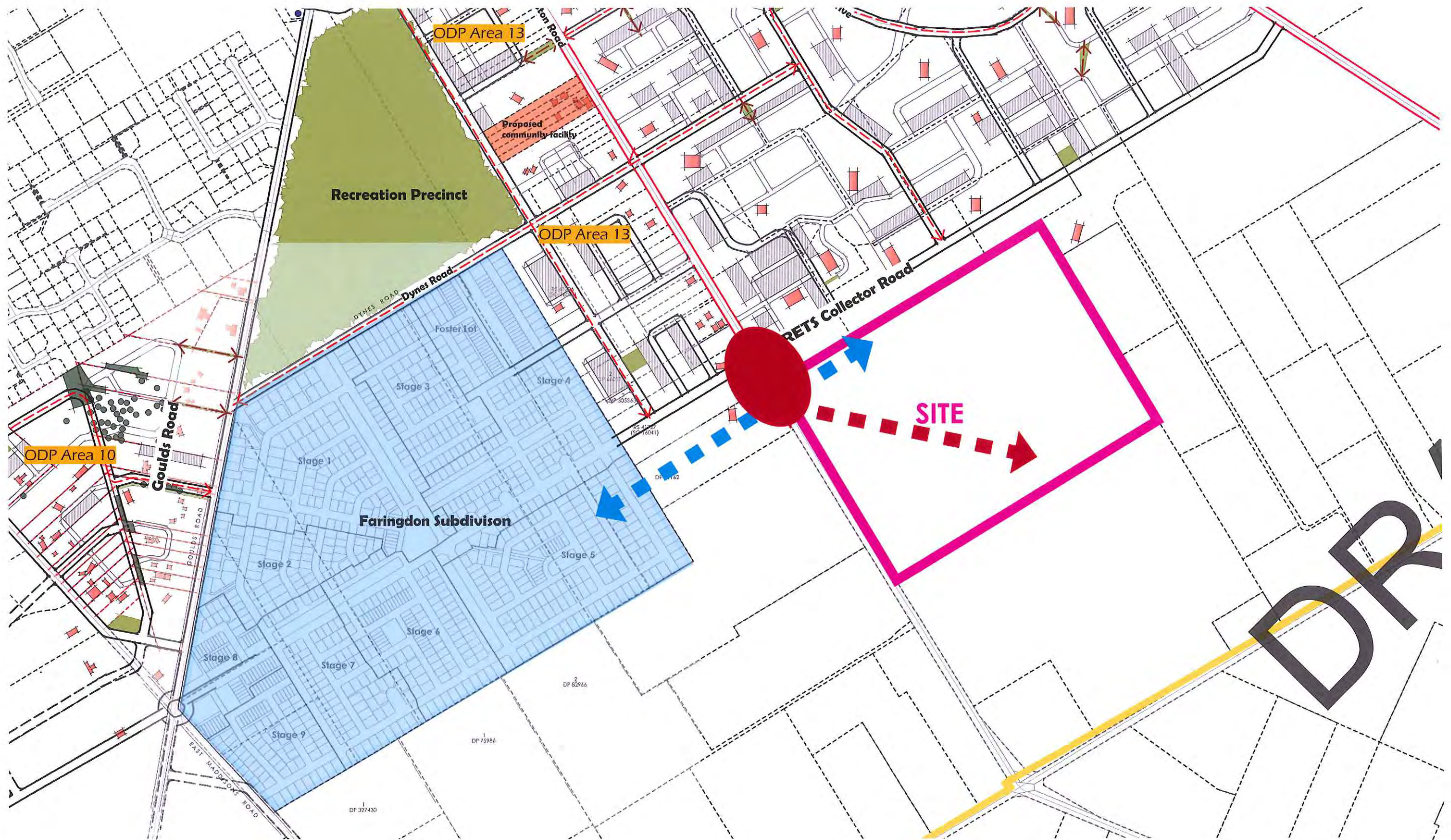


NEIGHBOURHOOD

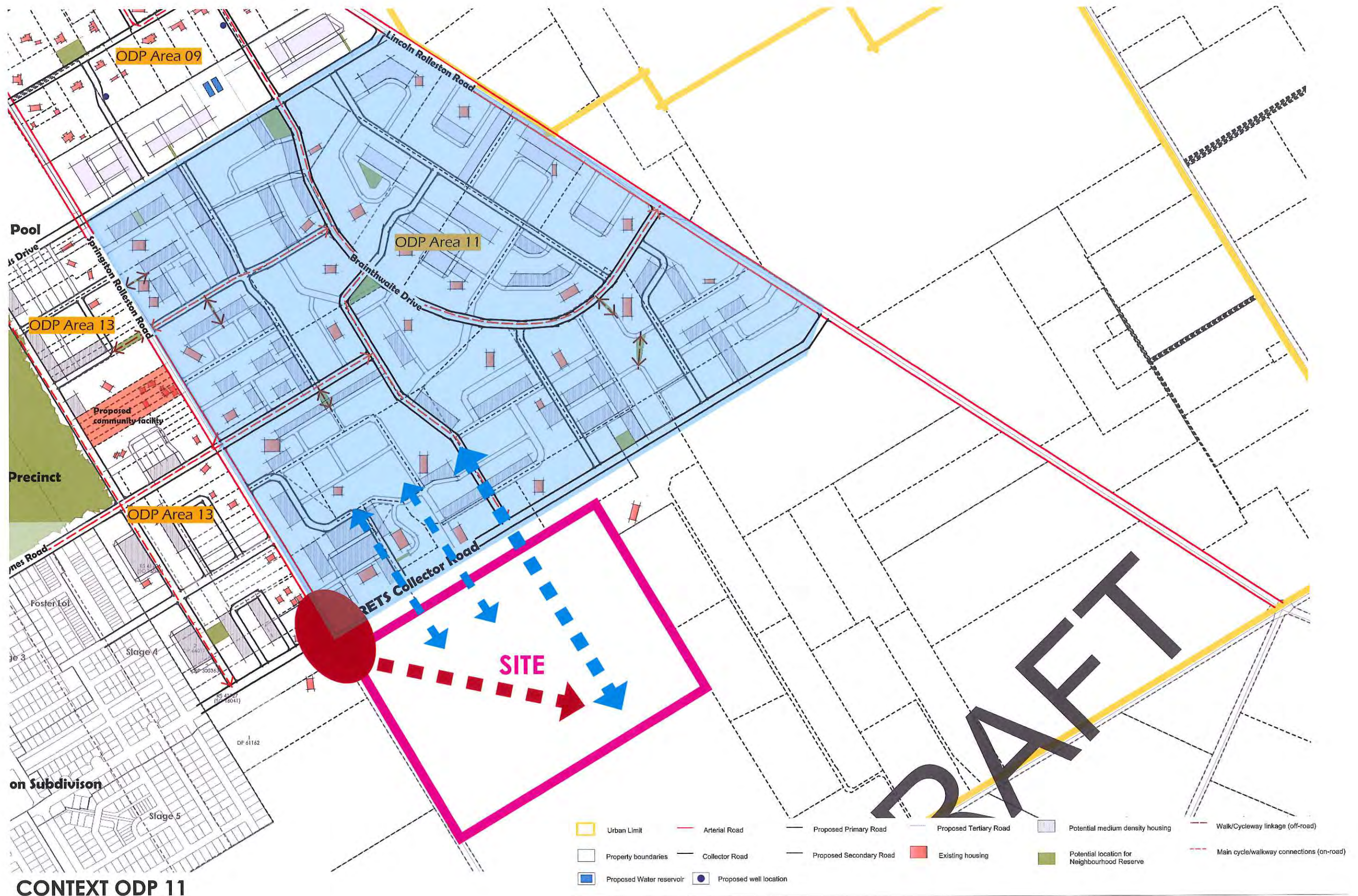
- | | | |
|--|----------------------|----------------------|
| The SITE | Town Centre | State Highway |
| deferred LZ ODP AREA 11 | Izone | Railway |
| existing 4ha and lifestyle blocks | proposed green space | existing major roads |
| Farrington urban residential development | | Branthwaite Drive |

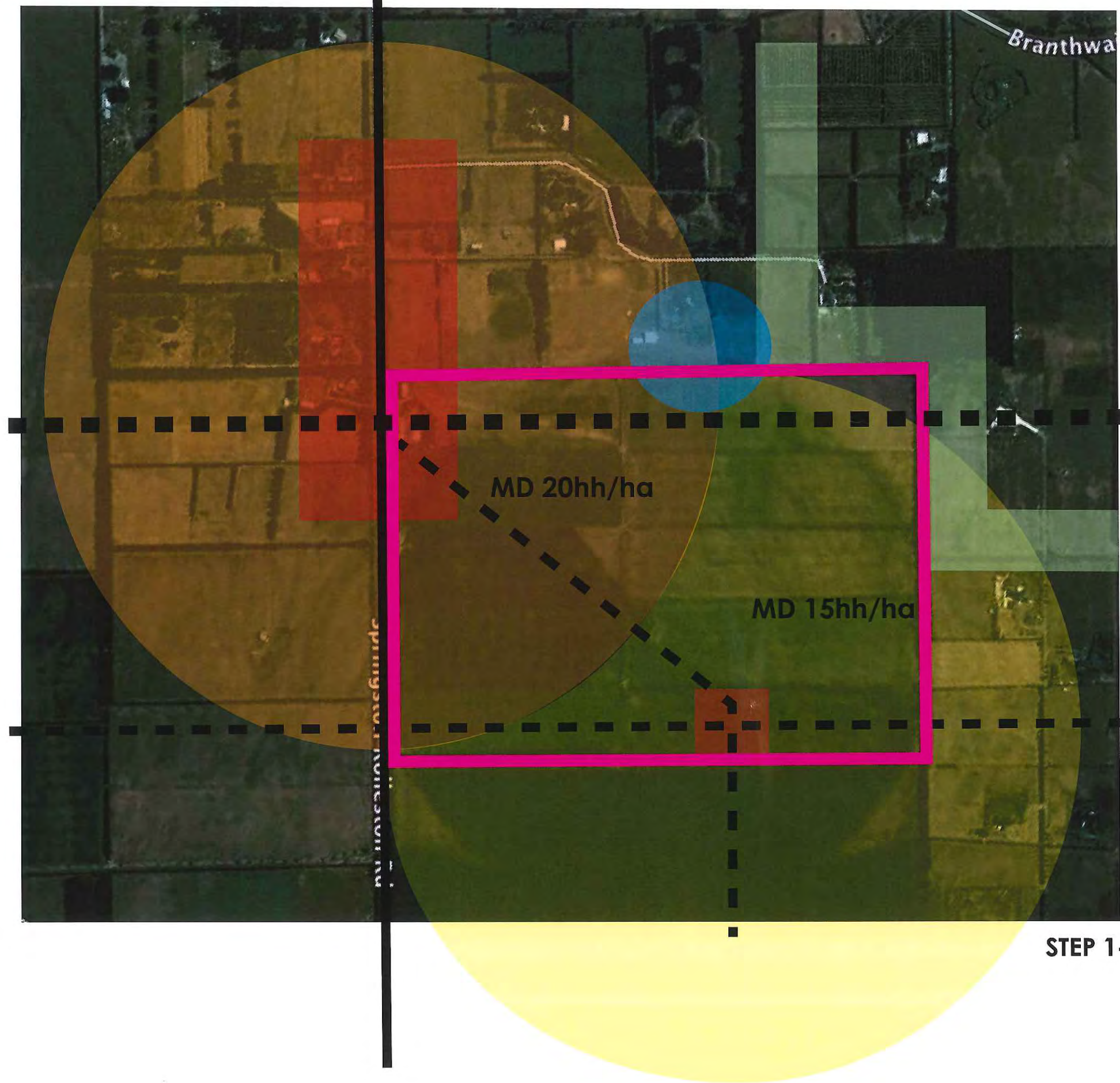
ROLLESTON L2 OVERALL OUTLINE DEVELOPMENT PLAN





CONTEXT FARRINGDON





KEY

landuse

- commercial
- medium density 20hh/ha
- medium density 15hh/ha
- school overlay

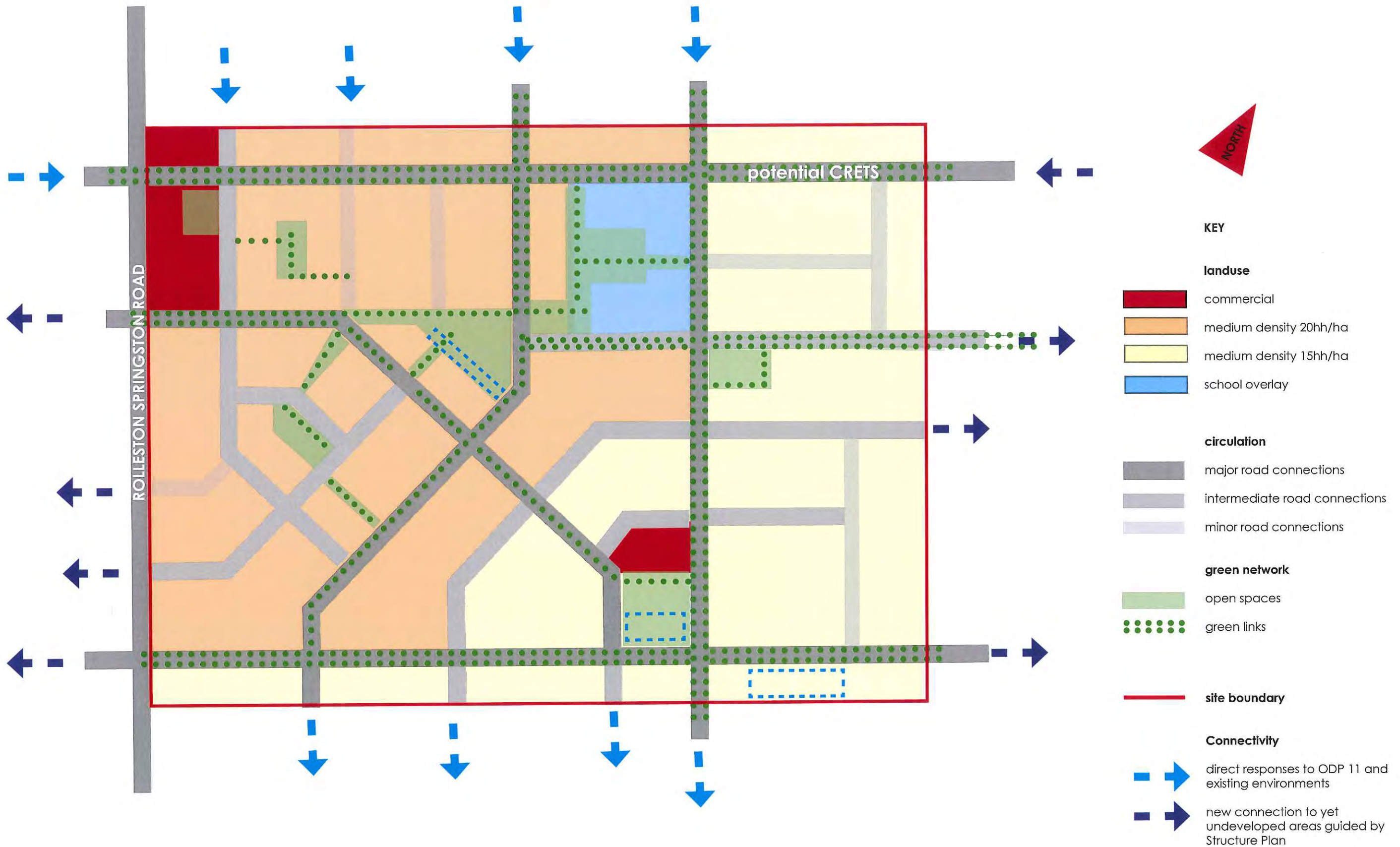
circulation

- CRETS road
- key connections

- green network

- site boundary

STEP 1- SITE AERIAL with STRUCTURE PLAN OVERLAY



STEP 2- STRUCTURAL LAYERS



ROLLESTON SPRINGSTON ROAD

potential CRETS

KEY

landuse

- commercial
- medium density 20hh/ha
- medium density 15hh/ha
- school overlay

road hierarchy

- major roads
- intermediate roads
- minor roads

open space

- parks / reserves
- stormwater management areas

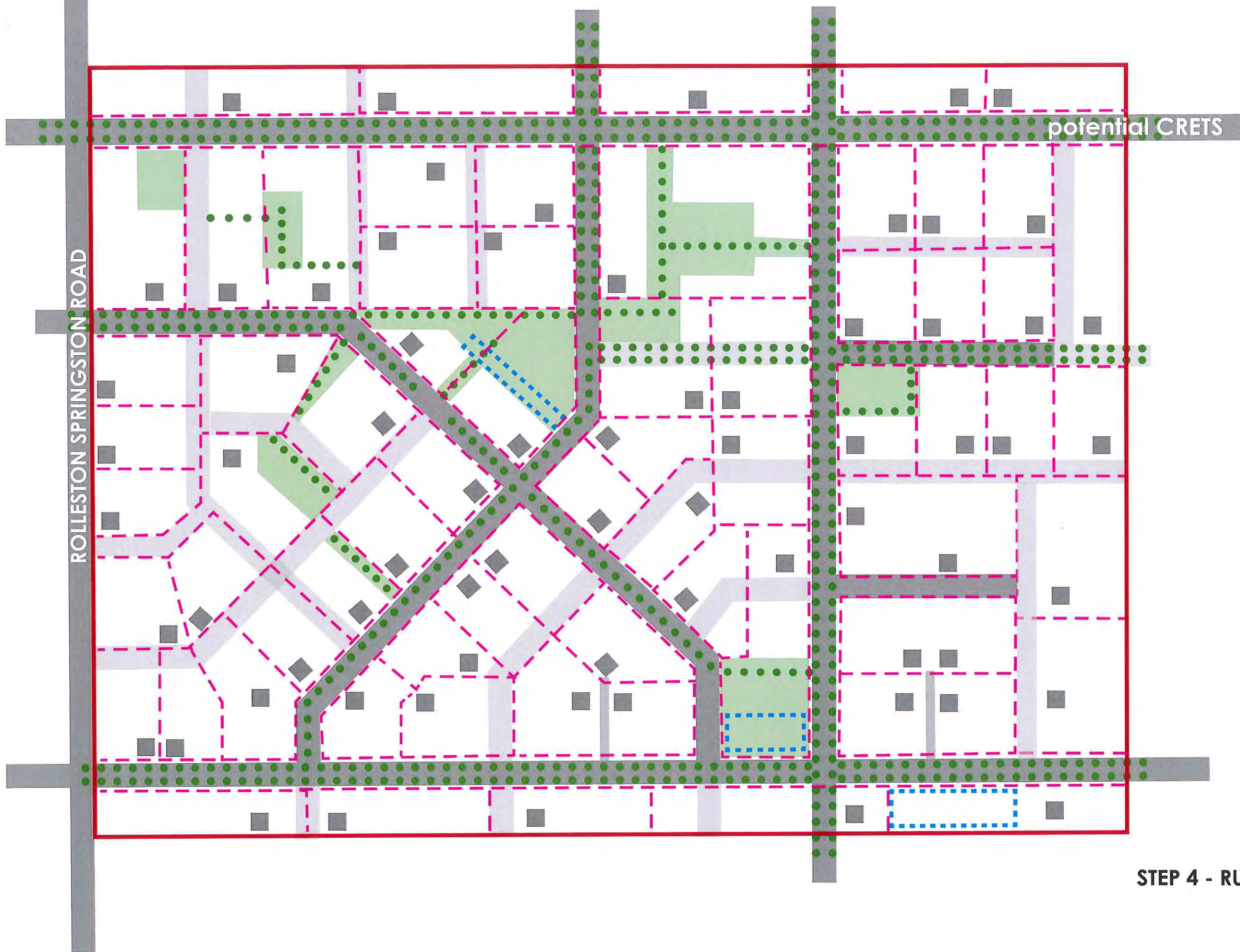
buildings

- RR dwellings integrated into MD layout

boundaries

- site boundary
- rural residential lot boundaries
- medium density lot boundaries

STEP 3 - MEDIUM DENSITY LAYOUT



KEY

landuse

Rural residential
average lot size 5000m²
lot sizes ranging
from 2500m² to 1.5 ha

circulation

rural residential road layout
future road layout to support
medium density

open space

parks / reserves
stormwater management
areas

buildings platforms

rural residential building
platforms

boundaries

site boundary
rural residential lot
boundaries

STEP 4 - RURAL RESIDENTIAL LAYOUT