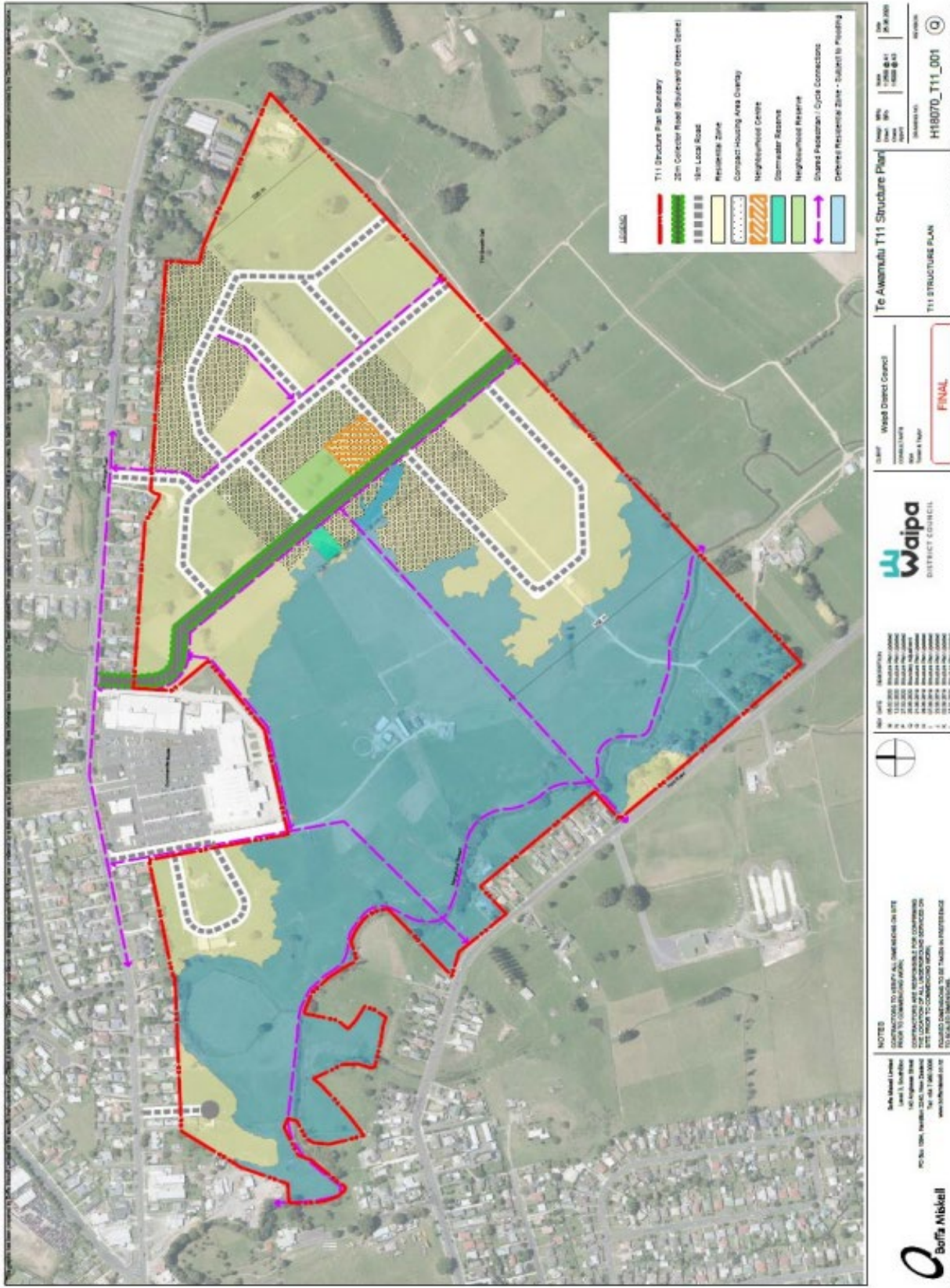


# Appendix S25 – Te Awamutu T11 Growth Cell Structure Plan (NEW)

## S25.1 Te Awamutu T11 Growth Cell Structure Plan



## **S25.2 Background**

- S25.2.1 The T11 growth cell is predominantly characterised by rural farming and cropping blocks, with a few large trees and a few dwellings. The topography generally slopes from the north and east to the south and west. The land drains to the Mangaohoi Stream which runs along the southern boundary of the growth cell.
- S25.2.2 There are significant flooding constraints within this growth cell associated with the Mangaohoi Stream, which has resulted in a large portion of the cell being deemed unsuitable for development.
- S25.2.3 Providing for changing housing demands while maintaining existing character and amenity expectations will be challenging. The Town Concept Plan 2010 prepared for Te Awamutu provides guidance on how these competing demands can be managed. The Town Concept Plan recognises that a change in the current density and form of residential development will need to occur if future housing demands are to be met in a sustainable manner.
- S25.2.4 It is important that the distinguishing characteristics of this particular place are maintained, including reflecting the existing semi-rural character, retaining existing mature trees where suitable and ensuring appropriate boundary setbacks for buildings.
- S25.2.5 The Structure Plan for the T11 growth cell is anticipated to deliver a development yield of approximately 380 allotments (approximately 10 lots per hectare). This is a provisional estimate based on net developable area and takes into account the loss of land used for roads and open space. A large portion of the growth cell has been identified as vulnerable to flooding and has been excluded from the developable areas of the structure plan.

## **S25.3 Key design principles**

- S25.3.1 The following general design principles have underpinned the development of the T11 Structure Plan.
- Respect for existing character*
- S25.3.2 All development layout and design should reflect a comprehensive understanding and appreciation of location and surrounding context. The natural environment is protected and enhanced to provide amenity and ecological enhancement. Important sites and landmarks are acknowledged to respect the history and culture of the area.
- Cultural identity*
- S25.3.3 Maori names and design elements will be incorporated where appropriate and in consultation with local iwi.
- Social value*
- S25.3.4 Public safety, recreation and social values are important.
- Connectivity*
- S25.3.5 An integrated network of roads, pedestrian and cycleways through the development connect the residents to the existing town, open spaces, and playgrounds.

### Appropriate scale

S25.3.6 The hierarchy of roads, cycleways and walking tracks is appropriate to the scale of the development and needs of the residents.

### Quality public realm

S25.3.7 High-quality materials and construction methods should be used throughout the neighbourhood in both the public and private spaces, to ensure spaces will retain a sense of quality and attract residents to use the facilities.

### Well-designed built environment

S25.3.8 The built form guidelines are intended to encourage creative design outcomes, not to limit or restrict original architecture or design. They should also positively contribute to the overall built environment of the area.

## **S25.4 Open Space Framework**

S25.4.1 The open space framework design for the T11 Structure Plan reflects a comprehensive understanding of the existing landscape and surrounding land use context. The development will be efficient, connected and permeable, with a focus on pedestrian walkways, cycleways, reserves and green corridors.

S25.4.2 The existing exotic and native mature trees perform many functions, including removing groundwater and reducing the requirement for stormwater attenuation; ecological functions, such as providing habitat and food for birds; retaining the rural aesthetic; shade during summer for people and animals; cutting of wind, reduction of soil erosion from storm events. Existing trees have been incorporated into the open space framework where possible.

S25.4.3 The open space framework is made up of:

- (a) Reserves
- (b) Green Streets
- (c) Open Spaces
- (d) Playgrounds
- (e) Vegetated Swales

S25.4.4 The combination of these spaces allows for a green network to be created through the site, ensuring that all members of the community have access to an open space, and the natural environment.

## **S25.5 Stormwater Management**

S25.5.1 The proposed reserves and open spaces within the T11 structure plan will provide for people's recreational interests, and the protection of landscapes, amenity, ecosystems, cultural and historical values. They also fulfil an important stormwater management function.

S25.5.2 There are significant flood risks that have been identified within this growth cell associated with the Mangaohoi Stream. This has resulted in a large portion of the growth cell being deemed unsuitable for development.

S25.5.3 The stormwater management approach for those developable areas of the growth cell can be summarised as follows:

- (a) Wherever possible retention, reuse and onsite soakage for stormwater is allowed to soak into impermeable services and managed through natural systems. Natural systems such as vegetated swales, are a low impact way of managing stormwater which are also an important amenity feature of the site.
- (b) The western and southern areas of the growth cell currently provide a significant amount of natural floodplain storage volume and the growth cell has been split into two smaller sub-cells to avoid increased flood risk downstream through the existing Te Awamutu urban area.
- (c) A flood flowpath across the lots in the western sub-cell area will need to be managed adequately, with the most appropriate option likely to be divert the flowpath around the southern end of the lots through the open space/reserve. This flowpath will also need to provide mitigation for the displacement of the floodplain volume.
- (d) Due to the position of the growth cell within the wider Mangaohoi catchment, peak flow control of the 2 year ARI and higher magnitude flood events is not recommended to avoid coincidence with the larger Mangaohoi flood peak.
- (e) Retention, reuse and onsite soakage of the post-development water quality volume will be required to provide stormwater treatment and erosion control.
- (f) Onsite soakage will need to be tested and designed on a lot by lot basis. If on-site soakage investigations show that the post-developed water quality rainfall volume cannot be achieved through water tanks and soakage, then bio-retention devices or a suitable wetland will need to be designed.
- (g) Vegetated swales are recommended to convey overland flow.
- (h) The compact housing area overlay is in close proximity to public open space. This is a best practice approach, where higher density residential environments are offset with easy access to usable open space networks.

## **S25.6 Connectivity**

S25.6.1 The road connections through the T11 structure plan area will holistically integrate cars, pedestrians, cyclists, stormwater management, and ecology.

S25.6.2 High-quality streets with tree lined berms, grassed swales, and footpaths / cycleways are proposed to provide a safe and attractive area for both vehicular and pedestrian movement.

S25.6.3 The Structure Plan will have a 20m green boulevard / tree framed collector road through the sites which become the main spine road for vehicles, pedestrians, and cyclists. The 18m local roads accommodate pedestrian facilities on one side and the option for stormwater conveyance through a vegetated swale down the other side.

S25.6.4 A network of shared paths and footpaths will help to connect residents to site features such as reserves, playgrounds, commercial zone, and the neighbourhood centres.

S25.6.5 Shared paths should be a minimum of 3m wide while footpaths should be a minimum of 1.5m wide.

S25.6.6 An integrated pedestrian and cycle network improve the wellbeing of the residents through exercise, contact with the natural environment, and social interaction.

S25.6.7 The activation of the public realm from people moving through these spaces makes them safer and more attractive to a range of users.

18m Local Road



25m Collector Road / Green Spine Road



Example image. Typical 18m street with separated 3m shared cycle path or 1.5m footpath (refer structure plan) and vegetated drainage swale.

## **S25.7 Built Form**

- S25.7.1 The scale, position and external appearance of new buildings must consider their settings and the relationships they have with nearby buildings and spaces.
- S25.7.2 Well-designed buildings will be compatible with the surrounding environment and respect privacy of neighbouring residents. They take into account the character of the area and are designed to enhance this character. The built form should also take into account site circumstances and local micro-climatic conditions, such as solar access, topography, and prevailing wind. Trees and landscaping are to be used for privacy and screening and to soften the built form.
- S25.7.3 Maximum height and site coverage controls will ensure houses relate well to the size of the lots, without being overly dominant visually. Considerate building placement ensures good relationships between neighbouring properties, roads and reserves.
- S25.7.4 The Design Guidelines provide a framework which will lead to positive outcomes for the landowners and the wider community. This encourages original design which considers the unique opportunities of the site and development areas.

## **S25.8 Neighbourhood Centre**

- S25.8.1 A well-designed neighbourhood centre creates opportunities and spaces for communities to gather, interact, do business and take part in passive and sometimes active recreation activities.
- S25.8.2 The Neighbourhood Centre incorporates local service functions and small-scale retail activities that could be supported by a small community centre space and related social infrastructure, aimed at attracting residents to the centre. The Neighbourhood Centre design should incorporate shared spaces, which activate the area, by providing different modes of transport through the spaces.
- S25.8.3 Landscaping plays an important role in supporting retail activities and providing spaces for residents to linger and enjoy social interactions with their community. The neighbourhood centre's landscaping should incorporate:
- (a) High-amenity open space and quality planting;
  - (b) Strong connectivity for pedestrians and cyclists;
  - (c) Appropriate use of materials to create a relaxed character with flexible spaces; and
  - (d) Landscaping should be low maintenance and incorporate predominantly native trees, shrubs and groundcover species.

## **S25.9 Supporting Documents**

- S25.9.1 This Structure Plan should be read in conjunction with the following technical reports which are available from Council on request:
- (a) Te Awamutu T11 Structure Plan Context Report, prepared by Boffa Miskell, dated 25 June 2020 (Council document number 10411036);
  - (b) Te Awamutu T11 Growth Cell Design Guidelines, prepared by Boffa Miskell, dated 25 June 2020, (Council document number 10411038);

- (c) T6 and T11 Growth Cell Structure Plan Liquefaction Desktop Study, prepared by Tonkin + Taylor, dated August 2019 (Council document number 10373335);
- (d) Te Awamutu T6 and T11 Structure Plans Three Waters Assessment, prepared by Tonkin + Taylor, dated August 2019 (Council document number 10373339); and
- (e) Te Awamutu T6 and T11 Structure Plans Transportation Assessment, prepared by Tonkin + Taylor, dated August 2019 (Council document number 10373344).