



WAIPA DISTRICT COUNCIL

**CAMBRIDGE C4 STRUCTURE
PLAN**

Context Report

9 September 2020

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1. INTRODUCTION

1.1 BACKGROUND

The Waipā District has been identified as a high growth area in the National Policy Statement on Urban Development 2020 (NPS-UD).

Cambridge township is forecast to grow by over 14,000 people by 2050. To provide for this growth, Council has set out to prepare a structure plan for the C4 growth cell, as identified in the Waipā 2050 Growth Strategy (2017), Waipā 2018-28 Long Term Plan, and Waipā District Plan.

The growth cell extends to approximately 66ha located to the south west of Cambridge township, adjacent to the Leamington neighbourhood. Situated to the east of Cambridge Road and north of Lamb Street, the area consists of approximately 50ha of gently contoured farmland and lifestyle development adjoining a deeply incised gully to the east, beyond which is the Cambridge Park residential subdivision.

The growth cell is currently zoned Deferred Residential, indicating its potential for urban density residential development.

1.2 PURPOSE

A pre-requisite for the uplifting of the 'deferred' Residential Zone status is the preparation and approval of a Structure Plan explaining how the growth cell should be developed to ensure that it is appropriately serviced and will contribute towards the achievement of an attractive and cohesive residential neighbourhood within the Cambridge township. The purpose of this report is to explain the statutory context and key land use and design expectations identified on the Structure Plan set out within **Appendix A**.

While providing important direction, the Structure Plan does not prescribe detailed development controls which are more appropriately addressed through the Plan Change processes or resource consents that will follow. The development of the Structure Plan has been informed by preliminary technical reports commissioned in respect of:

- Geotechnical;
- Archaeology;
- Ecology;
- Three Waters Servicing and Infrastructure; and
- Transportation.



Copies of each of these is included in **Appendix B**. Consultation with statutory bodies and landowners within and adjoining the growth cell as well as the wider community was undertaken in Autumn 2020 and the feedback received has been taken into account.

2. SITE CONTEXT

2.1 GROWTH CELL C4

The following image indicates the extent of the growth cell and its relationship to the Cambridge township. Leamington itself is a predominantly residential area served by commercial activities located primarily along Shakespeare Street, industrial activities located at Matos Segedin Drive and Pope Terrace and community facilities including recreational reserves located within residential neighbourhoods and around the older parts of the township in the form of the Cambridge Green Belt.

The eastern extent of the C4 growth cell adjoins the Green Belt and presents an extensive frontage to the deeply incised un-named gully extending from the Green Belt towards the Waikato River. Being approximately 20m deep and identified as a Significant Natural Area, the gully itself is not identified for urban development. Nevertheless, it will have a key role in defining the character of future residential development in terms of visual amenity and a focus for community use.

Land outside of the gully includes two areas of former sand extraction adjacent to the gully slope. Some low density residential development has occurred in a triangular shaped enclave situated between these extraction areas. The enclave is relatively recently established. While it is not anticipated that significant change will occur within this area in the short to medium term, it is included within the Structure Plan area and a transition to higher densities can be expected over the longer term. Elsewhere the balance of the Structure Plan area is predominantly farmed pasture, with a single farmholding being situated to the south of Silverwood Lane and a number of smaller farm and lifestyle blocks being located to the north. Towards the northern end, a steep vegetated slope defines the edge of a lower lying terrace adjacent to an artificial lake. Some historical uncontrolled filling has occurred in this area.

The landform of the upper terrace consists of a gently rolling contour sloping generally towards the gully. Stands of mature trees are generally located close to existing dwellings or along accessways with the majority of the land being in open pasture with typical post and wire fencing.

2.2 IMMEDIATE LOCALITY

Beyond the Structure Plan area to the north is the Matos Segedin Industrial area which includes a range of industrial activities including a meat processing facility and composting operations. The industrial area is also adjoined by the Cambridge wastewater treatment plant. Each of these established areas has the potential to generate effects extending beyond their immediate area dependant on climatic conditions and localised wind direction. The need to manage potential reverse sensitivity effects on these established activities has informed the preparation of the Structure Plan.

Cambridge Road is a major arterial route utilised by heavy vehicles travelling between Te Awamutu and State Highway 1. The road is slightly elevated above the adjoining Structure Plan area and traffic noise, particularly from heavy vehicles, is generally high. Lamb Street also provides an arterial function for lower vehicle volumes and provides a key route of entry from the Structure Plan area into Leamington.

Extending westwards from Cambridge Road is Kaipaki Road providing an alternative route to Hamilton and also providing access to the Mystery Creek locality.

Overhead high voltage power lines run on a north-east/south-west axis immediately beyond the western extent of the Structure Plan area. Land to the south is within the Rural Zone whereas land to the west, beyond Cambridge Road is intended for future large lot residential development.

3. TECHNICAL ASSESSMENT

The following key findings follow consideration and inputs made by the Council's Cambridge C4 Growth Cell Project Group, with additional detail set out in the technical assessments provided in **Appendix B**:

Geotechnical

Geotechnical assessment of the underlying ground conditions has identified the general suitability of ground conditions subject to specific foundation designs being required in areas of previous filling activity. However, the analysis has also identified a need to adopt precautionary building line restriction for new buildings, structures and infrastructure in respect of the gully slope. The building line restriction ranges from 8m from the top of the slope in the northern section of the area to 14m from the top of the slope to the south of Silverwood Lane.

Three Waters

Assessment of the area has confirmed that the entirety of the area is capable of being served by extensions to the reticulated water supply and wastewater network. While gravity connections to the wastewater network would enable development from north to south through the Structure Plan area, alternative development scenarios are achievable through the use of pumping stations.

As the geotechnical assessment confirmed the extent of free draining soils, on-lot stormwater disposal is viable across the area. Calculations of anticipated run-off under storm events confirms that the broad base of the gully provides sufficient capacity to manage storm events without requiring attenuation of flows on the upper terraces.

Ecology

Ecological assessment of the un-named tributary located within the gully identified the potential for enhancement of the stream environment but also recognised that stormwater inputs from the development area could also modify the hydrological regime of the stream and its associated natural values. As the gully environment is a defined Significant Natural Area, effects on its natural and ecological values are identified in the Resource Management Act as a Matter of National Importance.

Archaeological

Historic Heritage is also a Matter of National Importance and the wider locality has a rich history of pre-European occupation, primarily represented by pā and borrow pit sites associated with Māori horticultural practices. Previous sand extraction and residential development within the Structure Plan area has destroyed some of these features but a number of borrow pits remain. Engagement with iwi representatives as part of the Structure Plan preparation has enabled a deeper understanding of the significance of these features and it is expected that further consideration of the historic heritage values will occur as part of the development of plan change or resource consent processes to give effect to the Structure Plan. Given the extent of the archaeological resource it is possible that a separate Archaeological Authority may be required from Heritage New Zealand in addition to any resource consent approval.

Transportation

The gully feature separates the Structure Plan area from the existing residential areas and transport network within Leamington. Access to and from the area will therefore involve use of the adjacent arterial roads, in addition to potential off road connections for walking and cycling at the northern and southern ends. Anticipated traffic growth on the



wider network indicates a need for major improvement of the Kaipaki Road/Cambridge Road intersection, including the need for realignment of the approach from Lamb Street.

Recreation

The gully environment presents a unique opportunity within the Cambridge context to establish points of entry for longer term maintenance and public access. Currently, the majority is inaccessible and unmanaged but overlooked from residential development within Cambridge Park. Points of connection to Cambridge Park at the north and the Green Belt at the south provide the opportunity to enhance connectivity between neighbourhoods. Requirements for building line restrictions along the gully edge also provide an opportunity to make connections between these points.

4. LAND USE

The developable area of the Structure Plan extends to approximately 50ha, part of which is already developed as a low density, lifestyle enclave which is unlikely to change in the short to medium term. As indicated below, additional development constraints have also been identified in preparing the Structure Plan. Taking account of these factors, the achievement of residential densities required by the Waipā District Plan indicates the long term potential for around 600 new dwellings, with approximately 42% (250 dwellings) being to the north of Silverwood Lane and 58% (350 dwellings) being to the south.

Future residents will require specific provision of recreation reserves within a walkable catchment.

The scale of development within the Structure Plan area is expected to be well served by existing commercial and community facilities within Leamington and Cambridge town centre. If demand emerges for more locally based facilities, these will be limited in scale to serve the immediate area rather than serving a wider catchment and will be located adjacent to either of the two identified neighbourhood reserves.

Consultation with the Ministry for Education has confirmed that this scale of development will not require any additional school development within the Structure Plan area.

5. KEY DESIGN PRINCIPLES

Taking account of the technical assessments undertaken, and the feedback received through community engagement, the following general design principles underpin the proposed Structure Plan:

- **Local Identity** - Optimising the gully environment as the focal point for recreational provision and vistas. Establishing direct connectivity with and along the gully edge through a continuous linear shared path with direct connections from internal roads and paths. Recognising heritage landmarks and natural features.
- **Community Cohesion** – Establishing recreational reserves where they will support higher density development, provide safe and interesting places for play and integrate with the gully.
- **Connectivity** – Through an internal network of roads and paths that prioritises pedestrian and cycle movement and safety while enabling accessibility for public transport services. Aligning roads and paths with vistas and connections to the gully edge reserve. Establishing physical connection to Cambridge Park and the Green Belt.
- **Environmental Responsibility** – Stormwater management concepts prioritise on site disposal, with the conveyance and treatment of storm events via swales integrated into the streetscape design and discharge to the gully via strategically located and ecologically friendly treatment trains. Buffer planting to the Cambridge Road frontage will reduce the visibility of the major arterial road and industrial activities to the north, minimising the potential for reverse sensitivity effects.

5.1 OPEN SPACE NETWORK

Pivotal to the establishment of local identity, community cohesion and connectivity is the establishment of a coherent framework of open spaces. The gully provides the focal point in terms of vistas and connectivity with the natural environment but it is largely inaccessible and opportunities to provide access to it and through it are likely to be long term. Nevertheless, development within the Structure Plan area provides the opportunity to establish a clear interface between the natural and built environment and provide context within which future decisions can be made regarding investment in wider access.

To achieve this, the Structure Plan provides for the establishment of a linear shared path along the entirety of the gully edge, utilising land that would otherwise be subject to building line restrictions. The path itself will require a minimum width of 3m but will sit within a linear corridor that will provide opportunities for seating and observation areas, with planted margins on the landward side to assist in stormwater management as well as define the edge of public and private space.

Wider visual connectivity to the gully and adjoining path will be required to enable passive surveillance and enhance the safety of users. This is to be achieved via an open

frontage to parts of the internal road network, footpath connections from residential streets and restrictions on fencing height or design for properties bounding the route.

The gully edge reserve will anchor two neighbourhood reserves, each between 3,500m² to 5,000m². The reserves will be located within easy walking distance of residential areas developed to the north and south of Silverwood Lane. Both reserves will connect directly with the gully edge shared path without necessitating the crossing of roads. Passive surveillance of these areas will be achieved by requirements for adjoining development, which may include higher density forms of accommodation, to have a direct ground floor level outlook to the reserve. If demand emerges for small scale commercial or community activities, a location adjacent to either of the two neighbourhood reserves will support community cohesion and local identity without affecting the viability of the town centre or residential amenity values.

While the neighbourhood reserves will provide the key elements for recreational purposes, additional open space corridors providing footpath connections between residential streets and swale or rain garden designs for the streetscape design will complement the overall network. Streetscape design of these features will be expected to provide a consistent design theme throughout the Structure Plan area to reinforce local identity and ensure consistent management and maintenance. To ensure that reference points to the historical use of the Structure Plan area are not lost, future development proposals will be expected to consider how existing trees or archaeological features can be incorporated into the reserves network, streetscape design or internal footpath connections.

Along the Lamb Street and Cambridge Road periphery, a shared path will provide safe routes and connectivity to surrounding areas without affecting arterial traffic flows. The path will be established within a buffer planted margin to the Cambridge Road frontage, continuing the design approach established in the Cambridge Park subdivision. Along Lamb Street, modification of the existing berm will enable the path to be accommodated within the road corridor, offset from the property boundary to enable visibility from direct property access.

5.2 MOVEMENT NETWORK

Integrating the Structure Plan area into the wider fabric of the Cambridge township will require alterations to the surrounding road network as well as the creation of new points of connection for passive transport modes. Cambridge Road will continue to serve a major arterial function in the wider transport network and is the main access route to the Matos Segedin Industrial Area. To ensure that traffic from development of the full Structure Plan area and anticipated traffic growth on the network is able to be

accommodated safely, widening of the road corridor will be required at the bend in Cambridge Road and a new roundabout will be required at the Kaipaki Road/Cambridge Road intersection. The new roundabout will incorporate the realignment of Lamb Street to provide safe directions of entry and exit. Up to 300 sections may be capable of development prior to the improvements although no new points of entry will be acceptable onto Cambridge Road.

Subject to the reduction of current speed limits, access from Lamb Street will provide direct property access to frontage properties where sightlines can be achieved, with the balance served from internal roads connecting to two new intersections onto Lamb Street.

Internally, new roads will be required. The Structure Plan identifies the preferred layout, taking account of engineering requirements and the achievement of high degrees of permeability and connectivity. All streets will be expected to provide for motorised and passive transport modes with a streetscape and pavement design to achieve low vehicle speeds and priority for pedestrian movement. With the potential for new development to have reduced on-site car parking provision, corridor design should provide for parking embayments, with landscaping and lighting design following a consistent theme and integrating with recreational space.

Maximum permeability will be achieved by the provision of footpath connections provided mid-block between residential streets, aligned to enable accessibility to and visibility of the open space network and gully system.

Shared path connections at the northern and southern end of the Structure Plan area are critical to achieving integration with Cambridge Park, across the stream, and with the Green Belt. These connections will require high visibility and prominence in the overall site layout.

5.3 STORMWATER NETWORK

While the entirety of the Structure Plan area drains towards the gully system, the natural values associated with this system require a sensitive and integrated approach to stormwater management to ensure that opportunities for ecological enhancement are taken. The entirety of the area is suitable for on-lot stormwater soakage. This will manage stormwater from private lots for the 2yr ARI events as close to the point of origin as possible to minimise the need for conveyance and treatment. Future proposals will be required to demonstrate how this will be achieved, either through engineered devices or through development controls regarding site coverage and permeability.



Public spaces such as road and reserves will, similarly, be expected to be designed to capture maximum contaminant loads at source. Swales and rain garden designs will provide for soakage or treatment prior to conveyance. Conveyance devices such as overland flowpaths and swales will be expected to be designed as part of the overall open space network rather than as engineered corridors.

Significant storm events will result in flows towards the gully. Two points of collection are proposed, one within the unformed Silverwood Lane corridor and one towards the north of the Structure plan area. Both points of collection will require careful design to address the change in elevation and slope towards the gully floor and incorporate sufficient treatment to ensure that contaminants do not reach the stream and that discharge volumes do not result in erosion or scour of the gully floor. Maximising the opportunity for soakage as part of the overall network will reduce the operational requirements of the treatment and discharge devices.

6. STATUTORY CONTEXT

6.1 TE TURE WHAIMANA O TE AWA O WAIKATO - VISION AND STRATEGY FOR THE WAIKATO RIVER

Te Ture Whaimana o Te Awa o Waikato – the Vision and Strategy for the Waikato River arises from the Waikato-Tainui Raupatu Claims (Waikato River) Settlement Act 2010 and the Ngati Tuwharetoa, Raukawa and Te Arawa River Iwi Waikato River Act 2010 (Upper River Act).

These acts establish a co-governance regime to protect the health and wellbeing of the Waikato River for future generations.

The vision for the Waikato River is “*for a future where a healthy Waikato River sustains abundant life and prosperous communities who, in turn, are all responsible for restoring and protecting the health and wellbeing of the Waikato River, and all it embraces, for generations to come.*” The Vision and Strategy also includes objectives and strategies to achieve the vision.

The Structure Plan area includes an un-named tributary of the Waikato River. The stream is located within a deeply incised gully and is identified as part of a wider Significant Natural Area, adjoining areas that are known to have been occupied and modified by Māori horticultural practices. The wide range of values associated with the stream and its immediate locality have provided key elements to the consideration of future development, including consideration of the Vision and Strategy for the Waikato River.



In particular, the preliminary design includes high-level stormwater management solutions to ensure that water quantity and quality effects resulting from future development are appropriately mitigated and accord with best practice. This will help inform more detailed technical assessments that will be necessary to support any proposed plan change or subsequent resource consent applications under the District Plan and any regional stormwater discharge permits required under the Waikato Regional Plan.

The potential for land modification also raises issues in respect of the stability of the gully sides which could also result in increased erosion and sedimentation reaching the river. The Structure Plan is based on the establishment of an open space network that will protect the gully slope and margins and therefore secure the integrity of the natural system.

6.2 NATIONAL POLICY STATEMENT ON URBAN DEVELOPMENT (2020)

The NPS-UD is intended to ensure there is sufficient land available for future housing and business needs. The NPS-UD has identified the Hamilton area (which includes Waipā District) as a high-growth urban area.

The NPS for Urban Development requires that sufficient land for housing be available for the 'short term', 'medium term' and 'long term', and that an oversupply of land be made available. A fundamental shift in respect of on-site parking requirements is introduced, removing the requirement for minimum levels of provision. Increased development densities could result from the additional space that will be freed up, with a consequential increase in the demand for on-street parking.

The Structure Plan is a key step in ensuring that the supply of land identified within the Council's Growth Strategy is brought forward to be genuinely available for development. By providing clear guidance to landowners and potential developers, the Structure Plan identifies the anticipated pattern of development and associated infrastructure. The Plan also provides a clear basis for the identification of infrastructure improvements requiring public investment. Anticipating the shift towards reduced on-site parking, the Structure Plan signals the need for careful design of the streetscape to accommodate parking space in addition to landscaping and stormwater management devices.

6.3 WAIKATO REGIONAL POLICY STATEMENT

The RPS provides direction for the management of the resources of the region as a whole. District Plans are required to give effect to the Regional Policy Statement.

The RPS identifies the broad scale of residential growth anticipated within Waipā District and indicates urban limits within which this should be met as well as density targets to achieve the efficient use of land and resources. The Structure Plan area is within the defined urban limits for Cambridge. The proposed pattern of development provides protection for sensitive aspects of the Structure Plan area. It locates public spaces in areas that would otherwise face development restrictions and thereby increases potential yield in other parts of the area. The proposed road network and access arrangements ensures that all parts of the Structure Plan area are served by road connections that will support full urban density development.

The Structure Plan is consistent with the key objectives and policies of the RPS.

6.4 WAIPĀ DISTRICT PLAN

The Waipā District Plan outlines the strategic policy framework for the Plan, including key trends, future challenges, national directions, NPS-UD, Vision and Strategy for the Waikato River, Waipā River Agreement, National Policy Statements, National Environmental Standards, Regional and Local direction, and strategic outcomes sought. It also identifies the key resource management issues for the District and associated Objectives and Policies.

One of the key objectives is to achieve a consolidated settlement pattern that is focused in and around existing settlements of the District, which is supported by policies to ensure that all future development and subdivision in the District contributes towards achieving the anticipated settlement pattern in the Future Proof Growth Strategy and Implementation Plan 2009 and the District Growth Strategy.

The Structure Plan is consistent with the key objectives and policies of the Strategic Policy Framework section in the District Plan as it will bring forward the development of residential dwellings within a key growth cell that will contribute towards the coordinated expansion of the Cambridge township. Careful assessment of the site specific attributes and technical requirements of development and infrastructure provision has resulted in a Plan that will deliver significant growth whilst protecting and enhancing significant features. The Structure Plan is consistent with the capacity targets of the Waipā 2050 Growth Strategy.

7. CONCLUSIONS

The Structure Plan described in and appended to this report confirms the suitability and anticipated form of development for the C4 Growth Cell.

The technical assessments underpinning the Structure Plan, as well as engagement with iwi, provide confidence that future development is viable and can be achieved whilst protecting and enhancing significant natural and cultural features. The Structure Plan identifies the anticipated pattern of development and clearly signals key land use and infrastructure elements that will require public investment in their development or ongoing ownership.

The Structure Plan is a key step towards the achievement of planned development but is sufficiently flexible to adapt to the additional technical assessments that will be needed as part of subsequent plan change or resource consent processes.