

BEFORE THE SELWYN DISTRICT COUNCIL

IN THE MATTER of the Local Government Act 2002

AND

IN THE MATTER of a submission by TRENTS
ROAD DEVELOPMENTS on the
draft Rural residential Strategy
2013

**BRIEF OF EVIDENCE OF NICOLE LAUENSTEIN FOR
PREBBLETON WEST – TRENTS ROAD DEVELOPMENTS**

10 APRIL 2014 DRAFT

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QUALIFICATIONS AND EXPERIENCE

1. My name is Nicole Lauenstein. I have the qualifications of Dipl. Ing Arch. and Dipl. R.U.Pl.; equivalent to a Master in Architecture and a Master in Urban Design (Spatial and Environmental Planning) from the University of Kaiserslautern / Germany. I am an elected member of the Urban Design Panel in Christchurch and a member of the UDF (Urban Design Forum). Before moving to New Zealand I was a member of the BDA (German Institute of Architects).
2. I have practised as an Urban Designer and Architect for the past 15 years in Germany, Spain, Australia and New Zealand. The first 5 years I established my own architectural and urban design practice in Germany, the last 15 years I have been a director of a+urban based in Christchurch.
3. In both practices I have undertaken many projects combining the architectural and urban disciplines. Projects have been varied in scale and complexity from urban revitalisation of city centres, development of growth strategies for smaller communities, architectural buildings in the public realm and private residential projects in sensitive environments.
4. Prior to my arrival in NZ I worked for several European Architects and Urban Designers 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.
5. Since moving to NZ 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.
6. I have taught as a guest lecturer at Christchurch Polytechnic architecture and urban design and at Lincoln University Landscape Architecture Department teaching urban design at graduate and post graduate level.

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.
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)
9. Most recent urban design and architecture work includes:
 - Papa Otakaro Avon River and East/North Frame concept design, Christchurch Central City
 - Kirimoko residential development in Wanaka Stage 2
 - Urban analysis and strategic plans related to Selwyn District Council Rural Residential Strategy (RRS) submissions
 - Masterplans for Greenfield development in Lincoln (Flemington)
 - Mixed Use development on Hagley Avenue, Christchurch
 - New Tait Building and Masterplan, north west Christchurch
 - Several commercial and residential 'rebuild' projects in Christchurch
 - Master Plans for Inner City block infill and brown field conversions in Christchurch.
 - ODP's for rebuild projects in the Christchurch CBD
10. I have read the code of conduct for expert witnesses contained in the Environment Court Practice Note and agree to comply with it. I will only provide expert opinion within the area of my professional expertise.

SCOPE OF EVIDENCE

- **Background**
- **Analysis and methodology and best practice**
- **Introduction**
- **Site, location and context**
 - a. Site and location

- b. Neighbouring developments
- c. Wider urban and rural environment - growth and consolidation
- **Development potential/options**
 - a. 'Do nothing' - benefits and issues
 - b. 4ha lots - benefits and issues
 - c. Peri-urban rural residential - benefits and issues
 - e. Future proofing
- **Development strategy/proposal for the Site**
 - a. Overarching structure
 - b. Future proof plan MD
 - c. Extracting rural residential lots and building areas
 - d. Planning mechanisms
 - e. Landscape buffers, edge treatment reverse sensitivity

BACKGROUND

11. Due to my involvement in rural residential and urban developments in the wider Christchurch area, through participation in Proposed Change 1 to the Canterbury Regional Policy Statement (PC1), Plan Change 7 to the Selwyn District Plan (Rolleston and Lincoln), and several private plan changes, I have gained a good insight into the various aspects that contribute to the urban development patterns of the Townships in the Selwyn District. I have continued to observe the increased growth of Prebbleton since the Christchurch earthquakes. And through several visits to the Site and the Township I have gained a good understanding of the current and future urban and rural form, and the resulting development potential of the Site and its relationship to Prebbleton.
12. I was engaged by Trent Road Developments Ltd a few months ago to investigate the development options for the xxha site in the west of Prebbleton and provide a strategy for the owner to develop the Site into rural residential properties. A site and context analysis was undertaken as well as a study of the Prebbleton Structure Plan and other relevant urban

and planning requirements/documents to ensure the proposal will integrate into the wider context and future planning of Prebbleton Township. Similar to the SDC Rural Residential Strategy (RRS) 13 (Appendix 2 Map 24) my own urban assessment has identified the Site as a desirable and very likely future urban growth path to facilitate the preferred urban form of Prebbleton Township.

13. A site and context analysis was undertaken as well as a study of the Prebbleton Structure Plan, the Draft RRS and other relevant urban and planning requirements/documents to ensure the proposal will integrate into the wider context and future urban planning of Prebbleton.
14. I have read the officers report and will respond to still outstanding matters related to urban design and urban planning at the end of my evidence unless they have been sufficiently addressed in earlier paragraphs

ANALYSIS, METHODOLOGY AND BEST PRACTICE

15. In my analysis I have taken the 'Best Practice guidelines' from the ministry of the environment into consideration such as:
 - Urban design protocol
 - Urban design toolkit
 - Creating great places to live work and play, liveable urban environments: process strategy and action
 - People places and spaces: a design guide for urban New Zealand

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

16. The urban design protocol identifies a combination of design processes and outcomes known as the "7 C's" - 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 recognized principles and provide a good general checklist of qualities that need to be considered to achieve quality urban and RR outcomes.
17. The Prebbleton Structure Plan (PSP) provide important information on the wider context of Prebbleton with regard to all aspects of growth

management such as transport, housing, open space, rural residential activities, culture and heritage, commercial centres, connections to Christchurch, integrated landuse, storm water treatment, connectivity of green and movement networks and sustainability in the wider sense.

18. I have also taken guidance from the references to urban design matters in the Land Use Recovery Plan (LURP) and the Draft 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.

INTRODUCTION - RURAL RESIDENTIAL

19. 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.
20. 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
 - allow a range of choices of housing types
 - avoid inefficient use of land and infrastructure
 - protect future urban expansion options
 - manage potential conflict with rural character and rural activities
 - consolidate rural residential development and avoid dispersal
 - monitor supply and uptake of rural residential activity
21. The RRS has identified several Rural Residential typologies, has correctly chosen the most appropriate typology for peri-urban areas namely the peri-urban rural residential type and decided on a selected few locations where these should be implemented in the next 5 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.

22. If the RRS is to really manage RR 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.
23. The officer in paragraph 1.13 introductory statement 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*

24. 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.

4ha Rural residential lots - benefits and issues

25. The peri-urban land around townships sits within the Inner Plains IP, which allows 4ha lots 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 2000-3000 m² all inclusive - dwelling and associated access and domestic curtelage. In summary it often is a waste of productive land.
26. 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.
27. 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.
28. 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 compromising the desired outcome.
29. 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.
30. 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

31. 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 town
10	Place to retire

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

32. This is a clear indication that within peri-urban environments directly adjoin urban limits the peri-urban rural residential development is the more desirable typology and this applies particularly to Prebbleton due to its proximity to Christchurch.

Peri-urban rural residential - benefits and issues

33. 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”

34. 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.

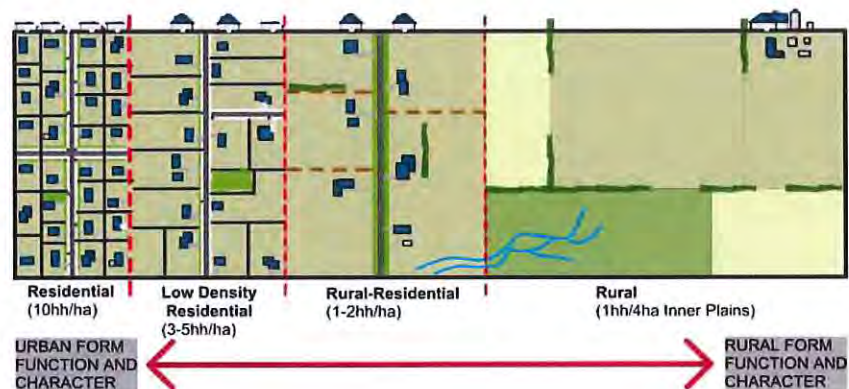


Figure 8: Land use spectrum



Figure 9: Photos illustrating the land use spectrum

35. 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*
36. 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.

37. 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.
38. 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 (future proofing).
39. To clarify this point; there are two different categories of peri-urban rural residential development:
 - (1) 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.
 - (2) 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.

40. 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.
41. 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.
42. Using this rural residential development type to its full potential of gives the planning authority tools to properly direct urban growth into the most appropriate locations on the perimeter of rural townships and also gives clear direction to landowners in peri urban areas how heir 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 other detail.
43. 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 be included **in principle** in the RRS 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
44. 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 to strengthen urban form
45. 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 urban dispersal in the long term.

Urban Growth

46. 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.
47. Urban growth is a 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:
- larger Greenfield developments
 - gradual linear and/or concentric expansion of a settlement
 - infill/ intensification of existing areas
 - landuse change i.e. Brownfield developments.
48. All 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, affordability, etc - but in particular proximity and connectivity, as they tend to build on or extend existing features and services versus 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.

49. 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 constraining factors (financial, infrastructure, time to name a few). 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, urban growth paths 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.
50. Structure plans are the main tools to manage the anticipated growth and this has been done for Prebbleton, Lincoln and Rolleston 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 land within the new urban limits. They do not address the land on the other side of the line, the peri-urban land but do rely on the peri-urban land to work in partnership and provide the necessary response such as forming a boundary, dealing with reverse sensitivity, allow for future growth, forming gateways etc.

Urban Form

51. 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 effect the urban form such as 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 try to be 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.

52. 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 features 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 to go from one to the other i.e. stream, a contour change, strong vertical elements such as trees and dense vegetation, against uninterrupted open space. Abrupt Change and contrast are the two elements that create boundaries and are most successful at defining and containing urban form.
53. 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 on it is important that they provide their own distinctive rural character which differentiates them from the urban environment and assist in the creation of gateways/thresholds from rural to urban

SITE, LOCATION AND CONTEXT

Refer to graphic supplement location and site plan GS1 & 2

54. The Rhodes Family together own approximately 22ha of land located west of Prebbleton stretching from Hamptons Road to the south through to Trents Road to the north. The centre of the Site is approximately 1.5 km from the centre of Prebbleton as the crow flies. It is currently zoned Rural Inner Plains and is surrounded by rural lifestyle blocks of varying sizes to the east, north and west, and by agricultural land to the south. The site is a classical example of smaller rural parcels that are too small to work as sustainable farms and are mainly used for supplementary farming activities. The Site has common rural characteristics with established planting in the form of shelterbelts surrounding open grassed paddocks. There are two established dwellings with the traditional domestic curtilage.

55. Within the context of Prebbleton this is a fairly large site in single ownership, which allows for a cohesive, comprehensive and coordinated development. It can avoid the common issues that arise with piecemeal developments of small individual sites or compromises that have to be entered into, as a result of multiple ownerships. From this perspective the Site is well suited for a peri-urban development with an underlying structure for future growth.
56. The Site has not been identified as a preliminary peri-urban rural residential site by the Draft RRS, although it meets most of the location criteria for the placement of peri-urban rural residential development. This is due to it being located within the preferred urban form of Prebbleton and as such could be a potential urban growth path. Location Criteria for Prebbleton (Appendix 1 page 10) states that rural residential locations should:
- *'Preserve the obvious growth path west of Springs Road between Trents and Hamptons Roads, which presents a long term opportunity to achieve a compact concentric urban form for Prebbleton'*

In order to accommodate this potential future urban growth the RRS has taken the position to avoid peri-urban rural residential development on the Site. From a '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, should this be required in the future. . (Refer to Branthwaite Drive ODP 11 – Rolleston)

57. There is an alternative approach to achieve the preferred urban form and preserve a potential future urban growth path on this Site. It can be achieved by future proofing a peri-urban rural residential development so it can transform into a future urban environment should this be required. From an urban design point of view this would be a better process *'to preserve the obvious growth path and presents a long term opportunity to achieve a compact concentric urban form for Prebbleton'* even if not developed to full urban densities. It provides more certainty and more flexibility, as it can be integrated into a low-density residential environment

in the future if this is indeed required or can continue to exist as a well-connected peri-urban rural residential development.

Context – immediate neighbours - Refer to graphic supplement GS2

58. 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.
59. **North** – The site shares a road boundary with the Kingscraft Drive Development Area. This is an existing rural residential enclave stretching from Trents Road to Blakes Road with a variety of lot sizes averaging approximately 1ha per ha. Two lots directly opposite the Site to the north have direct access fronting Trents Road, further towards Shands Road property sizes increase. The RR proposal for the block at the Trents and Shands Road (also RRS submitters) has been identified by the RRS as a preliminary RR Site. Distance to Springs Road along Trents Road is approx 1km.
60. **East** – within the northern portion of the Site the eastern boundary consists of a well-established cluster of vegetation with a single dwelling nestled within. In the southern portion of the Site the eastern boundary is flanked by a row of silver birches, which allows selected views through to the neighbouring site. A single dwelling is well set back approximately 150 metres to the east.
61. **South** – Hamptons Road allows views to the Southern Alps and has been identified as an important road connection in the future leading to the southern motorway extension via Shands Road. The land to the South is of a distinctly open rural character with expansive views a pastoral land
62. **West** – rural residential of varying sizes (4ha and smaller lifestyle blocks) with established tall shelterbelts along the majority of the western boundary and a small forest block. 2 dwellings in close proximity to the western boundary visually and physically separated by shelterbelts.

Context - wider urban and rural environment – growth and consolidation

Refer to graphic supplement GS3 & GS4

63. The Site directly adjoins the residential areas and is well connected with the centre of Prebbleton. It is not part of the current urban fabric of

Prebbleton but adjoins the existing lifestyle blocks to the north and is in close proximity (400m) to the edge of the current Prebbleton Township to the east. Its location is a natural future growth path for development linking the northern and eastern parts of the township and has been identified as part of the preferred urban form for Prebbleton. (RRS map 24)

64. There is no direct correlation between the preferred form of the township and the requirement for urban-scaled development on the site. The most important aspect in the context of the preferred urban form is the connectivity, character and consolidation of development. The way it integrates into the township structure and creates an edge to the urban form along Hamptons Road and towards the west to Shands Road. Depending on the actual rate of urban growth and the demand for rural lifestyle blocks, the area within the preferred urban form could accommodate urban development and/or peri-urban rural residential development.

DEVELOPMENT POTENTIAL / OPTIONS FOR THE SITE

'Do nothing and wait' – benefits and issues

65. The approach to 'do nothing' and keep the agricultural use until the land is 'legally opened' as a growth path for urban scale low density residential development might seem at first glance a good solution as it allows the entire block to be developed as one entity for one purpose. However, the risk of the site being carved up into 4ha blocks is high as the owner wants to develop and the opportunity to integrate this site into the preferred urban form could well be undermined.

Standard 4ha Rural residential lots - benefits and issues

66. 4 ha lots are the natural fallback position for the site and could be established as of right. They would be consistent with the current rural lifestyle development pattern in the area (in combination with smaller 1- 2 ha blocks in the Kingcraft Drive Existing Development Area) not contribute to the creation of preferred urban form as their density is too low. 4ha lots are by nature rural in character and mostly 'self-contained' creating an introverted environment. Access would most likely be off Trent and off Hamptons Road and limited to linear driveways with multiple easements to service several lots or several individual long driveways adjacent to each other but

without providing connectivity through the site. Dwelling location and orientation and setbacks etc. would be determined by access points and views shelter with no consideration for future intensification which will make retrofitting this environment into an urban density very difficult, no provision will be made for good links across boundaries to neighbours as dwellings are treated like islands within a larger site. Refer to ODP 11 Rolleston)

Future proofing the proposed Site

67. An 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 an urban density 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 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.
68. If a peri-urban rural residential development is specifically designed from the outset through design, planning and legal mechanisms it can be future proofed to become a successful urban environment should this be required but can also continue to exist as a peri-urban rural residential environment.

DESIGN PROPOSAL STEP BY STEP

69. As mentioned in earlier paragraphs there are generally two different types of growth patterns; gradual infill and planned expansion. The proposal aims to combine the benefits of both approaches to achieve a diverse outcome with sufficient level of control and certainty through a more natural process of planned gradual intensification, if required.

Step 1 - structure and layers Refer to graphic supplement plan GS5

70. The starting point is the creation of an overarching spatial structure that allows the Site to integrate into the urban form of the township, provides connectivity, builds on or introduces important landscape features and

resolves edge treatment, enables views, organises access and circulation, locates gateways and make them an integral part of the design and layout.

71. This is followed by introduce the key internal 'layers' that inform the site's character and layout, and further develop them to a level of detail to be able to place individual elements, for example
 - a. Establish road hierarchy to the detail where road reserve widths can be locked in,
 - b. Establish location and size 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 urban development
 - d. Identify the type and requirements for SW management for the final MD development and locate the treatment and conveyance areas to ensure they are not build upon
 - e. Identify other important elements/qualities (such as pedestrian and cycle connection, viewshafts, existing landscape to be retained) to a level of accuracy so that they can be located/placed with certainty to ensure these qualities 'survive' the development process

Step 2 – 'future proof' plan Refer to graphic supplement plan GS6

72. This second step establishes the urban base plan containing all the important urban elements that underpin urban development in accordance with the Prebbleton Structure Plan intentions, for example:
 - a. Develop an urban residential layout based on the detailed elements mentioned above, in particular ensure that the unique character of the Site and the Prebbleton area are incorporated
 - 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 low-density layout and typology suitable for the Prebbleton environment.

73. **Step 3 – peri-urban rural residential lots and building areas Refer to graphic supplement plan GS7**

- a. 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.
- b. 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.

74. **Step 4 – planning and legal mechanisms**

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

75. **Step 5 - Landscape buffers, edge treatment reverse sensitivity**

Provide solutions for edge treatment where reverse sensitivities may arise as a result of rural activities adjacent to residential activities. This is a important aspect were residential activities face productive rural land. The nature of the Site already provides good solutions towards the east with extensive shelterbelts and activities to the north and east are in not sensitive to the residential development of the Site. This leaves the southern interface with Hamptons Road and the rural activities beyond. This needs to be addressed carefully to ensure the solution works not only to mitigate reverse sensitivities but also supports the legibility of the urban form of Prebbleton. There are several solutions which can be used individually or in conjunction with each other:

- (1) Areas within the Site to remain a 'landscaped buffer' including stormwater areas;
- (2) Large shelter belts along the southern boundary;
- (3) Large properties along the rural interface to allow for building areas with a large setback to the rural boundary

NOT FUTURE PROOFING

76. Developing the Site as rural residential and not future proofing is not in accordance with best urban design and planning practice and undermines the urban design intentions and outcomes of the Prebbleton Structure Plan.

RURAL RESIDENTIAL ISSUES TO CONSIDER

77. Regardless of the density of the development on Site, whether rural or urban the rural residential issues identified in the Draft RRS need to be addressed. As a rural residential environment the development needs to meet the expectations and criteria of the RRS and therefore needs to negotiate some of the issues as they concern the Site. Potential Issues raised in the RRS report are addressed below:

78. Potential Issue: reverse sensitivity

- *Risk of adverse reverse sensitivity effects where new residents to an area are less aware of farming, rural industry or strategic infrastructure, which can lead to complaints and amenity conflicts that may undermine the viability of legitimately established land uses.*

Appropriate boundary treatment at the interface with rural activities is required along the Hamptons Road. The placement of larger lots along these boundaries means less potential for complaints and greater opportunity for larger setbacks and boundary planting. Retaining existing shelterbelts and planting a new shelterbelt along the southern boundary towards Hamptons Road also significantly mitigates the potential reverse sensitivities.

79. Potential Issue: loss of rural landscape values, dilution of contrast

- *It 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.*

To protect rural landscape values and productivity of the remaining rural land, urban and peri-urban sprawl beyond the anticipated preferred urban form needs to be avoided. The proposal can assist in this matter by creating a clear contrast between the urban and rural environments. Such

visual contrast is best created through distinct contrasts in density and landuse such as:

- The introduction of a clear gateway in and out of the urban area on Trents Road
- Create a strong western landscaped edge towards the larger rural properties
- The retention of strategic shelterbelts
- The use of strong structured landscaped treatment to the south to create discernible contrast and boundary along Hamptons Road
- Utilise the variety in lot sizes to increase densities towards the township
- Avoid individual property access points off Hamptons Road to strengthen Hamptons Road as a discernible southern boundary to the urban form of Prebbleton

The development itself is inherently of a rural character and designed to provide a rural edge to the urban fabric.

URBAN DESIGN MATTERS RAISED BY THE OFFICERS REPORT

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

80. *The 'preferred urban form' annotation on Map 24 of Appendix 2 of the RRS13 appears to be the basis for identifying the land as being appropriate for "future proofed" rural residential development. However, if the density of development in the nominated area is to be intensified, then it should only occur when it can be integrated with the urban form of Prebbleton to achieve a more compact concentric urban form. A separate process should be initiated to confirm the merits of extending the township to establish whether residential growth is appropriate further west of the existing boundary between Trents and Hamptons Roads. Such a review should not proceed until the 'Greenfield' land within the Township boundary is close to being exhausted in accordance with the LURP and Chapter 6. Given historic rates of take-up this is unlikely to be within the next 10 to 20 years at the earliest (refer to RRS Appendix 1 - Prebbleton Urban Form & Growth Management Locations Criteria)*

Any peri-urban land is by its nature under development pressure and a potential future growth path unless there are natural constraints or strong discernible and accepted boundaries, strong enough to contain the urban development. 10-20 years are minor timeframes when it comes to

urban growth, hence the future proofing approach - future proofing does not mean that the land has to be intensified to an urban density it just means it can if it has to - This is just best urban design practice to provide as much certainty and flexibility as possible.

81. *Rural residential development in this location could significantly complicate future residential development, which is discussed in detail under the 'Strategic Management Of Rural Residential Activities' section of this report. Development to rural residential densities would create an isolated node that is not integrated into the township, which would be costly and inefficient to service as it would not align with the sequencing of development or Council's infrastructure works programme (refer to RRS Appendix 1 - Prebbleton Urban Form & Growth Management Locations Criteria)*

With regard to the matter of isolation, I disagree with this statement that *Development of the Site to rural residential densities would create an isolated node that is not integrated into the township*. The site has been identified by the RRS as part of the preferred urban form, which clearly shows that it has the ability to integrate. Connections to the township would be achieved via Trents road; and new connections through the neighbouring land to the east with the aim to link up with connections identified in the Prebbleton Structure Plan. I am aware that most of the landowners to the east between the Site and the existing urban boundary have submitted in support of the RRS showing their land as within the 'preferred urban form' area for Prebbleton. They have confirmed their interest in the land being rezoned for urban residential purposes as soon as possible.

An alternative would be for their land to also be developed as 'future proofed' peri-urban rural residential development. However, there are more existing landowners on smaller parcels of land than the Trent Road Developments site so this may not be as straight forward as for the TRD site (but still possible). I note that the TRD site is closer to Prebbleton Township than proposed Preliminary Area 3 (Shands/Trents Rd corner).

82. *The general block contained by Springs, Shands, Hamptons and Trices Roads contribute to the character and amenity of Prebbleton through its semi-rural parcels and views towards the Southern Alps, with immediate development potentially undermining this amenity*

The block contains many large shelterbelts and several lifestyle blocks. There are no views to the Southern Alps from the Site itself. Such views occur along Hamptons Road. The open rural character is to the south of this block with Hamptons Road providing a good discernible boundary

between the peri-urban and urban landscape. The proposed development aims to keep the characteristics of the Site i.e. shelterbelt so this will not change the semi rural character of the block/Site which can currently only be seen in part along Hamptons Road. The entry point/gateways /thresholds into Prebbleton from Shands Road are currently ill defined and the development could assist in forming these. Immediate development of the Site as peri-urban rural residential would therefore not undermine the rural amenity as the existing characteristics are being integrated into the design and other measures are taken to preserve the natural landscape values of the site.

83. *Prebbleton has a discrete character and rural outlook, with significant numbers of rural residential development on the western periphery of the town placing pressure on existing community and infrastructure services and potentially undermining the character of the Township*

It is the 'Piecemeal' approach of development so far that has undermined the urban form and character of the Township. The RRS has the opportunity to rectify some of that and has clearly identified the Site as part of the preferred urban form. The original character of the Township has changed with the introduction of suburban style subdivisions and several rural lifestyle blocks - this is an expected part of growth and development - new proposals can continue to enhance the existing character - which the proposed design does in my opinion as it creates a well integrated peri-urban rural residential environment, which can gradually intensify to a low urban density whilst retaining key rural characteristics such as road design and streetscape, shelterbelts and landscape treatment, views and open space.

84. *There is sufficient Living 3 zoned land and land supported for inclusion in the Strategy within Prebbleton that better aligns with the Locations Criteria to provide housing choice in the short term than the nominated sites*

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

From an urban perspective the Site should be considered for inclusion at an early stage as it meets all the relevant criteria and should be developed to enable it to form an important part of the 'Preferred Urban Form' of the township in the short and long term. To ensure the Site can contribute appropriately to this urban form it is important to allow the Site to develop in a comprehensive manner and avoid it becoming the default standard 4ha solution. 4ha blocks will not only be very problematic to integrate and retrofit but also contribute little to the urban form.

85. *With on-going monitoring and reviews determining the necessity and appropriateness of additional sites with the recommended 5 year timeframe (refer to RRS13 Appendix 1 – Prebbleton Urban Form, Function & Character Locations Criteria)*
86. 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
87. The Officers Report has identified very import 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 the OR, which only addresses a minor segment of the entire peri-urban land, and standard best practice in the urban design field, where it would be expected that a RRS would address all peri-urban land with a consistent

short and long term approach giving more certainty that the desired outcome is achieved.

88. The Draft RRS seems to only address selected peri-urban rural residential developments versus providing a solution for peri-urban land, which, as a result, will continue to be under urban development pressure. Through the RRS the Council has the opportunity to look further into the relationship between the peri-urban land and natural urban growth patterns and the necessity to control urban sprawl – identifying a few parcels to be developed as peri-urban rural residential will not solve this tension. Using peri-urban development strategically around the perimeter of rural Townships to future proof growth paths or constrain urban expansion where boundaries are vulnerable makes far more sense.

CONCLUSION

89. 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 the peri-urban rural residential offers to provide an even 'sharper' tool to control and direct growth on the perimeter of rural townships.
90. The selection criteria for the individual townships listed in the appendix 1 has in my opinion also been applied in a somewhat arbitrary way with preferred locations being included although they meet less of the criteria than other proposed areas. I assume that this is a result of the fact that these areas were undergoing plan changes not because they are the most suitable locations.
91. The Site is a natural growth path and has been identified as being within the preferred urban form. To achieve this preferred urban form it needs to be developed in a manner that integrates it into the township in the short and long term. This excludes larger rural residential developments, such as the standard 4ha lot as this typology does not integrate well and is distinctly different to the urban fabric of Prebbleton. Peri urban rural residential development has the ability to create a distinctive character that can better integrate with the urban form of Prebbleton.

92. Development of a peri-urban rural residential scale with an average lot size of 0.5ha can create an underlying structure, lot layout, connectivity and circulation pattern that can integrate well into the urban form of the Township. With the additional 'layer' of future proofing such 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 adjacent to it.
93. 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.
94. For this particular Site in the context of the urban form and growth pattern of Prebbleton the future proofed approach has some clear advantages over the avoidance of peri-urban rural residential development:
 - Retains certainty and flexibility for long-term planning and growth
 - Avoids retrofitting of services, roading and boundaries resulting in difficult and inefficient layouts if it needs to be intensified
 - Assists in the realisation of the preferred urban form at an early stage encourages movement patterns, connections and user patterns within the rural environment without committing to a definite urban growth path and additional urban development
 - Provides rural residential lifestyle in a concentrated area in close proximity to a township encouraging consolidation and avoiding rural residential dispersal into the wider Inner Plains

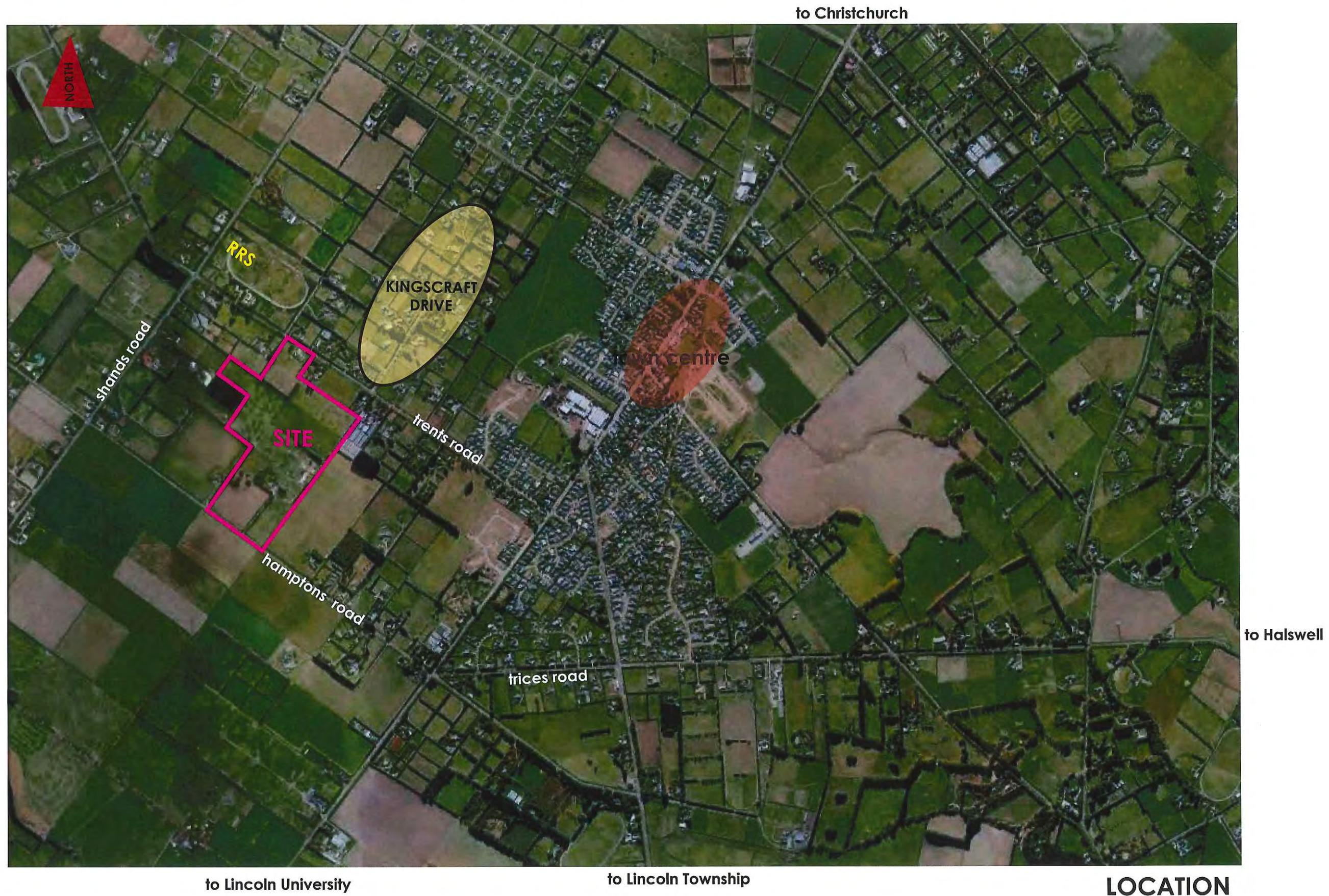
Nicole Lauenstein - 10 April 2014

URBAN DESIGN EVIDENCE
Nicole Lauenstein

GRAPHIC SUPPLEMENT

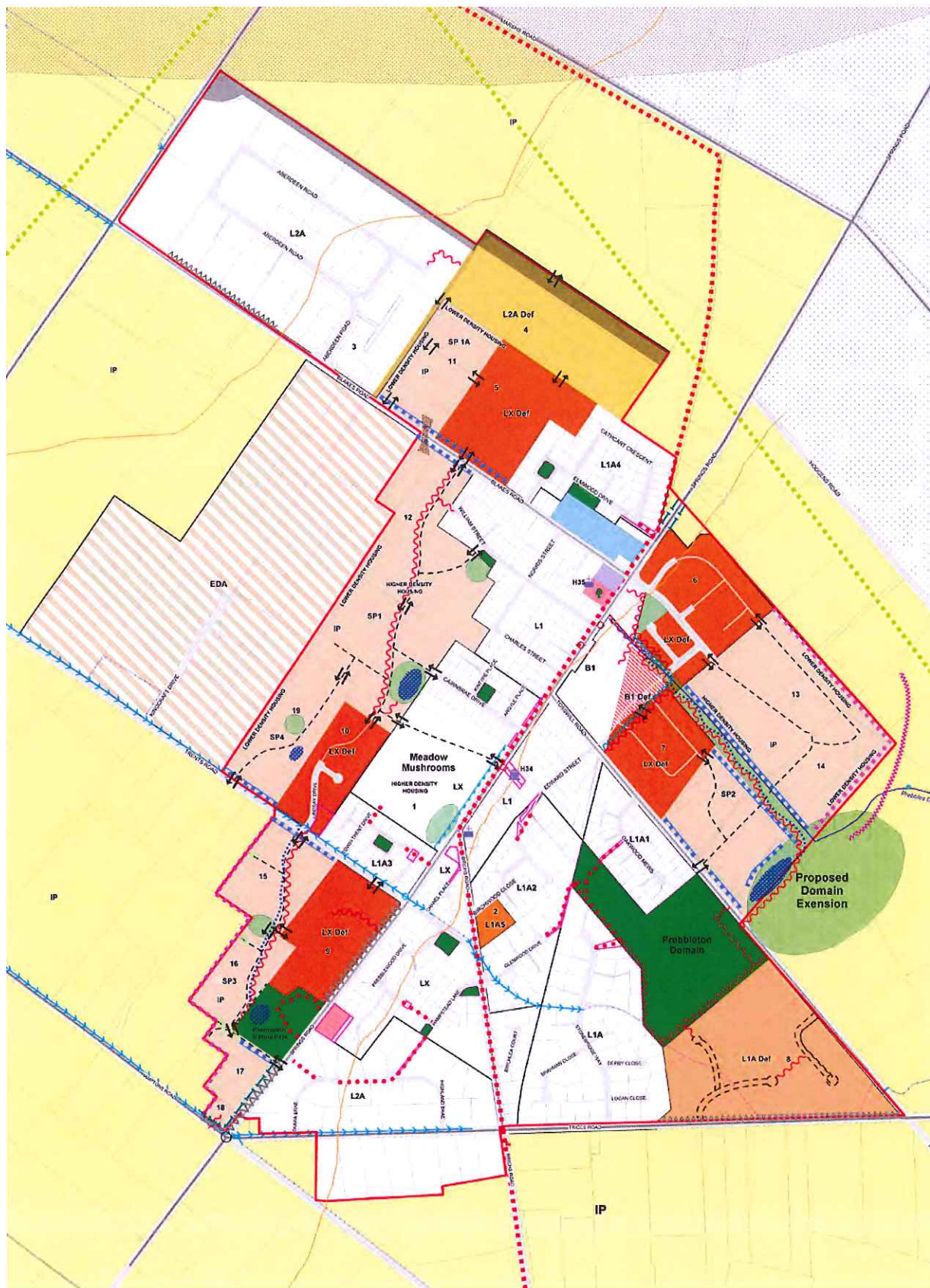
TRENTS ROAD DEVELOPMENT - PREBBLETON WEST

SDC Rural Residential Strategy
HEARING

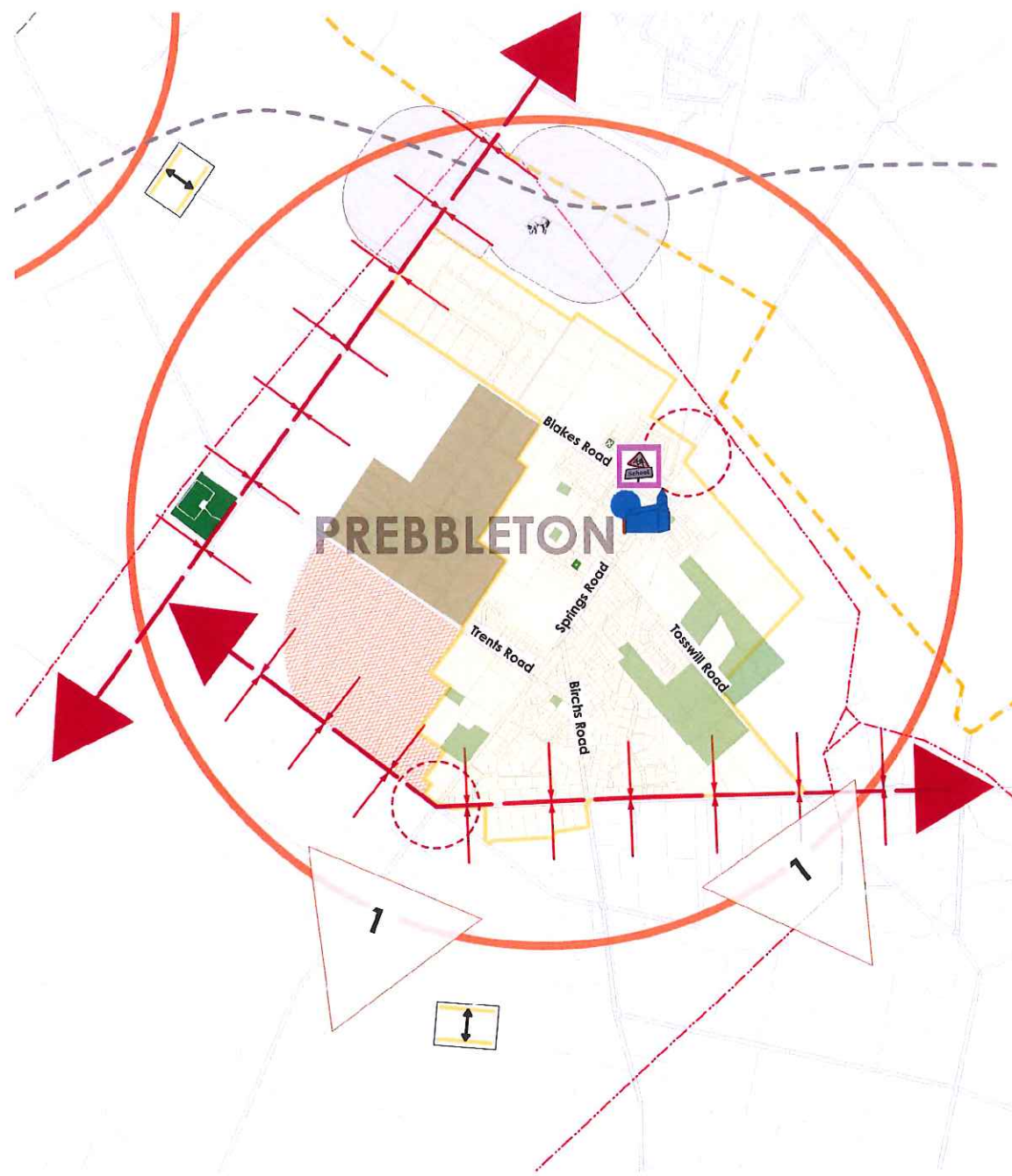




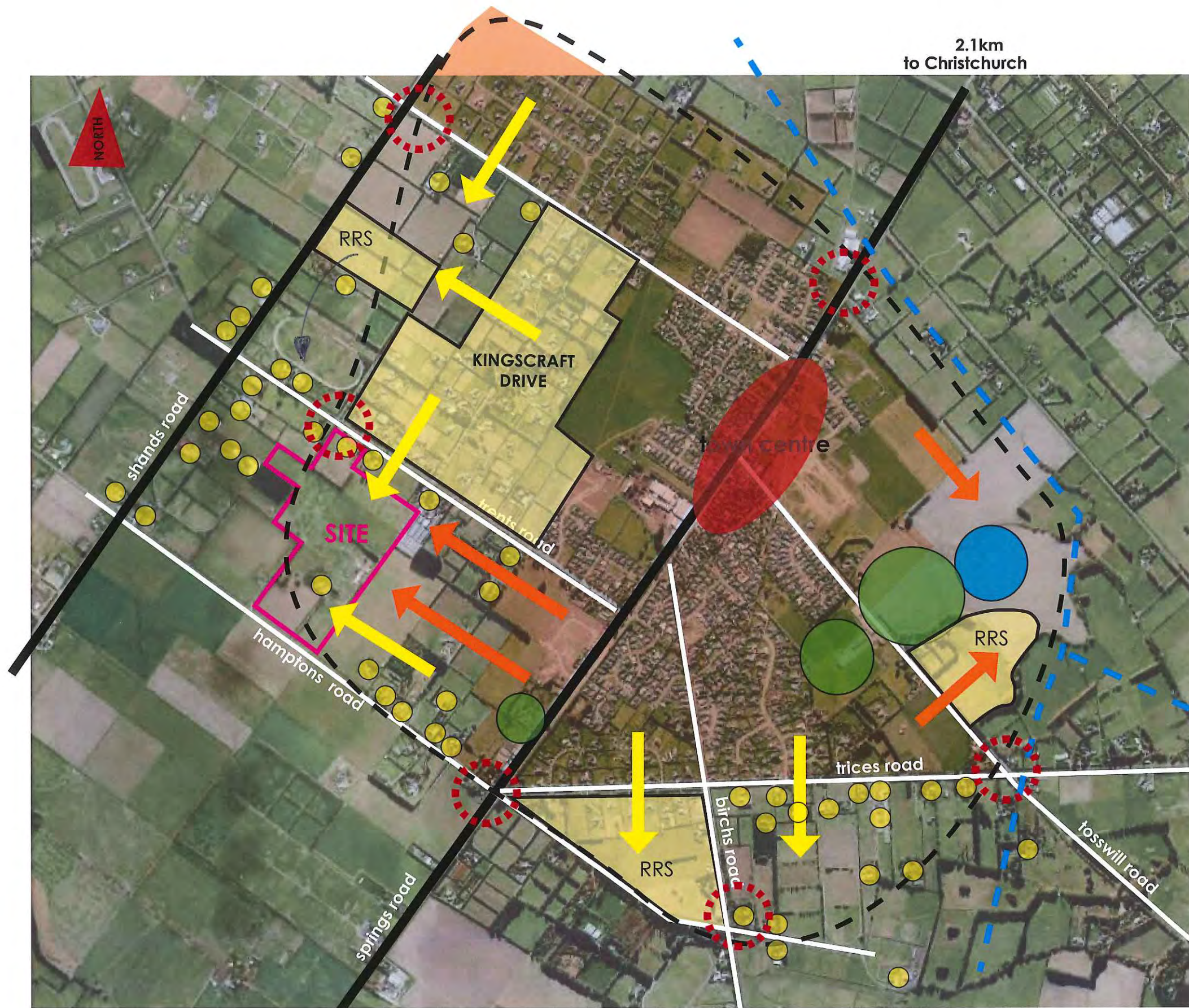
SITE AND NEIGHBOURHOOD



PREBBLETON STRUCTURE PLAN



PREBBLETON CONSTRAINTS AND OPPORTUNITIES MAP

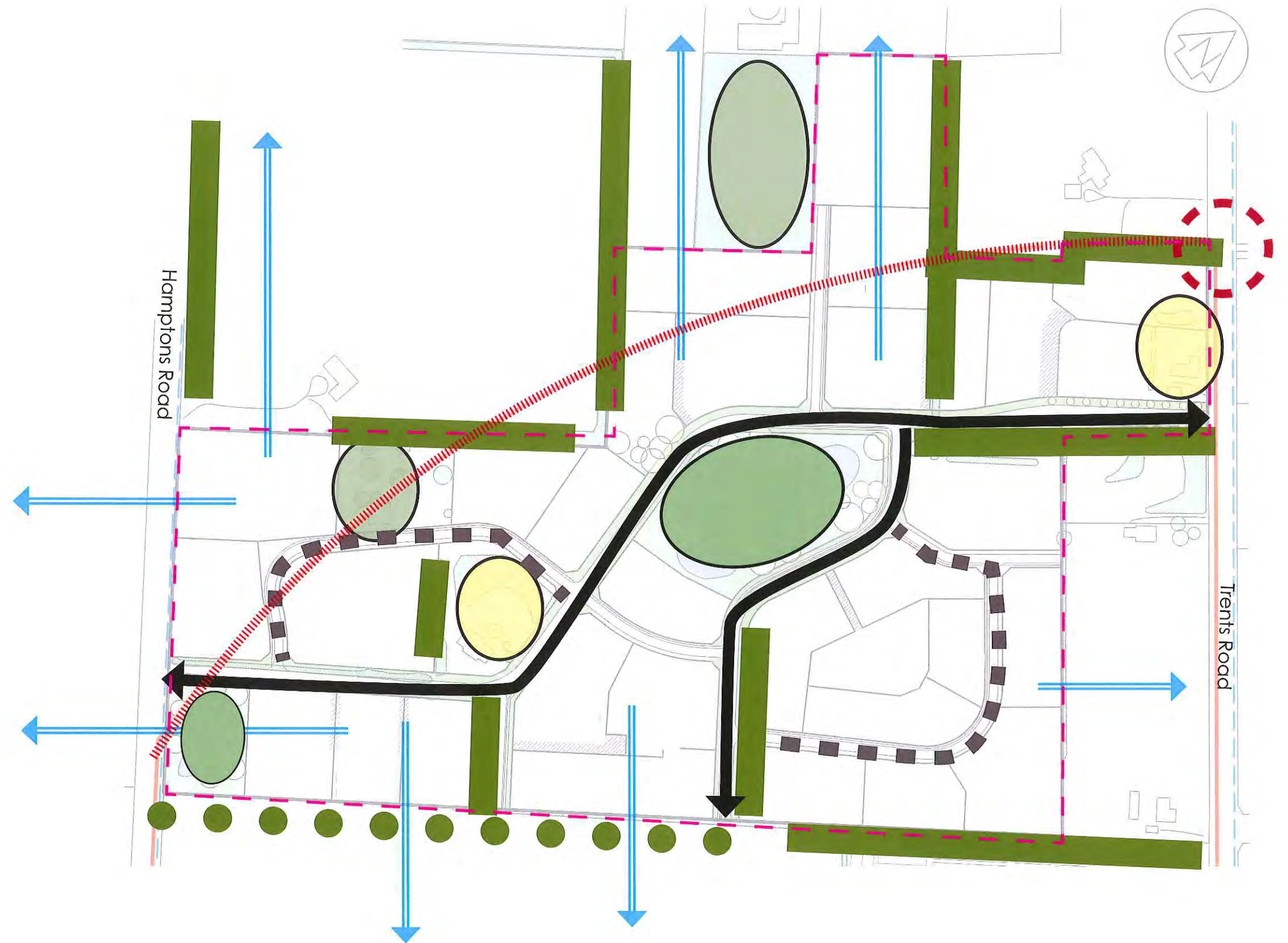


- KEY**
- extent of urban residential
 - urban growth pressure
 - rural residential growth
 - recreation / domain
 - existing and proposed proposed rural residential development
 - town centre
 - SW areas
 - gateways into Tai Tapu township
 - rural dwellings and farmhouses
 - major roads
 - key rconnections
 - concentric urban form

GRAPHIC SUMMARY OF URBAN ANALYSIS

KEY STRUCTURAL ELEMENTS

-  open space and SW treatment
-  existing landscape features
-  existing dwellings
-  gateways into township
-  rural dwellings and farmhouses
-  key rconnections
-  internal distribution
-  rural outlook
-  preferred urban form



UNDERLYING STRUCTURES AND LAYERS

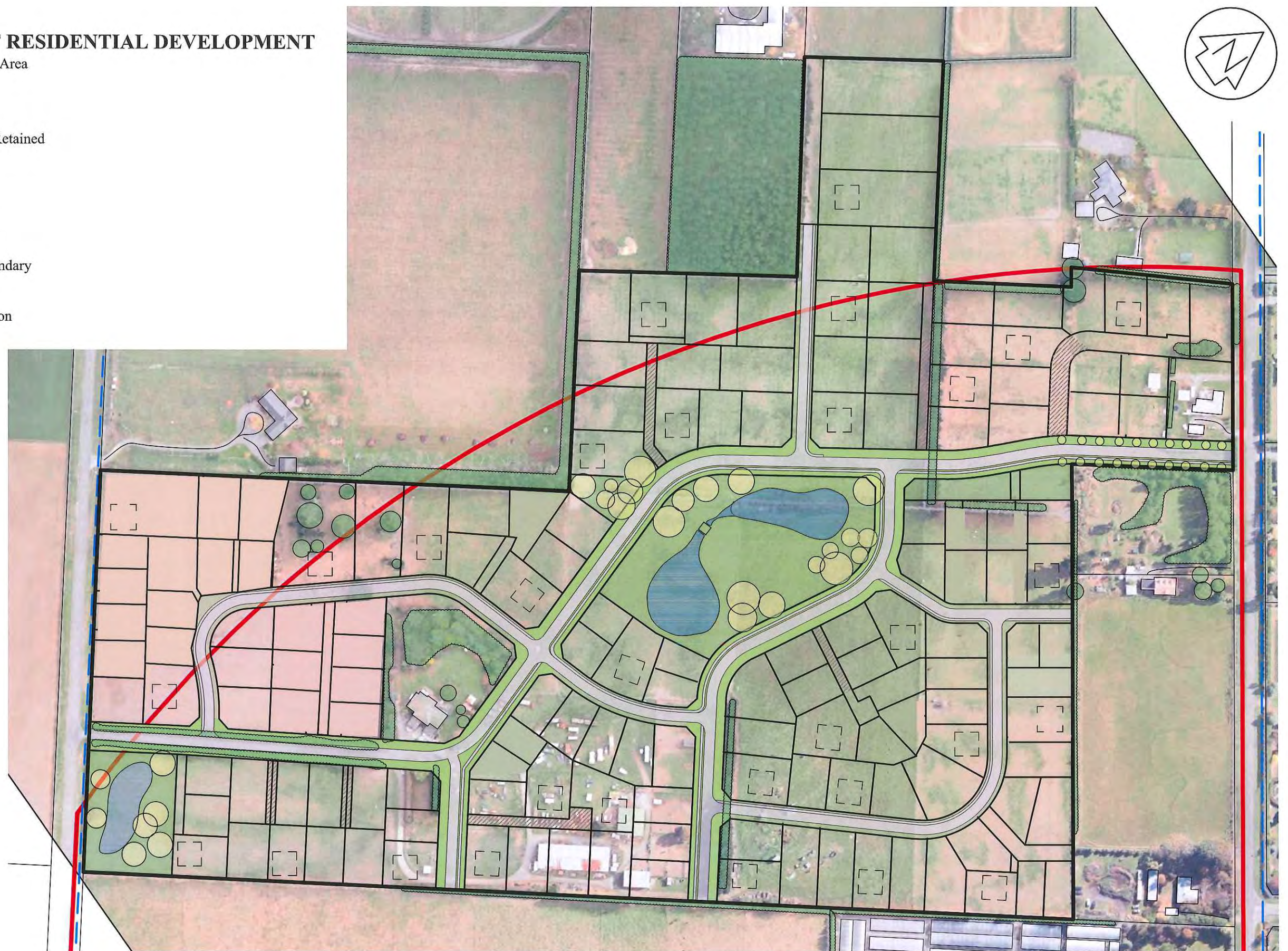
FUTURE PROOF RESIDENTIAL DEVELOPMENT

-  Outline Development Plan Area
-  Reserve
-  Stormwater Reserve
-  Existing Vegetation to be Retained
-  Proposed Vegetation
-  Road Reserve (18m)
-  Road Reserve (10m-12m)
-  Future Shared Access
-  Preferred Urban Form Boundary
-  Stock Race
-  Indicative Dwelling Location

FUTURE PROOF RESIDENTIAL

Lot Sizes

There are 156 Living Z Residential Allotments ranging in size from 5,945m² to 610m², with an average size of 1,143m².



URBAN BASE PLAN 'FUTURE PROOFED'

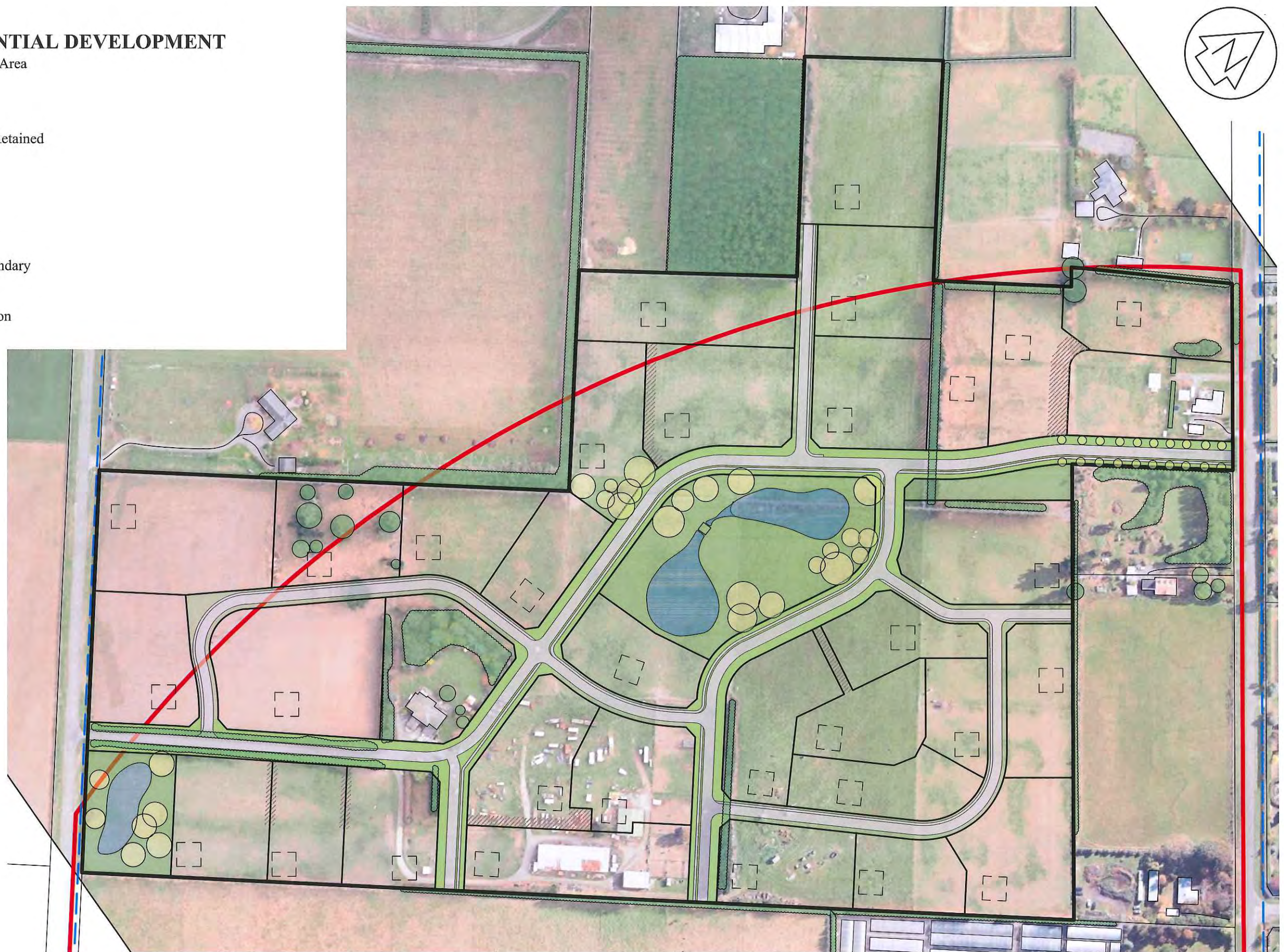
RURAL RESIDENTIAL DEVELOPMENT

-  Outline Development Plan Area
-  Reserve
-  Stormwater Reserve
-  Existing Vegetation to be Retained
-  Proposed Vegetation
-  Road Reserve (18m)
-  Road Reserve (10m-12m)
-  Future Shared Access
-  Preferred Urban Form Boundary
-  Stock Race
-  Indicative Dwelling Location

RURAL RESIDENTIAL

Lot Sizes

There are 35 Rural Residential Allotments ranging in size from 3,100m² to 9,060m², with an average size of 5,003m².



RURAL RESIDENTIAL PLAN (FUTURE PROOFED)



LOOKING EAST



LOOKING WEST



RURAL URBAN INTERFACE AT HAMPTONS ROAD