

IN THE MATTER

Plan Change 19 to the Operative Central
Otago District Plan

AND

IN THE MATTER

of proposed Plan Change 19 (PC 19) to the
Central Otago District Plan and to rezone the
land at 2 Schoolhouse Road from Rural
Resource Area to a Large Lot Residential
zoning

BEFORE THE CENTRAL OTAGO DISTRICT COUNCIL

IN THE MATTER OF

Plan Change 19 to the Operative Central Otago District Plan

STATEMENT OF EVIDENCE OF JAMES DICKSON LUNDAY ON BEHALF OF

ROWAN AND JOHN KLEVSTUL (#163)

URBAN DESIGN

16 MAY 2023

Introduction

- 1) My name is James Dickson Lunday.
- 2) I hold the qualifications of Diploma of Architecture, Bachelor of Arts with First Class Honours, Bachelor of Planning with First Class Honours, a Diploma of Urban Design, and a Master of Urban Design (Distinction) both from Oxford Brookes. I have over 45 years' experience in Architecture, Strategic Planning, Heritage Planning, Urban Regeneration and Urban Design having worked in Government, Academic and Private Sector roles. I undertook the Ministry for the Environment Making Good Decisions Foundation Course in 2014. I have 33 years of experience in professional practice in New Zealand as an Urban Planner, Landscape Planner and Urban and Architectural Designer.
- 3) I have held the positions of Graduate Architect for City of Glasgow Corporation, Urban Designer/Landscape Planner for the State Government of Victoria, Australia, Director of Urban Regeneration for the Civic Trust, UK, Executive Director of the Auckland Heritage Trust, Senior Lecturer at University of Auckland, General Manager of Regenerate Christchurch, Manager of Urban Design and Heritage at the City of Greater Geelong and Principal of Common Ground Studio.
- 4) I have been a practicing Urban Designer since 1982, when I was appointed to the position of Urban Designer and Landscape Planner for the Ministry for Planning and Environment, Victoria, Australia. During this time, I was involved in the restructuring of Melbourne with a focus on infrastructure land-use led economic recovery with the aim of creating Melbourne as the most Liveable City in Australia. As part of this I was involved in the regeneration of the CBD as the centre of retail and culture for Victoria (initiating such projects as the Lanes, and Southbank). In addition, I worked for Townscape Advisory Services where we worked with failing provincial Town Centres to improve their competitiveness in attracting and retaining retail.
- 5) In 1985 I returned to Europe from Australia to take up the position of Project Director of Regeneration for the Civic Trust, London, in charge of Urban Renewal Projects. The major focus of this organisation was the urban regeneration of failing Towns and Communities. Whilst in this position the Civic Trust became a founder of the Urban Villages Forum, established to develop new settlements to absorb growth in the United Kingdom. The Civic Trust introduced the concept of Conservation Areas to the British Planning Legislation. In 1989, I left Europe, and I was appointed to the position of Executive Director of the Auckland Heritage Trust and accepted an Academic position at the University of Auckland.

- 6) I was a lecturer at the University of Auckland between 1989-2002, within the School of Architecture, Property and Planning, lecturing in landscape planning, urban design, economic development, and heritage planning.
- 7) I have published extensively in my field, particularly with respect to achieving sustainable urban development. In 2000 I co-authored a book 'Manual for Sustainable Neighbourhood Development' (Christina du Plessus, James Lunday and Pierre Swanepoel – Pretoria, ISBN 0-621-29983-9).
- 8) I am a past member of the Auckland City Council, Manukau City Council, Urban Design Panels and was involved in the establishment of the Queenstown and Lakes District Urban Design Panels.
- 9) I am the principal and founder of Common Ground Studio and recently established Common Ground Southern to focus on South Island opportunities and manage a multidisciplinary practice focused on Urban Design and Development.
- 10) In New Zealand I have completed numerous large-scale strategic planning exercises resulting in masterplanned or Urban Design led Plan Changes, Variations, and design projects. Major projects include Pegasus Town, Homestead Bay, Jacks Point, Albany City, Waikanae North, Ngārara Farm, Taupō Eastern Urban Lands, New Lynn TOD, Tāmaki TOD, Glen Eden TOD, the Quad Auckland Airport and a retail expansion of Queenstown and Darwin Airports. I have also been involved in consulting work on major Town Developments and waterfront redevelopment in Australia, China, Sri Lanka, Australia, and Kuwait. I have been involved in the reconstruction of post-earthquake Christchurch and instrumental in protecting the Christchurch Cathedral. I produced the first Conservation study in New Zealand in 1991 (St Joseph's Convent School, Takapuna) and have been responsible for the restoration of several historic buildings.
- 11) Most relevant to this evidence is the extensive work undertaken in Queenstown and Wanaka for local land-owning families and District Councils. These include a growth study for Queenstown resulting in further study (Coneburn Study), an early Heritage and Character study of Queenstown Centre in the early 1990's; Queenstown Centre Waterfront Study, Homestead Bay and, Jacks Point Plan Changes, as well as projects for prominent local families (Jardines, Mills, Blennerhassett, Dippie and others).
- 12) Directly relevant to the Hamlet and cluster development concept that is core to this evidence, was a study undertaken in Western Australia; The Margaret River Rural Hamlet Development and Design Strategy, 2009. This study was

undertaken for the Western Australian Government and the local Shire, to reduce demand for lifestyle living, protect the wine and food industries productive soils and cope with growth.

- 13) In preparing this evidence I have read and refer to and rely on the evidence from the following persons: Brett Giddens (Planning), Ben Espie (Landscape), Mark Cruden (Infrastructure), Andy Carr (Traffic).
- 14) I also refer to and rely on the planning evidence of Mr Craig Barr dated 11 April 2023 in the PC19 Stage one hearing which identified and discussed the National Policy Statement Urban Development (NPSUD) in relation to PC 19. Mr Barr's evidence also touched briefly on the submitters land in the context of the wider density for Bannockburn.

Code of Conduct for Expert Witnesses

- 15) Although this is a Council hearing, I confirm that I have read the Code of Conduct for Expert Witnesses Contained in the Environment Court Practice Note 2023 and that I have complied with it when preparing this report. I have also read and am familiar with the Resource Management Law Association / New Zealand Planning Institute “Role of Expert Planning Witnesses” paper. I confirm that I have considered all the material facts that I am aware of that might alter or detract from the opinions that I express, and that this evidence is within my area of expertise. I advise there are no conflicts of interest that would impede me from providing independent advice to the Hearings Panel.
- 16) I am familiar with Higher Level Government documents that relate to my field (National Policy Statements and rely on the Planning and Landscape evidence (Espie and Giddens) for their understanding of other relevant documents in relationship to the Bannockburn area.
- 17) I have read the Evidence and documents produced by the Councils consultant planner (Liz White) and I will attempt to inform the Panel as to what is meant by a Hamlet (cluster), what is the effects on the character of Bannockburn and how would it be delivered. (pg36 s42A zoning report): *"It is not clear to me how the Rural Hamlet Vision would be incorporated into the district plan, nor how it would be implemented through planning provisions."*
- 18) I have read with real interest this excellent and detailed report, The Bannockburn Heritage Landscape Study, commissioned by DOC in 2004. The Study is focussed on heritage issues covering landform and the changes to that landform created by human intervention from the first people to the extensive development since the 1990's. This concept is based on the premise that heritage is best thought of as a “network” or “layered web”, rather than individual sites or features. The study gives very extensive detail of the history of the area and the evidence that demonstrates layers of cultural and social change from the earliest settlers and Moa Hunters clearing vegetation, pastoralists, the major changes brought by mining and then vineyards and growth of population. Interestingly the study poses the question of Bannockburn being a dormitory suburb of Cromwell. Whilst this is functionally true to an extent from an Urban Design lens, it is important to retain its compact and contained character and produce plans that reinforce it as an independent and sustainable village that is well connected to Cromwell.

Executive Summary

- 19) The study area is set within a rich heritage landscape in which the key stories of Central Otago are clearly layered: Māori associations, pastoral runs, alluvial mining, hard rock mining, dredging, coal mining, subdivision of the stations, orcharding, small farming, the Clyde dam, holiday, and recreational uses, through to today's increasing urbanisation and viticulture.
- 20) The Bannockburn Character has a remarkable wealth and complexity. It is shaped by geology, landform, and human intervention. It has all of this on show still today.
- 21) It is, however, a dynamic and evolving character, with many owners and interests. People living in and associated with the area today value the landscape highly for its historic, spiritual, aesthetic, cultural, economic, and recreational attributes. Many of the original families are still there.
- 22) Valued aspects include natural landforms, open tussock country, patterns of past activities, historic structures and features, stories, names, activities, and genealogical links. While aspects have already been lost over recent years, the heritage values of the landscape/townscape have survived surprisingly intact to the present.
- 23) Bannockburn still has the historic Church, General Store, School buildings, yet because of proximity to Cromwell and low density through large lot subdivision and holiday homes, none of these essential elements that make community are operational as intended or to full potential. A sustainable development approach is likely to be the most successful way of considering the people and the landscape holistically. This would involve conserving the key aspects of the heritage landscape, preserving the essential quality land for vineyards (it was early identified by Bragato in the late 1800's as an area perfect for wine) whilst addressing social, cultural, economic, and environmental sustainability (variety of house types, affordability, protection of land, water and clean air, walkability, and local facilities).
- 24) Using a constraints mapping exercise (geology, slope and aspect, water, soil quality, land uses, cultural heritage features) we have produced a Limits to Growth Map that would suggest support for a growth area that is connected to existing urban form to the south of Town as illustrated in Rowan Klevstuls' Submission. This land is also considered non-productive and not suitable for horticulture. The Council report also indicates a severe shortage of development land (200 lots). There is no technical reason why the Klevstul lad to the south of Town and the Davies land should not be rezoned as

housing to provide more capacity. This area for growth was also supported by many of the submitters.



Figure 1: *J Klevstul, R Klevstul and Rubicon Hall Road Limited (#163)*

- 25) The large lot subdivisions generated from the 1990's is not in character with Bannockburn. The original historic lots, whilst still large, created a mosaic of smaller dwellings set within a landscape dominated by trees, orchards, and productive gardens. In general, they followed closely the original mining paths that in turn followed Māori pathways.
- 26) The large lot concept, 2000m² does not necessarily create a sense of openness with site coverage of 40% allowing building footprint of 800m² and a height of 7.5m. This does not create the spacious environment sought in the objectives of Plan Change 19 and is in fact suburbia writ large. Creating clusters of smaller houses set within a common and shared landscape can. With correct objectives, policies, rules, and standards, outcomes of reduced building coverage, with some increase in density can be achieved. There can be an opportunity to preserve the character of the area, the elite soils, and deliver variety and affordability in housing. This in turn may stimulate local facilities.
- 27) There is a care of duty in land use and spatial planning to deliver sufficient housing and a variety of house and lot sizes to create a diverse, affordable, and sustainable community. Using constraints mapping, it shown that the is approximately 27.4Ha of non-productive land to the south which contains

the 7.4Ha of Klevstul land that could be re-zoned to facilitate for housing in a cluster formation as described and illustrated in the body of the evidence. This land is an appropriate area for a relatively contiguous and logical extension of the existing Bannockburn settlement. It has historical precedence with the school location and historic connection of the old School Track. The area is subject to a scheduled activity (a gravel pit) but otherwise does not contain any overlays or features, and areas of mining heritage will be preserved through clustering of houses into areas that have can absorb development whilst retaining the landscape and cultural heritage of Bannockburn. Other expert witnesses have described how the area can be serviced and accessed. The benefits I discuss can still be achieved with the rezoning of the Klevstul land only but will be enhanced with the inclusion of the Davies land as part of the rezoning package.

- 28) Liz Whites evidence cites a recent yield assessment that was undertaken for the Council, to provide yield calculations for PC19, to identify whether the proposed zonings would provide sufficient capacity for the forecasted demand. When looking more specifically at Bannockburn Township, there is insufficient supply proposed in Plan Change 19 to meet demand. From the White report the assessment is that the PC19 zonings are expected to provide for just over 500 dwellings, which is a shortfall of around 200 under the medium forecasted demand and 300 under the high forecasted demand. This deficit could be offset in part if other land in Bannockburn to the south is rezoned and greater intensification proposed within the existing centre (along “the Main Street” of Bannockburn Road) to create a critical mass to stimulate local facilities (as suggested in the Cromwell Spatial Framework Stage 1 Spatial Plan May 2019).

Scope of Evidence

- 29) I have been engaged to assess if the southern part of Bannockburn is suitable for residential growth and define the character of the town of Bannockburn through an Urban Design lens relying on Ben Espies landscape evidence for the Towns setting.
- 30) If I deemed the location to be suitable for housing, I was asked to produce a design that responded to the townscape, cultural, social, and environmental conditions of the subject site.
- 31) I was also asked to produce expert witness evidence and appear at the hearing to provide the panel with independent and expert advice on Urban Design matters pertaining to the southern extension to Bannockburn.

[1] Department of Conservation (2004) *Bannockburn Heritage Landscape Study*. Retrieved from <https://www.doc.govt.nz/globalassets/documents/science-and-technical/sfc244.pdf>

Townscape and Character of Bannockburn Shaped by Land, Geology and Human Endeavour

- 32) I will try and summarise the actual bones that created Bannockburn as it is known today. Much of this is taken from the Bannockburn Study undertaken for the Department of Conservation (2004)¹ and other information based on mapping research and observation.
- 33) Tangata whenua for the area include people associated with Te Runanga o Otakou, Kati Huirapa Runaka ki te Puketeraki, and Te Runaka o Moeraki. Of Kai Tahu, Kati Mamoe, Waitaha, and Rabuva'i descent, the iwi still retains strong connections to the land, and this is borne out by names and stories of the area. Physical traces (archaeological sites) in the wider area and in the vicinity of the Town also tell of the occupation of the area by Māori as far back as the moa-hunter period.
- 34) The Bannockburn area was further settled by Europeans from the establishment of Kowarau Pastoral Station in 1858. An interesting characteristic of the area is that families tend to 'stick around'—there are some families who have been established in the area for many generations and whose descendants still live in the community, and others with family links who have returned. The past twenty years have seen an influx of new people into the area, particularly since the early 1990s. The community therefore reflects a range of 'knowing' of the landscape and its history, from those who draw from long family or personal engagement to those who have a particular interest in the area's heritage and have made a point of researching and collecting information, and to those who have spent a shorter time in the area (but are frequently no less passionate about it). (DoC, 2004)
- 35) Apart from a few orchards and mixed farms on the terraces around Bannockburn settlement and closer to the Kowarau River, pastoral farming was the only viable form of agriculture until the recent advent of viticulture. The presence of gold and coal largely shaped the landforms and settlement form we see today.
- 36) The first settlement of the Town of Bannockburn began at the end of 1862 near the junction of the Bannockburn and Shepherds Creeks. By 1867 the

centre of Bannockburn moved south–west and the Hotel shifted to approximately the site the existing pub sits on. Some buildings were established along the Bannockburn/Nevis Road and others clustered where mining was. A town site was surveyed in 1878. The rectangular grid pattern was imposed on the ground scarred from mining. The Town was never built to the survey and by 1890 only four or five buildings were built in the designated Town (a couple of houses, the Store and Hotel all still there today). It was easier and cheaper to take up residence under the Mining Act and this clusters of housing located outside of the Town. It has been suggested that is why the School, Hall and Presbyterian Church were all built away from the Town. It was also natural for the commercial areas to locate on the main road.



Figure 2: Historic Bannockburn Township Features, (P Crump, 1995)

37) It is recorded that until 1980s most of the houses were located outside of the designated Town. The cluster of houses we know today are relatively recent. The Stone Store, Post Office, Hotel represent the few buildings built in town and stand today awaiting a more intense Main Street or Town Heart to happen. The pathways were simple and comprised of Bannockburn Road, Smiths Gully Road (now Schoolhouse Road), School Track, Terrace Hall Road, and Domain Road. (Fig 2 Historic Bannockburn Township Features). The red outline identifies the subject site (Klevstul land)

38) New Planning provisions and infrastructure began a period of significant growth of subdivisions and new housing from the mid-1980s. By this time,

the settlement had a sewerage scheme, and in the mid-1990s it was linked to the Cromwell water scheme. These infrastructural changes opened the area up, allowing for more development to occur.

- 39) New residential development initially occurred primarily within the area which had been surveyed as the 'Town of Bannockburn' in 1878, but later started to expand to the east. Larger 'lifestyle' blocks also proliferated, both on the existing small-farm titles and on newly subdivided blocks. A few of the new residents were associated with the Clyde Dam project; others bought land to build holiday cribs or to retire, while others chose to live at Bannockburn and commute to work elsewhere. Some of the dwellings associated with the mining era were also purchased to use as cribs or homes, while others languished and fell into disrepair or were demolished (DoC,2004).
- 40) In essence Bannockburn has always had a dispersed pattern of growth. Until recently (1990's) houses were modest in size and the lots dominated by informal tree planting, food producing gardens. The roads were also modest in size and construction. The overall Townscape of the older parts of towns is that of houses set within a treed landscape. Much of the damage by mining has been "healed" by planting initiated by development.
- 41) The more modern subdivisions are dominated by wide engineered roads, large houses, and less tree planting. The existing rules enable large building footprints and up to two levels. (2000m² sites will enable 40% of site to have buildings excluding driveways). This is a very different urban form the older areas (pre-1980).
- 42) The following Maps (**Figures 3,4,5**) give a snapshot of the development of Bannockburn and its dispersed form. In 1878 the bulk of buildings were outside of the surveyed Town grid. In 2004 buildings started to cluster around the area designated as Town in 1880's, with clustering outside of town. Today there is a definite clustering around Halls Road. Smith's Creek and Gulley have historically formed a Southern boundary to town whilst domain Doctors Flat and Templar Hill form Historic boundary to the North.

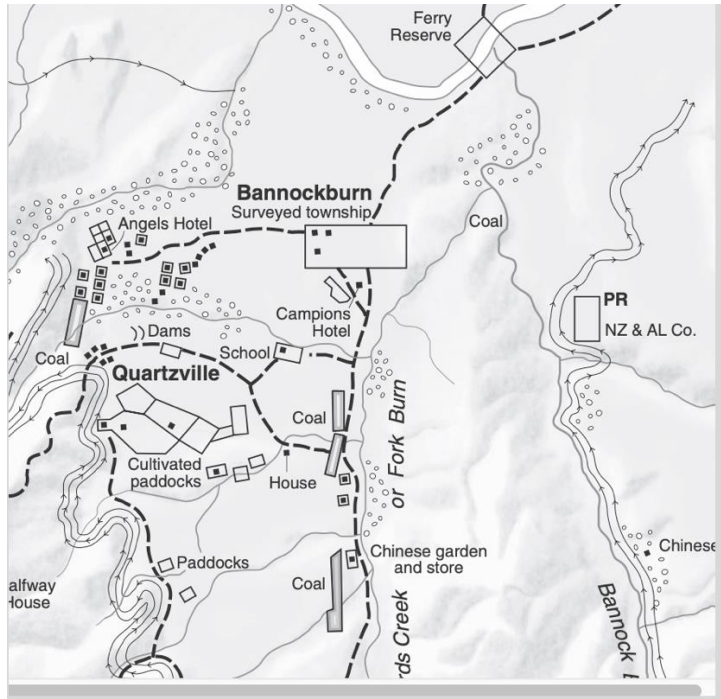


Figure 3: Map of Bannockburn 1878, (DoC, 2004)

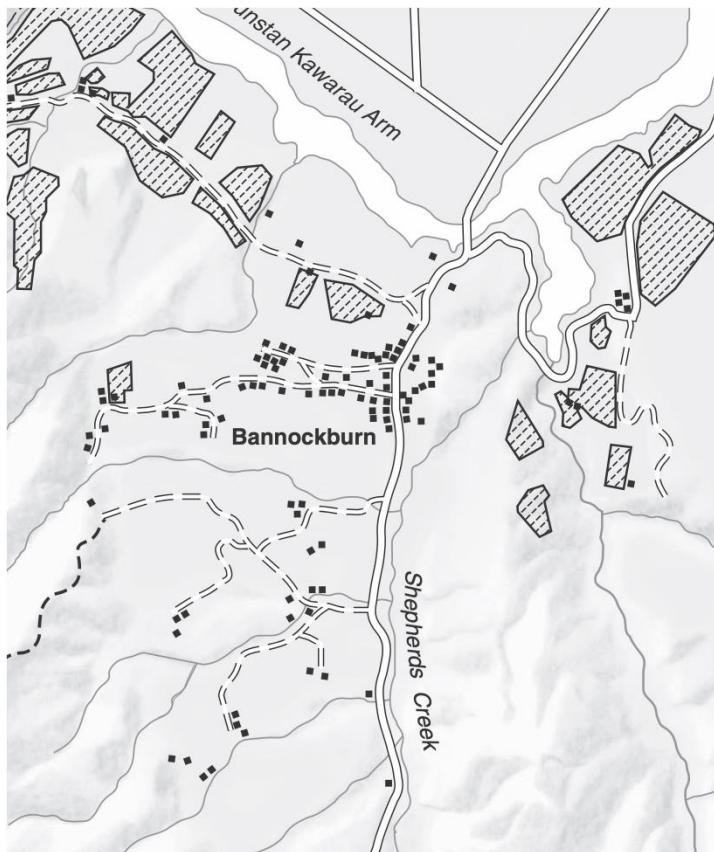


Figure 4: Settlement and vineyards 2003, (DoC, 2004)

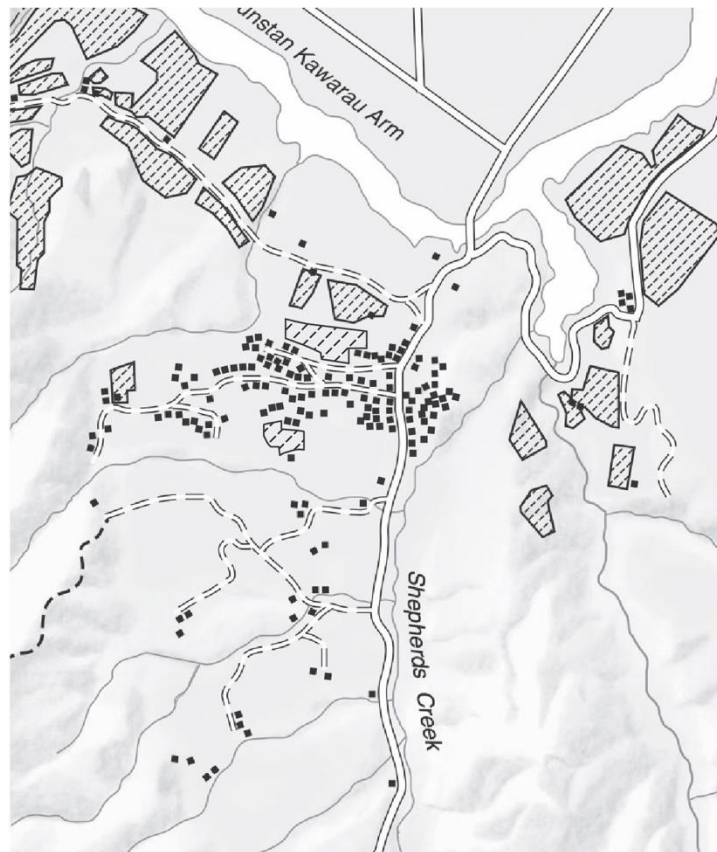


Figure 5: *Settlement and vineyards 2023, (CGS, 2023)*

Limits to growth

- 43) Despite the dispersed pattern topography (Gulley's, terraces and hills, watercourses, mining works, orchards and vineyards along with access to roads have kept Bannockburn compact and legible.
- 44) I have used a sieve mapping technique to define limits to growth based on defendable edges such as streams, gulley's, and steep slopes; then added to that protected cultural landscape (largely mining areas); overlaid by soil classification. In addition, there is an urban design driver for connectivity, compactness, and amenity that would also temper best practice growth. Current legislation discourages development on Land categories 1,2 and 3. (See Figure 6)

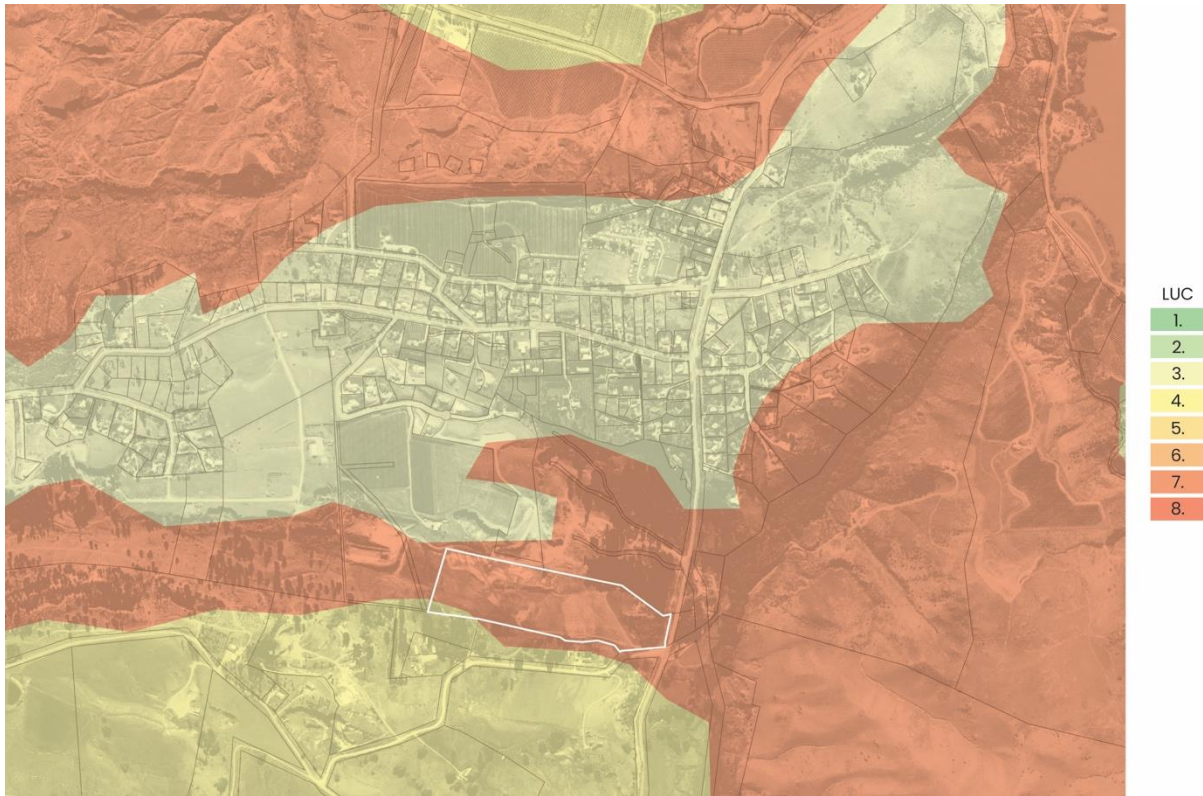


Figure 6: *Land Use Categories (CGS, 2023)*

45) When we exclude the areas with a low capacity to absorb growth, we end up with quite a tightly constrained development area for Bannockburn. The major area suitable for growth and that can be connected through roads and walkways is to the south of the existing core of Town around Hall Road (**Figure 9**). The existing Town layout was proposed on higher quality soils and hence development followed into this area. Today there is an imperative to preserve horticultural and viticultural land for economic and cultural reasons.

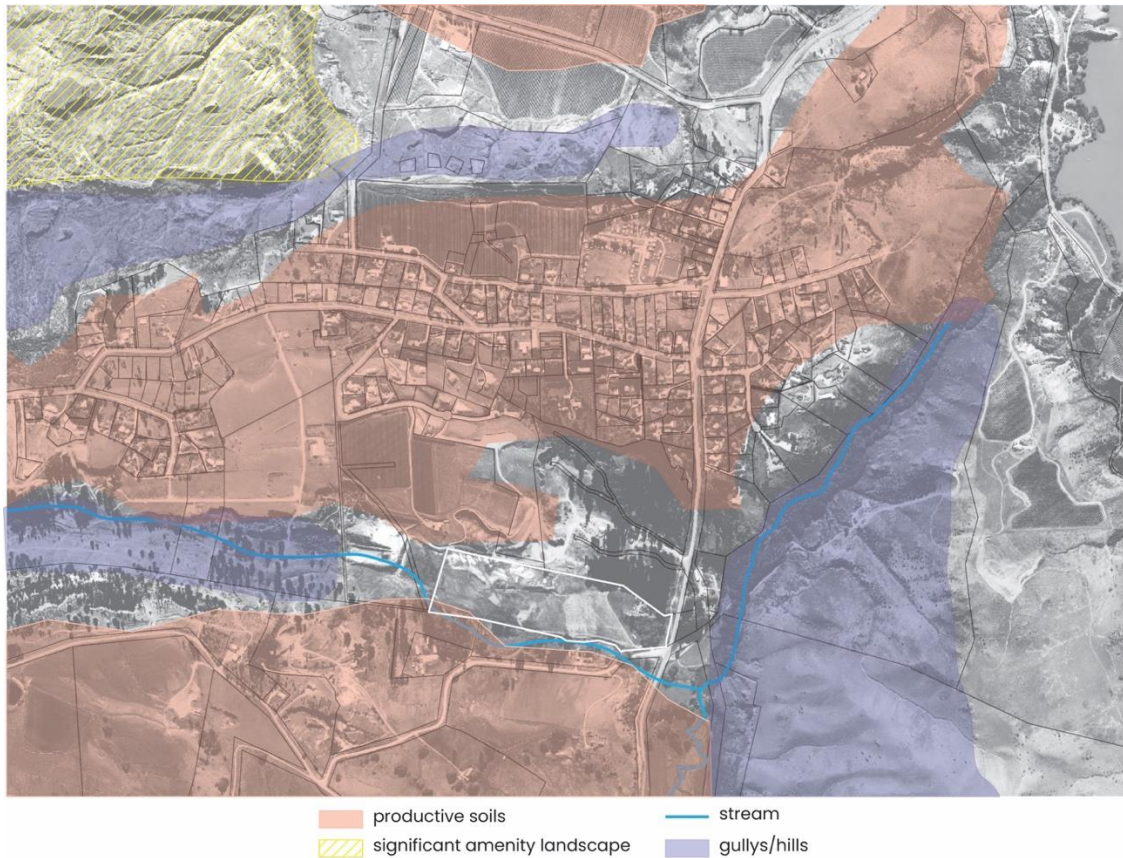


Figure 7: Growth Boundary Constraints (CGS, 2023)

46) Connectivity and walkability are important elements in creating and reinforcing community and sustainability. It is probable that mixed use development and commercial uses will develop along Bannockburn Road (Bill Hillier Space Syntax Theory: The Social Logic of Space (SLS) with Bill Hillier (CUP, 1984)). Any retail in a town of this size will rely on visibility and access for locals, tourists and passing trade. There is a community hub around Church and Hall which are in a parklike setting this can be reinforced through walkway connections. This is an ideal domain for the Town.

47) Looking at the constraints mapping the south edge becomes an obvious choice for growth. Apart from infill intensification there just isn't any other land without constraints There simply isn't enough developable land to waste on 2000m² lots on productive land. There are reasons to build on productive soils that are included within the National Policy Statement –Urban Design. However, that is a matter for Council. From a best practice Urban Form and Design lens Bannockburn has defensible growth boundaries that can be identified technically and can be connected to town.

48) It is my consideration that the south could be rezoned for higher density but in a form that responds to the character of Bannockburn (Figure 9). The logical area for extension is shown in Figure 9. This includes the Klevstuls land, together with the Davies land. It also includes land that no submitter has sought to be included but is at least in part already functionally part of the urban environment, being used for industrial storage and other purposes.

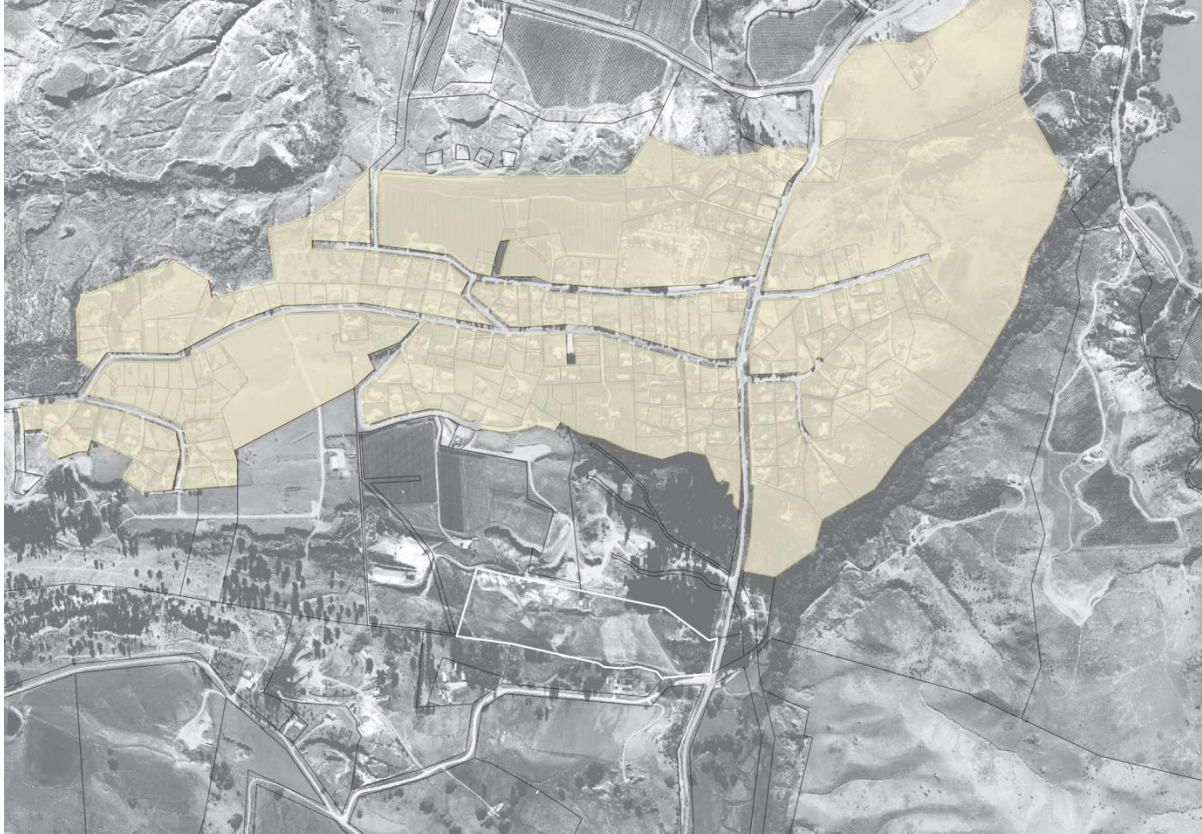


Figure 8: *PC19 Proposed Zoning (CGS, 2023)*



Figure 9: Natural Town Growth Area Based on Constraints Mapping (CGS, 2023)

Development Options: Large Lot vs Cluster /Hamlet

- 49) If we look at the character of Bannockburn it is defined by:
- Strong landform forged by nature and mining.
 - Historic strip along Bannockburn Road.
 - Central historic 'domain' around Hall and Church.
 - A vineyard town, as identified by Bragato in 1890's.
 - Traditionally smaller houses set within a treed landscape.
 - Latterly large houses set within 2000m² grassed and landscaped sites starting to dominate.
 - Development traditionally follows roads with large, landscaped areas between houses.
 - Appears due to house locations and topography as a mosaic of open space and buildings sitting within that landscape.
- 50) There are alternative approaches to developing urban areas other than conventional subdivision and grid patterns that, with appropriate rules, can increase density and preserve the landscape. As part of the Margaret River Research Study, undertaken by the author of this evidence, on preserving viticulture and horticulture land whilst incentivising a variety of housing, we

came up with two alternative rural models of development as an alternative to large lot sub-division. (Refer **Figure 12 & 13**).

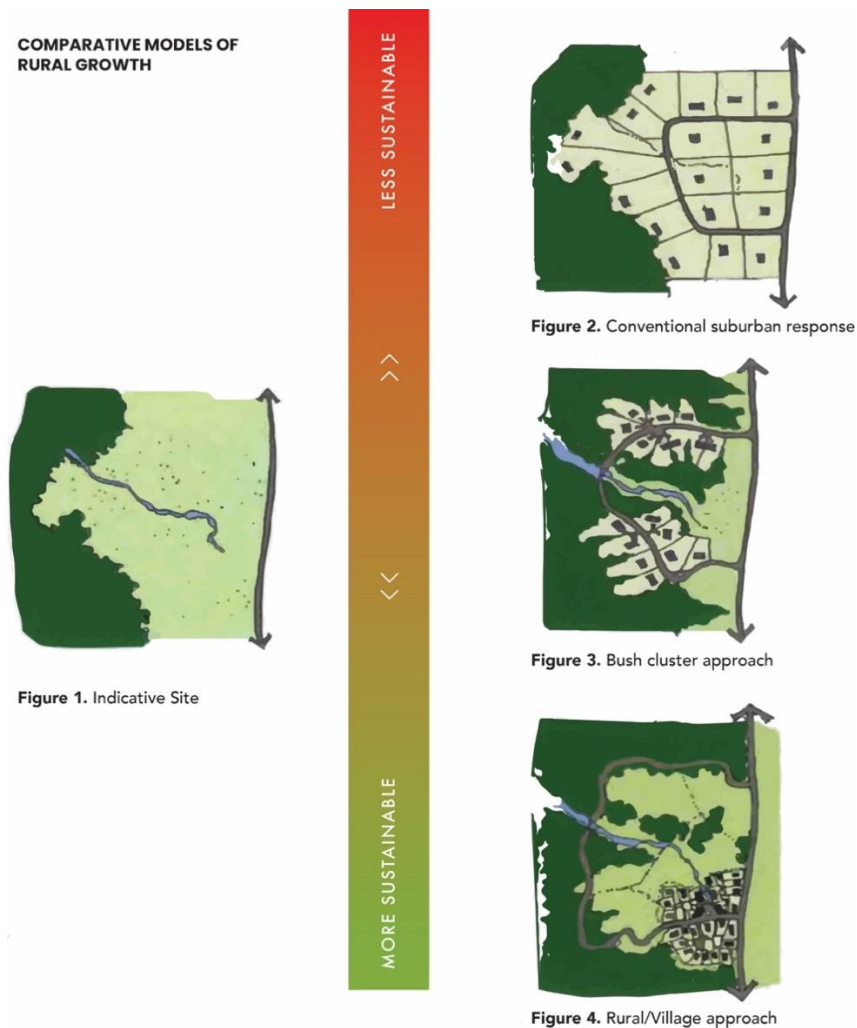


Figure 10: *Cluster Model (CGS, 2009)*

- 51) If we take a parcel of land with a small watercourse, some bush and paddock and chop into a conventional subdivision we lose anything that isn't protected and end up with houses regularly dotted in centre of lots.
- 52) We can improve on this and increase yield of housing whilst expanding vegetation (re-establishing native vegetation) preserving the stream and having common land for food production by clustering houses in a more compact form and with a variety of lot sizes.
- 53) If we further condense this into a small Hamlet, we increase the amount of undeveloped land and the housing yield allowing more land for nature, live, work, play, food production and the local amenity that comes with density.

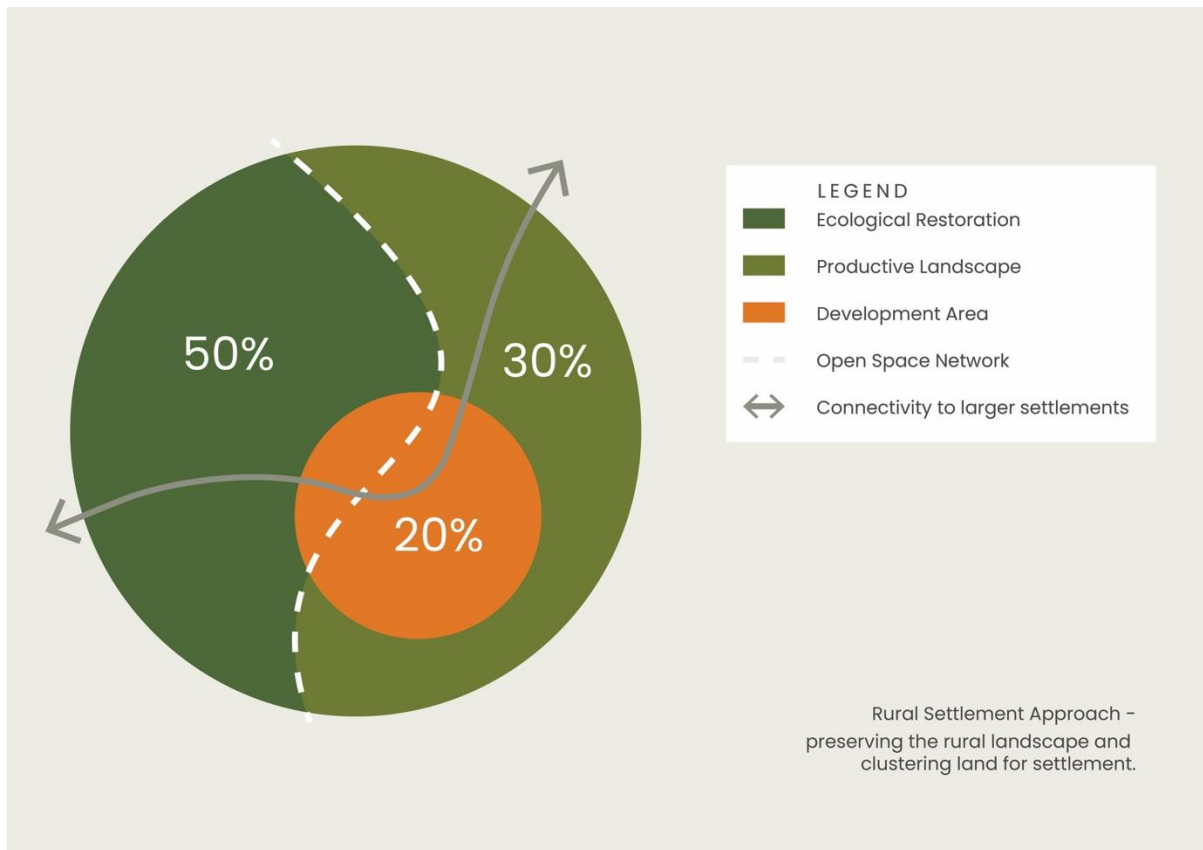


Figure 11: *Rural Settlement Approach (CGS, 2023)*

54) When we took this to real world situation, we achieved on farms at risk to large lot development an outcome of; 50% ecological restoration/preservation, 30% vineyard/ horticulture, and 20% Hamlet.

Development Models for the Klevstul Land to South of Town

55) The sieve mapping exercise has indicated that the area to the south of Bannockburn town has no physical constraints to development. It also has no other economic use apart from housing/commercial. Also, given that under Plan Change 19 there is a shortfall of housing identified, we are talking about methods of delivering development that fits with the Objectives and Policies of the LLRZ. If we now apply Plan Change 19 – Residential Chapter Provisions Changes Recommended in Section 42A Report to the site, we can test the appropriateness of this zone to the character of Bannockburn and alternative design approach that may better suit the Objectives and Policies.

56) The Large Lot Residential Zones (LLRZ) are in some of the outer residential areas within the townships of Alexandra, Clyde, and Cromwell, as well as in Bannockburn, Lowburn, Pisa Moorings and Roxburgh, along with some isolated areas of existing large lot residential near located along the eastern side of Lake Dunstan. The densities within the Large Lot Residential Zone are the lowest of all the residential zones, providing for detached houses on

large sites, with the intent of maintaining a high open space to built-form ratio. Generous setbacks are also provided from the road and neighbouring boundaries. Buildings are expected to maintain these existing low-density characteristics, minimise the effects of development on adjoining sites and integrate with the surrounding area.

57) Therefore, the intent is to reduce the effect of buildings in the rural environment. This, however, does not consider the variety and uniqueness of the rural environments in each town.

58) The Objectives for housing in the LLRZ include:

- pleasant, low density living environment;
- low rise and detached residential units on large lots;
- predominance of open space over built form;
- good quality on site amenity and maintains anticipated amenity values of adjacent site;
- well designed and well connected into the surrounding area.

59) The Policies are designed to enable the Objective and the intent of the zone; They are designed to ensure that development within the Large Lot Residential Zone:

- provides reasonable levels of privacy, outlook and adequate access to sunlight;
- provides safe and appropriate access and on-site parking;
- maintains a high level of spaciousness around buildings and a modest scale and intensity of built form that does not unreasonably dominate adjoining sites;
- is managed so that relocated buildings are reinstated to an appropriate state of repair within a reasonable timeframe;
- provides generous usable outdoor living space for residents and for tree and garden planting;
- maintains the safe and efficient operation of the road network;
- mitigates visual effects through screening of storage areas and provision of landscaping; and
- encourages water efficiency measures.

60) Interestingly in the Residential Activity Policy the zone is to enable residential activities within a range of residential unit types and sizes to meet the diverse and changing residential demands of communities. This is difficult to do without a diversity of lot size and a variety of zones or precincts

61) The rules in Plan Change 19 are designed to ensure development is in alignment with the objectives and policies. The Basic rules are:

- 2000 m² minimum lot size and no more than one unit per site;
- secondary dwelling with garage 70m²;
- Site coverage 40%;
- Height Limit 7.5m;
- setback from road 4.5 m; setback from internal boundary 3 m;
- one car park per building.

62) I will now illustrate the development of the Klevstul block and explore applying the rules using conventional subdivision and cluster subdivision development. Keeping in mind that the objective of the zone is for the urban form to be subservient to landscape and that a variety of housing is to be enabled to reflect the needs of the community.

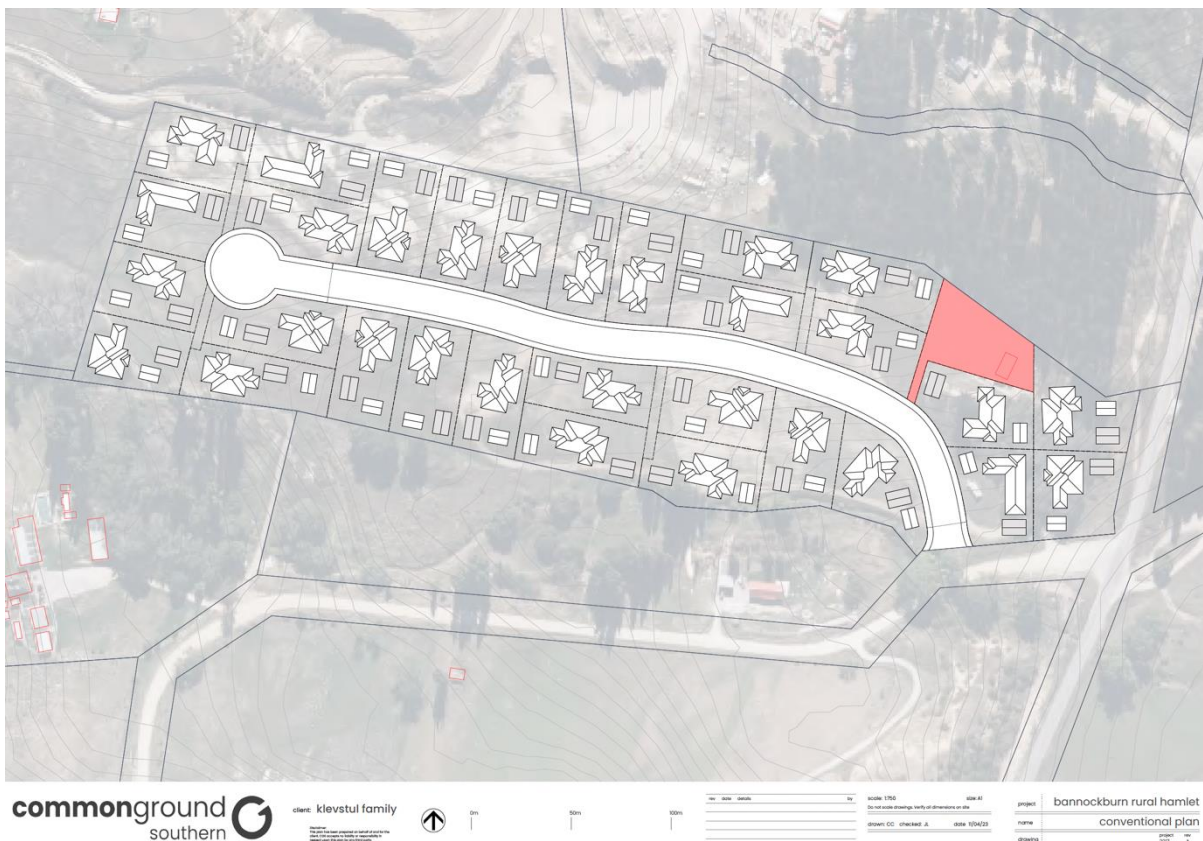


Figure 12: Conventional Subdivision of Klevstul Block into LLRZ (7.4 Hectares approx.)

63) If we apply a typical, conventional, cul-de-sac large lot subdivision approach to the land (Figure 12) and apply the proposed development rules for large lot development we could achieve 32 lots (the area in red indicates the Klestil's current home, which they wish to retain in any future development scenario). This would mean that there could be site coverage of 24,800 m²

excluding the road, access roads, and hardstanding for parking. The illustration uses housing footprints taken from other sites in Bannockburn developed in the past decade. None of these illustrated lots maximise site coverage as I consider 800m² of building coverage to be excessive and fanciful. In addition, there is little opportunity to preserve any features within the land (this becomes more obvious in the adjacent site owned by Davies family that has old mine workings).



Figure 13: *Clustered Subdivision of Klevstul Block (7.4 Hectares approx.)*

64) When we use a clustered approach to a design, we end up with a very flexible pattern with the ability to design with the nature, constraints, and opportunities of the site. (Figure 13)

65) The layout as illustrated has lot sizes (freehold) of a minimum of 400m² set within common land. If we apply the rules of LLRZ to 400m² (40% site coverage) we have a building footprint of 160 m². This is a total building footprint of 5,760m² minus roads and driveways) This is less than one-quarter of the building footprint on the conventional development model. We can, as illustrated, create setbacks between buildings that fit within the LLRZ rules and height limits. In this layout, we achieve 36 buildings. We could double the density and varying lot sizes between 300m² and 600m²

and achieve a similar landscape result but with higher density and variety of houses, remaining well under the site coverage of conventional LLRZ.

66) In the cluster model we are also providing for a variety of house types which is unlikely with 2000m2 lots.

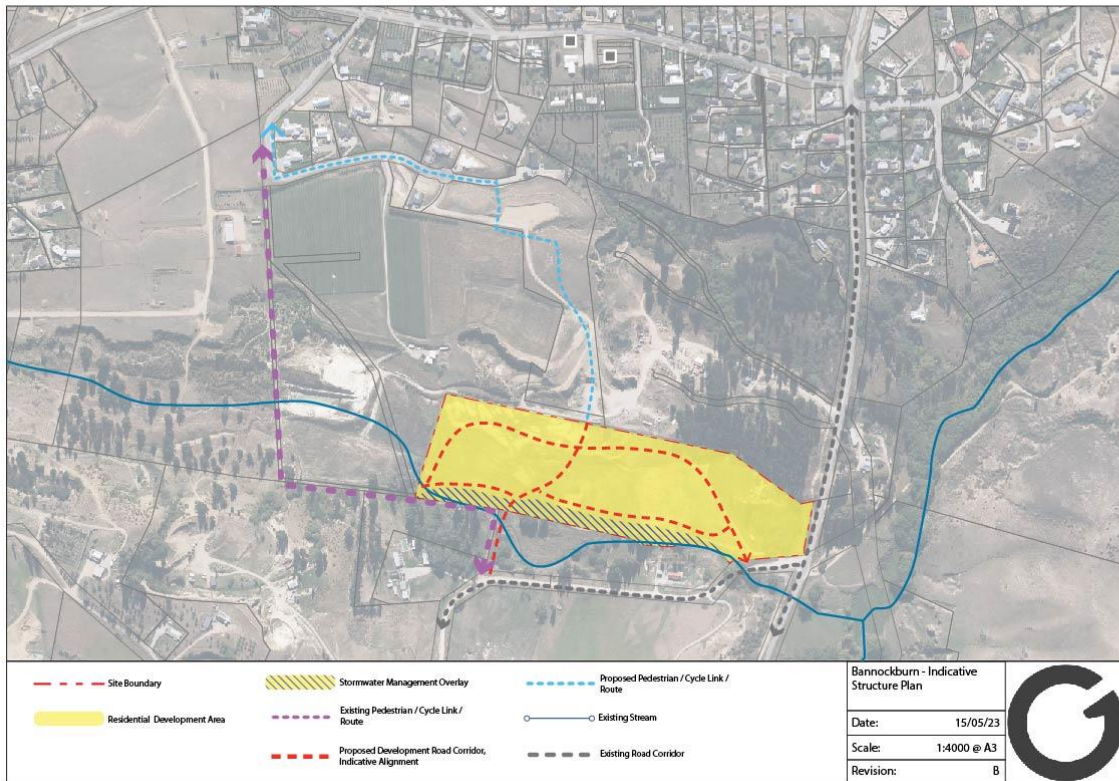


Figure 14: *Draft Structure Plan for Klevstul Land showing connections to Town and beyond.*

67) Whilst I am giving evidence for my clients (Klevstul Family) I am aware that the Davies family (Doctors Flat Vineyard) is seeking that the unproductive part of their land be considered for housing. I have produced a draft structure Plan for the Klevstul land that shows connections to Town through the Davis land (identified in their submission) as well as connections to Lynn Lane and Schoolhouse Road. (Figure 14) This shows a continuity of development and connectivity which follows the routes, illustrated in the historic map (Figure 2) that connect the Bannockburn store and hotel with the Church and Hall, down to the school. Even if not included as a structure plan in the District Plan, it reinforces the connectivity to the Klevstul land, as well as its location as a logical edge to the future development of the township.

South Bannockburn Development Proposal

- 68) Applying the Objectives of Plan Change 19 and best practice Urban Design Guidelines we can create a part of town that responds to environmental, economic, and social needs of the community. **Figure 14** explains principles that are applied to any best practice intervention into an urban area whether it be greenfield or brownfield.



Figure 15 : *Urban Design Principles (CGS, 2019)*

Indicative Masterplan

- 69) **Figure 15** illustrates a possible masterplan with suggested landscape outcomes. In this we show that we can have substantial houses, set within their gardens, sitting within a landscape that includes wetlands, restoration of streams, rewilded Kowhai Forest, orchards, and common gardens. This is connected through walkways and streets to the central Town area. The cottages along Bannockburn Road announce the southern entry or gateway to Bannockburn and could be robust enough to change to commercial use over time.
- 70) Throughout Central Otago in rural areas and small towns, they are experiencing growth pressures. What has occurred in many areas has been ad-hoc large lot (lifestyle) subdivision often on good productive land around these Towns. It is a type of creeping suburbia that compromises the townscape and quality horticultural/ viticultural lands capacity for production is affected. Bannockburns character is now tied to wine. It is imperative that land suitable for wine production and horticulture be preserved and that the constraints to development keep Bannockburn as a town and not sprawl into Cromwell which has a very different character.
- 71) If large lot development is the only zone identified for smaller towns and elite soils are not protected it could result in:
- Loss of horticultural/ viticultural activities
 - Loss of economic value through the supply chain that supports horticulture/viticulture;
 - Loss of associated value through associated industries that rely on horticulture/viticulture character;
 - Disaggregation of economic horticultural units;
 - Reverse sensitivity issues;
 - Land Price escalation leading to retirement of land from agricultural uses;
 - Loss of Identity as large lot large house becomes the dominant character;
 - Large lots generally price local workers and potential working residents out of the market.
- 72) I have tried to look at a way to develop the South of Town in a way that is in alignment with objectives and policies of Plan Change 19 and that:
- Supports sustainable growth for the Town;
 - Leaves productive horticultural land for horticultural uses;
 - Provides a variety of houses and price points; and
 - Restores the indigenous landscape.

- 73) The proposed approach to development by the collective landowners in the south appears to set aside horticultural land for horticulture; preserve the area of mining heritage and develop clusters of housing set in a restored indigenous landscape including stream and wetland restoration and Kowhai Forest.
- 74) Clustering development within Klevstul Block will allow the ability for Bannockburn to absorb urban growth whilst retaining and enhancing other land for horticulture and enhanced areas of high ecological value.
- 75) I consider the environmental, built form and heritage of the old town and curtilage of Bannockburn should drive the residential and commercial expansion. It would be a mistake to allow creeping suburbanisation to occur on non-defendable edges of the Village. I suggest following principles laid down by the likes of Ian McHarg, Design with Nature. McHarg promoted successfully blended community design with natural boundary conditions (watershed management, geology, forestry, slope properties, productive soils, protection of streams, heritage and ecological etc) values to drive growth studies. Design With Nature has done much to redefine the fields of landscape architecture, urban and regional planning, and ecological design. It can be looked upon as a "user's manual for our world," Design with Nature offers a practical blueprint for a new, healthier relationship between the built environment and nature. In so doing, it provides nothing less than the scientific, technical, and philosophical foundations for a mature civilization that will, as Lewis Mumford ecstatically put it in his Introduction to the 1969 edition, "replace the polluted, bulldozed, machine-dominated, dehumanized, explosion-threatened world that is even now disintegrating and disappearing before our eyes.
- 76) Key elements which the Bannockburn Development Area Indicative Masterplan care based on were;
- Compact, walkable, and well-designed settlement defined by landscape features, protection of horticulturally productive land, protection of cultural heritage and ecological restoration.
 - Creation of a real, localised, and authentic sense of place.
 - A place that is attractive to the full range of occupants, visitors, and business.
 - Development that responds to landscape and resources within it, local vernacular, and cultural associations.
 - Creation of a carefully planned and executed pedestrian and cycle network.
 - An attractive environment, green streets, good walkways, and pavements connecting facilities, parks, open spaces, quality public realm, quality design and architecture.

- Respect for the environment with low impact design, green technology, green architecture and green streets and infrastructure.
- A settlement for everyone, adopting universal design strategies, local facilities and diversity of housing including affordability.
- Protection of the streams, gullies, horticultural land, gold mining heritage, water races and steep slopes with the aim to restore native vegetation or forest.
- More sustainable and intensive, mixed, agricultural practices to be promoted.
- Infrastructure that supports small business, work from home and best practice telecommunication provision.
- A single land management system.
- Development areas that can absorb a variety of densities and house types.



Figure 16: *Indicative Masterplan (CGS, 2023)*

Summary: Is it in right place; is it in character; is it connected; does it contribute to environment.

- 77) There is a shortfall of housing land identified in Bannockburn.
- 78) A constraints mapping exercise can identify areas with the capacity to absorb growth whilst preserving the character, connectivity, and elite soils of Bannockburn. There is no urban design reason why the land identified as the Klevstul land and the Davies land, or even the wider areas shown in **Figure 9**, should not be zoned residential.
- 79) I consider that a comprehensive structure planned approach to enable clustering development, with some amended rules, will result in the development of the southern extension of Bannockburn that achieves the Objectives, Policies and Rules of Plan Change 19 and provides diversity of housing. The rezoning sought will enable a positive contribution to Bannockburn's future.
- 80) To put the outcomes sought in their wider context, Figure 16 is a Nolly diagramme that shows the southern extension to town in a graphic style that illustrates how the South is a natural extension to the spatial patterning of Bannockburn and the connectivity that will result. (A Nolly diagramme is a 2 dimensional plan showing solid buildings and space between illustrated in black and white)
- 81) I strongly recommend the rezoning of the land sought by the Klevstuls, for all of these reasons, even if no additional changes were made. However, a superior outcome will result if some minor changes are made to better facilitate the hamlet or cluster development approach.

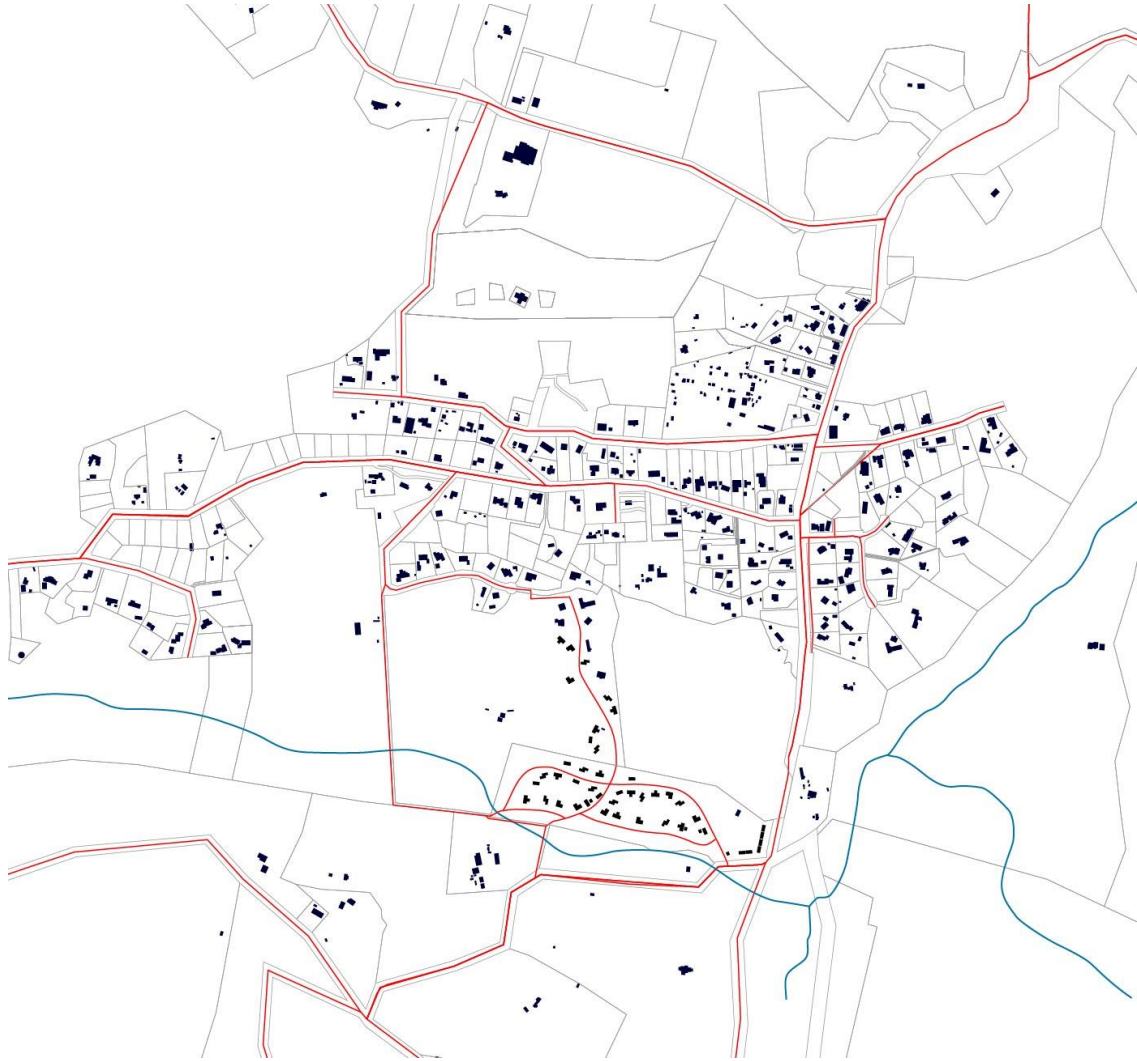


Figure 17: Nolly of Bannockburn with Southern extension inserted (CGS, 2023)

