

DESIGN GUIDELINES

TE AWAMUTU T6 GROWTH CELL




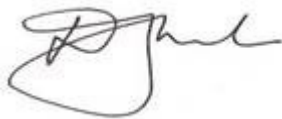
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Boffa Miskell



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1. Introduction

The Waipa District has been identified as a high growth area in the National Policy Statement on Urban Development Capacity.

Te Awamutu and Kihikihi are forecast to grow by 5,400 people by 2050. To provide for this growth, a structure plan for the T6 growth cell is required, as identified in the Waipa2050 Growth Strategy (2017) and Waipa 2018-28 Long Term Plan.

The T6 growth cell is located to the west of State Highway 3 between Te Awamutu and Kihikihi, is currently zoned Deferred Large Lot Residential.

Specific provision for large lot residential development is identified within T6. This location is considered suitable for this land use as it expands on the existing large lot residential area on St Leger Road and provides for some growth between Te Awamutu and Kihikihi, where other land use practices may otherwise not be appropriate.

This growth cell has been identified as a location for non-serviced (water only) large lot residential development, providing an alternative form of living choice to other greenfield developments in Te Awamutu.

To ensure that development is consistent with the Council's strategic direction as set out in Waipa 2050, a structure plan has been developed in consultation with landowners and key stakeholders, and servicing requirements identified.

These design guidelines have been developed to support the implementation of the Structure Plan and to ensure that as the neighborhood is developed, the community and Council can be assured of a high level of quality and consistency.

This design guide is to be read in conjunction with the Waipa District Plan. In order to achieve a higher level of quality and consistency of development within the Structure Plan area, there are certain guidelines that are more onerous than the District Plan provisions. In these circumstances, it is anticipated that a design review will be undertaken as part of a development control process. The design guide has taken into account the district plan rules, but has not sought to list out every relevant provision. For the avoidance of doubt, the relevant provisions of the District Plan will prevail over these guidelines in a regulatory context and a full assessment against those provisions will need to be undertaken in parallel to any consideration of design matters in this guideline.

1.1 Purpose

This design guide is a document for future residents, designers, development partners and local authorities, clearly communicating the expectations as to how this area of land will be developed. The document guides the landscape framework, site layout, boundary treatments and built form within the T6 Structure Plan area.

This document describes the expectations that need to be met for development to proceed. It will form an integral part of quality assurance processes. It will be used as the basis for discussions with designers, local authority staff and other key stakeholders during the design and construction of the development and individual sites.

Good design comes as a result of clearly identifying the intended outcome, and the constraints and opportunities are resolved through a creative process. The guide is not meant to be prescriptive, and it should inspire imaginative and practical solutions.

1.2 Site Context

The T6 growth cell is predominantly characterised by rolling pasture, large mature vegetation, and large residential dwellings and spacious lots typical of the semi-rural environment on the perimeter of the Te Awamutu and Kihikihi townships. There is a large natural gully system which runs through the centre of the site and drains the surrounding farmland to the Puniu River to the south.

This area has been identified as suitable for Large Lot Residential development which reflects the semi-rural character of the area, which has a lower density and a more rural feel than in the Residential Zone. People living in this zone are generally seeking to live in a semi-rural environment, while remaining within commuting distance to urban centres.

The character of the Large Lot Residential Zone is different from urban residential and/or rural character. The elements that generally define the District's large lot residential character are.

- » Views to natural features including flat to rolling terrain, volcanic cones, and water bodies; and
- » Low density residential built form and residential land use; and
- » Generally un-serviced with a lack of urban infrastructure such as reticulated water and wastewater systems, and less services such as street lighting, footpaths, and curb and channel road edging than the Residential Zone. This character is certainly consistent with the T6 Structure Plan area.

The area has many large sections, resulting in dwellings having good separation from the road, reinforcing the semi-rural character of the area. There are a few parks and open spaces but with minimal amenities such as playgrounds and walkways. The region is primarily grass paddock, with large mature exotic and native trees scattered through the landscape.

There are many mature trees within the area, with shelterbelts and trees planted linearly along existing site boundaries and between orchards and fields. Driveways and access roads into the sites are primarily gravel and meander organically. Fences are timber post and rail, or wire, and gates are predominantly timber or galvanised steel tube.



1.3 Design Principles

» **Respect for existing character.** All designs 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.** Opportunities are to be identified throughout the development of cultural interpretation and education within the landscape. Maori names and design elements will be incorporated where appropriate and in consultation with local iwi.

» **Social value.** People are the key consideration in all aspects of the design. Pedestrian safety, recreation and social values are paramount.

» **Connectivity.** Transport networks and public spaces incorporate stormwater management, and green corridors, for pedestrian and ecological connections. A network of pedestrian and cycleways through the development connects the residents to the existing town, open spaces, and playgrounds.

» **Appropriate scale.** The correct scale and hierarchy of roads, cycleways and walking tracks are integrated to ensure a balance of transport options and access to public transport.

» **Quality public realm.** High-quality materials and construction methods used throughout the neighbourhood in both the public and private spaces, ensure spaces will retain a sense of quality and attract residents to use the facilities.

» **Well designed built environment.** The built form guidelines ensure that the landscape and buildings within private lots, contribute to the amenity, safety, and broad context of the development. This guide is intended to encourage creative design outcomes, not to limit or restrict original architecture or design.



2. Open space framework

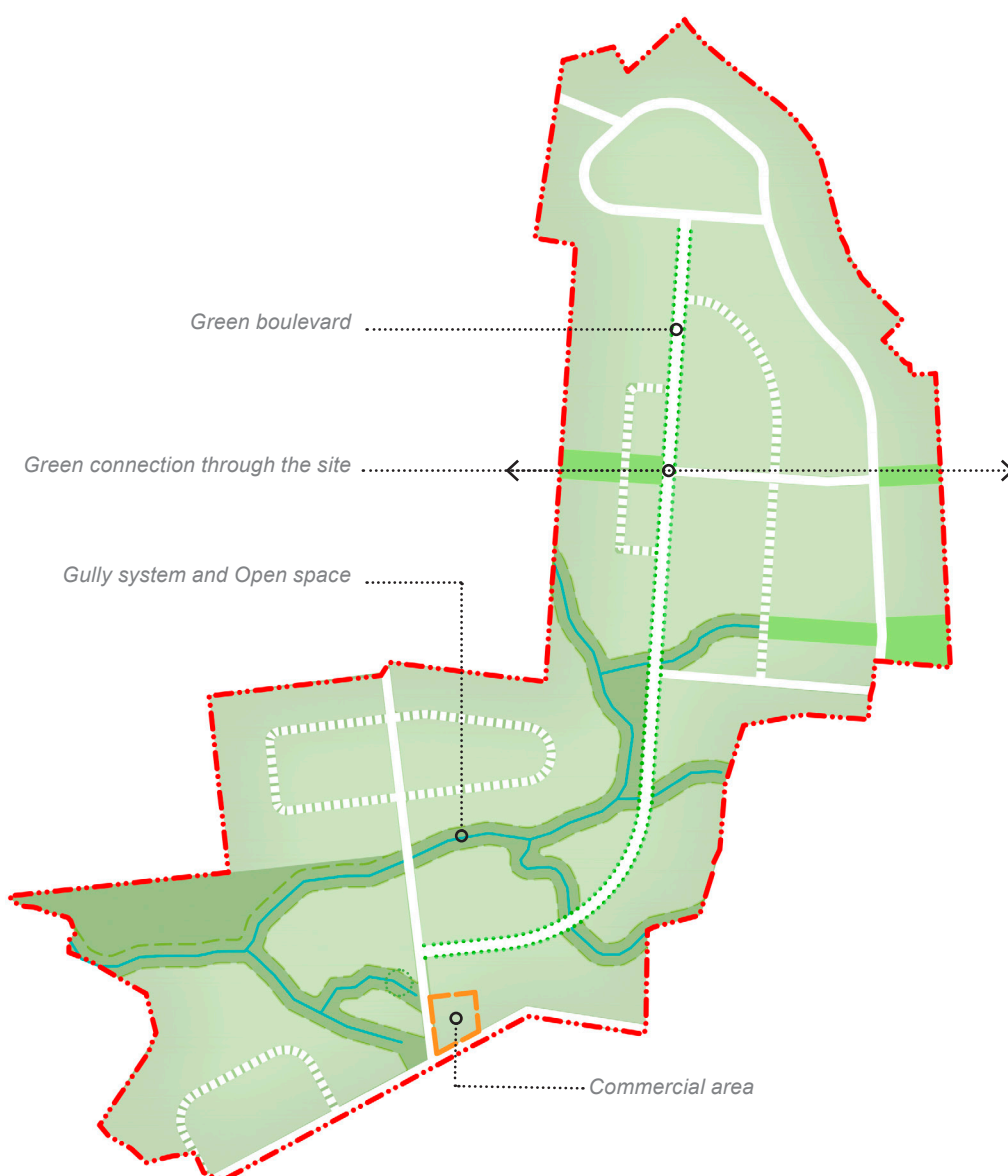
The design of the T6 Growth cell reflects a comprehensive understanding of the landscape and surrounding context. The development will be efficient, connected and permeable, with a focus on pedestrian walkways, cycleways, reserves and green corridors.

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.

The T6 growth cell open space framework is made up of:

- » Reserves
- » Green Streets
- » Open Spaces
- » Gully System
- » Vegetated Swales

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



2.1 Reserves and Stormwater management

- » Reserves and open spaces provide for people's recreational interests, and the protection of landscapes, ecosystems, cultural and historical values. They also offer considerable amenity value to the community.
- » Stormwater is managed through a planted gully system, vegetated swales, the St Leger road culvert and new crossings, and on lot individual water tanks. 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.
- » Water tanks for each lot are required, so rainfall runoff is reduced. Water will be stored for household water supply, as the development will have access to a restricted water supply. The combination of vegetated swales and on-site water tanks makes for a resilient design approach to stormwater and ensures the system can cope with the post- development stormwater.
- » All waterways will have a minimum 2m planted buffer adjacent to the water to prevent contaminants entering the water, and improve the water quality. The Main Gully system has a 23m Riparian planting margin.
- » Due to the position of the growth cell within the wider Punui River catchment, peak flow control of the 2 year ARI and higher magnitude events is not recommended to avoid coincidence with the larger Punui River flood peak.
- » The St Leger Road culvert should be upgraded and new crossings appropriately designed to enable pass forwarding of post-development flood flows. Crossings and discharge points to the channel should be designed to mitigate scour and erosion within the incised gully.
- » Retention, reuse and onsite soakage of the post-development water quality volume will be required to provide stormwater treatment and erosion control. Water tanks for each lot are recommended to help meet these requirements and water supply demands.
- » Onsite soakage will need to be tested and designed on a lot by lot basis. Especially as low soakage could be an issue in the upper areas of the growth cell.
- » 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.
- » Vegetated swales are recommended to convey overland flow.
- » Avoid modification to existing channel corridors and an ecological survey is recommended.



2.2 Vegetation and Natural Site Features

- » Where large trees over 6m tall exist on private lots, these are to be retained. Trees may be removed subject to an arboricultural assessment.
- » Existing vegetation and natural features are to be protected and enhanced.
- » Landscape planting is preferred over hard structures for privacy and shade.

Examples of vegetation preferred to hard structures for fencing and shade



2.3 Parks and Play-spaces

- » The development could have unique and exciting playspaces to suit children of all ages and abilities.
- » Playspaces could include nature-play and educational facilities, which help kids learn about the significance of the landscape.
- » Sculptural and interpretive elements could be incorporated into the designs, which provides exposure to, and encourages interaction with New Zealand's culture and history
- » Playspaces should be connected by cycleways and walkways to ensure they are accessible and utilised by residents.

Examples of nature-play opportunities



3. Roads and Streetscape

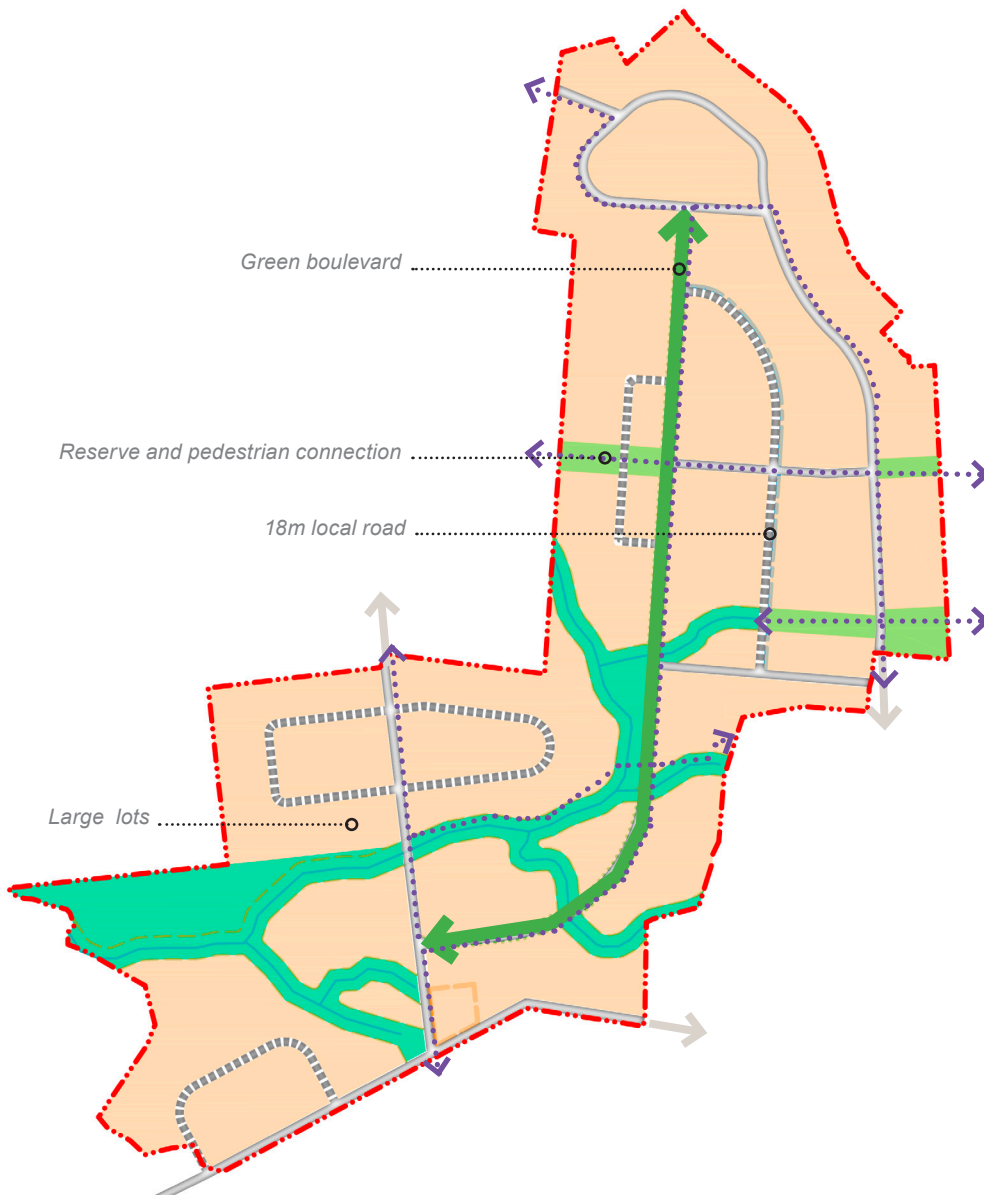
The roading connections through are considered holistically, to integrate cars, pedestrians, cyclists, stormwater management, and ecology.

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.

3.1 Road Hierarchy

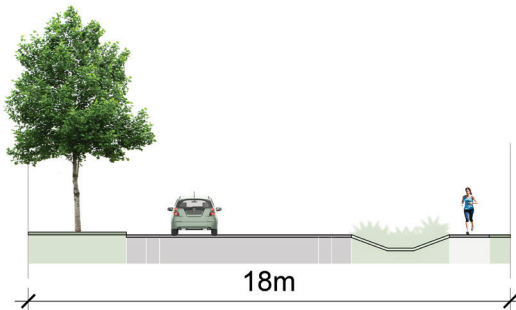
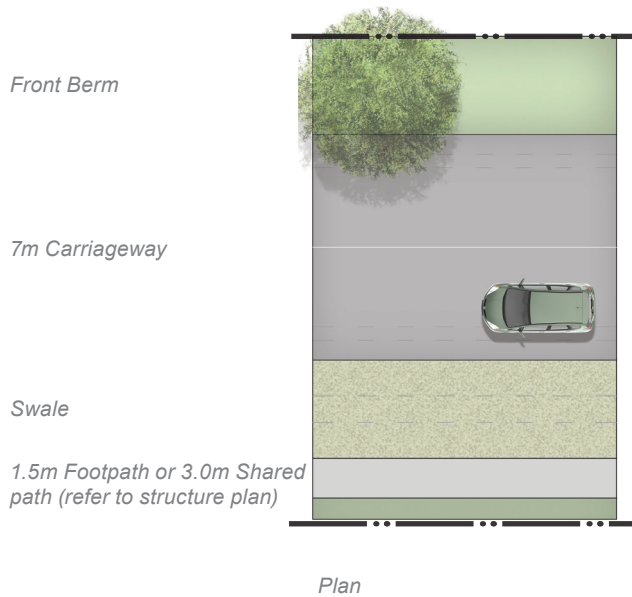
The 25m green boulevard is a tree framed street through the site and becomes the main spine road for vehicles, pedestrians, and cyclists.

The 18m local roads accommodate pedestrian facilities on one side and the option for stormwater conveyance through a vegetated swale down the other side.



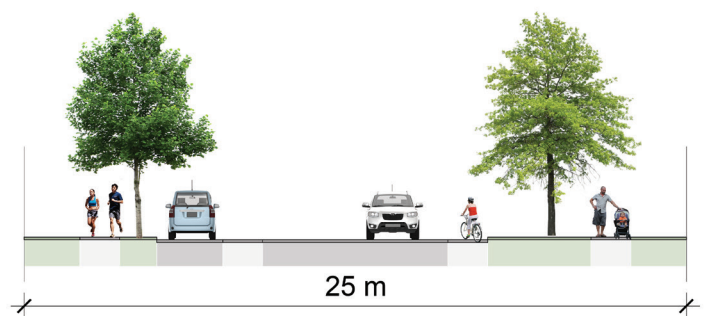
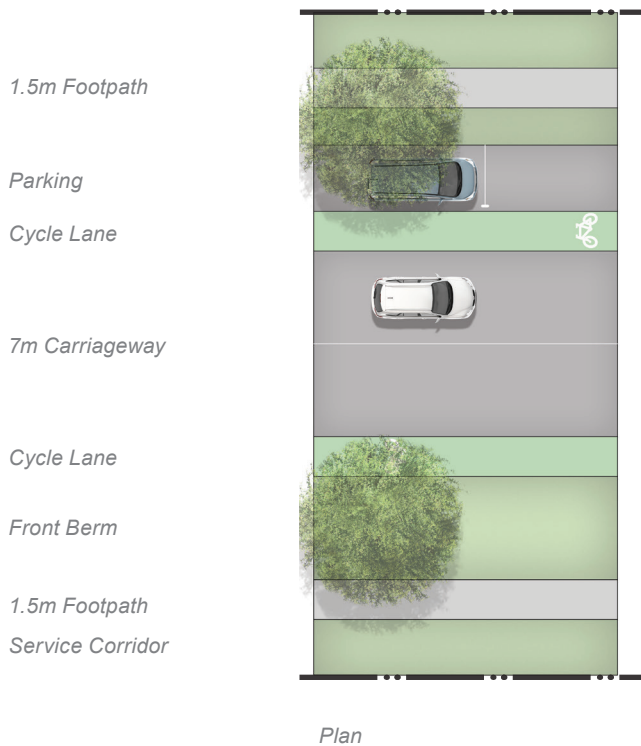
3.2 Road Typologies

18m Local Road



Front berm may include: Swales, recessed parking, bus stops, tree planting, street lighting

25m Collector Road / Green Spine Road



Front berm may include: Swales, recessed parking, bus stops, tree planting, street lighting

3.3 Pedestrian and Cycle Connectivity

- » A network of shared paths and footpaths will help to connect residents to site features such as the gully system, reserves, playgrounds, commercial zone, and the town centre.
- » Shared paths should be a minimum of 3m wide while footpaths should be a minimum of 1.5m wide.
- » An integrated pedestrian and cycle network improves the wellbeing of the residents through exercise, contact with the natural environment, and social interaction.
- » The activation of the public realm from people moving through these spaces makes them safer and more attractive to a range of users.



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

3.4 Paving and Surface Treatments

- » The use of stone paving, segmental concrete and surface treatments at key intersections, road junctions, and in the private rows is encouraged, and will assist in slowing vehicles and help to prioritise pedestrian movement
- » Good quality pedestrian and cycle path materials and construction ensure they can easily be maintained to a high standard and used in all seasons.
- » Permeable paving materials should be considered as an option to reduce stormwater runoff and have a low impact on the landscape.
- » Using exposed aggregate concrete on walkways and cycleways is recommended to provide a higher quality surface with a more natural feel.

3.5 Site Furniture and Lighting

- » The pedestrian spaces should use high-quality materials and construction methods, which ensures long life and low ongoing maintenance costs.
- » High-quality pedestrian spaces attract people to use them, though the good design of paving, lighting and furniture.
- » Site furniture should be sympathetic to its rural surroundings, the use of timber, a subtle colour palette, and simple design ensures it ties in with the rural context.
- » LED Lighting with a low light spill and a warm colour tone should be used throughout for a consistent lighting effect. Warm LED Lights are efficient and provided the appropriate light to spaces without causing any adverse effects to people or the landscape.
- » Uplighting on trees and sculptures is appropriate, so long as the spill of light does not affect neighbouring properties or the public realm. Down lighting is preferred in outdoor living areas as there is less glare. In general, where possible the light fitting itself should not be visible.

Example images. Public space vernacular.



4. Built Form

Good design ensures the height and bulk of built form is appropriate to the location and character of the site. The scale, position and external appearance of new buildings must consider their settings and the relationships they have with nearby buildings and spaces.

Well designed buildings are compatible with the surrounding environment and the respect the 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 specific site circumstances and local microclimatic 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.

Maximum height and minimum size floor areas 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.

This guide puts in place a design framework, which will lead to positive outcomes for the landowners and the wider community. This encourages original and exciting design which considers the unique opportunities of this development.

Standard district plan rules are used in combination with design recommendations to achieve a high quality, attractive and high value design outcome for the community.



4.1 Building Placement

» The house is to be setback according to the Setback Table and Diagrams on page 13 of this document. Setbacks establish a framework for how buildings will relate to each other and the public realm. Generous setbacks ensure the relationship between the built form, and the public realm is complementary and consistent.

» The orientation of the building is to consider the sun and wind to provide the most comfort for the residents and give variation to the housing layouts.

» Well-positioned houses have enough separation from the road for usable driveways and turning areas which are in scale with the property. Where part of a garage sits in front of the house, it must adopt the architectural style or materials of the house.

4.2 Street Frontage

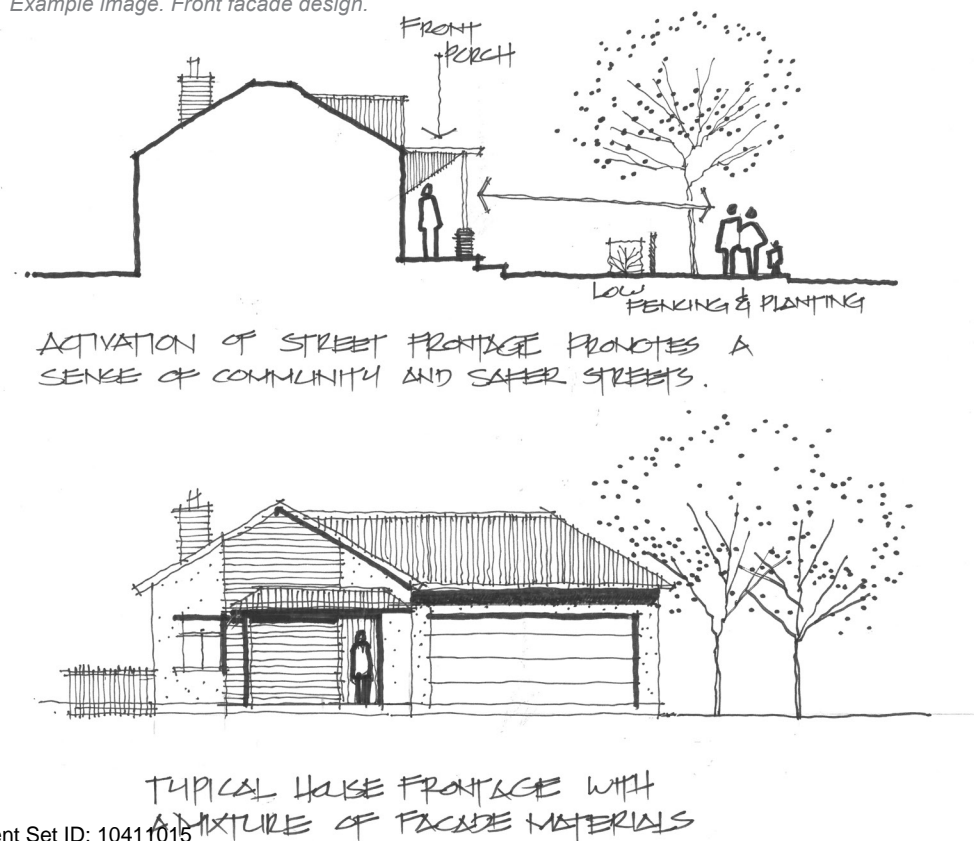
» Houses should appear to be oriented towards the street and be visible from the road. A covered entrance/outdoor space is recommended on the road frontage of the house. A welcoming front facade creates a sense of community and promotes active surveillance over the streetscape.

» The front facade should where possible incorporate two to three complimentary materials and should have variation in the form to provide interest. An attractive street frontage adds value to the neighbourhood. Relationships between the roads and the buildings are considered critical to the identity of the community, and comfort and safety of the public spaces.

» It is recommended that driveways follow the contour of the landscape to minimise earthworks or to retaining walls. Materials are to be in keeping with a rural context, and of good quality, such as asphalt, exposed aggregate concrete or metal. The design of turning circles or parking areas which are visible from the road must compliment the design of the house.

» Vehicle crossings should be constructed from exposed aggregate concrete, so a consistent high quality street / driveway interface is maintained.

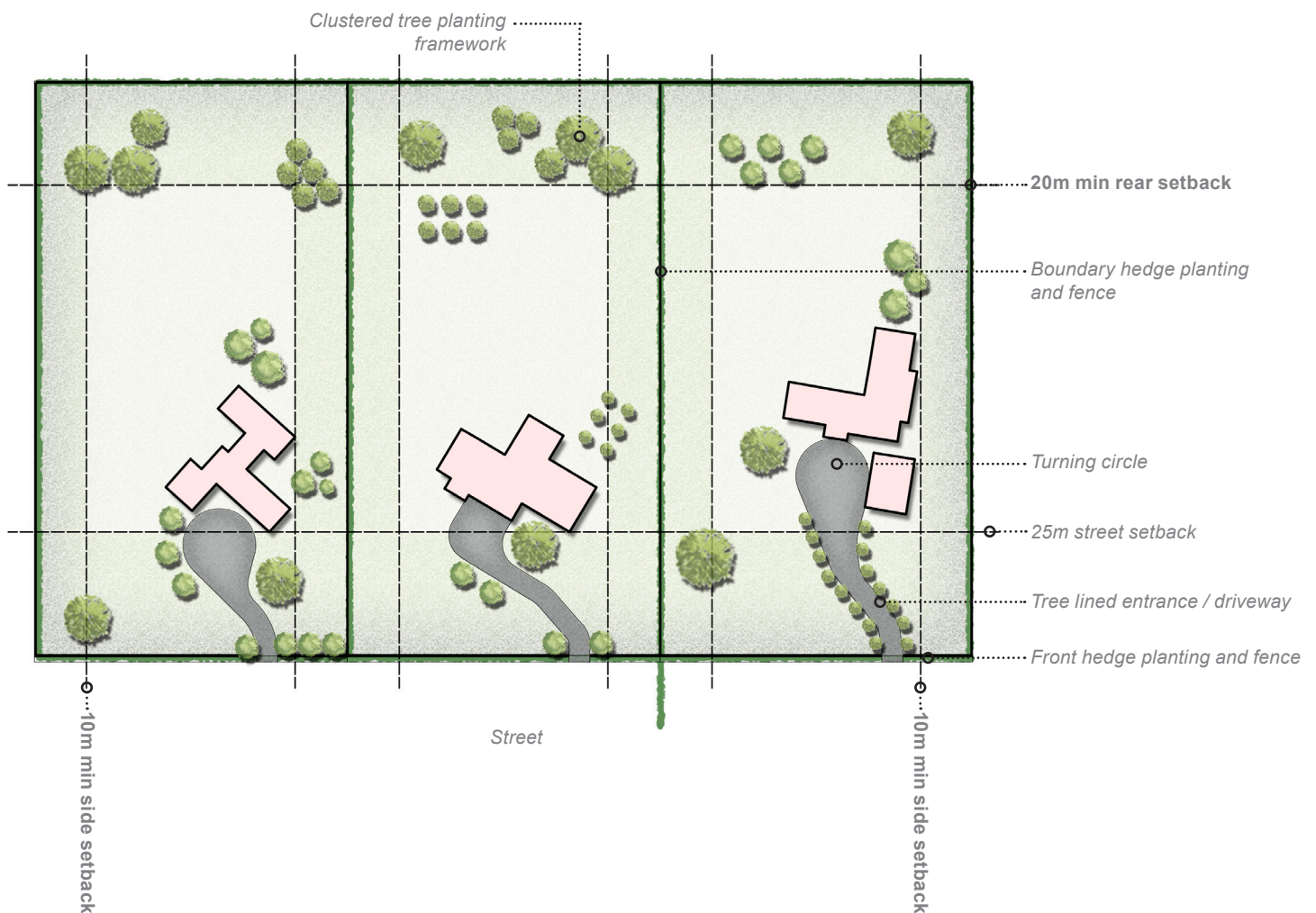
Example image. Front facade design.



4.3 Building Setbacks (Large -Lot Residential (2,500m² to 5000m²))

2500m ² to 5000m ² Lot Building Set Backs	Meters
Road boundary setback	25
Rear boundary setback	20
Side boundary setback	10

Provided that for dwellings and detached habitable rooms where a site boundary adjoins the Rural Zone or Reserves Zone, the minimum setback from that boundary will be 20m.



**Building design, driveways and landscaping for illustrative purposes only*

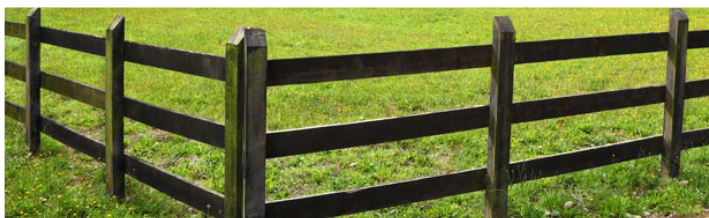
4.4 Boundary Treatments

- » Fences between buildings on the site and any road, public walkway or reserve should be no higher than 1.2m in height if not visually permeable, or no more than 1.8m in height if visually permeable.
- » Landscape planting between dwellings on the site and any public place should allow visibility between the dwelling and the public place.
- » Clipped hedges are preferable to fences on front boundaries. Hedges provide a softer interface between properties and a more natural feel over long spans.
- » Side and rear fences should be visually permeable. Examples include high quality pool fences and farm style fences, such as post and rail, which are sympathetic to the landscape.
- » Planting should to be used to create privacy between lots, which, in addition to the public space planting framework, will improve the overall amenity for the community.

4.5 Retaining

- » Retaining walls should not exceed 1.5m in height. Where retaining walls above 1.5m in height are required, stepped retaining should be used to prevent visual dominance.
- » Retaining walls visible from a public viewpoint should be enhanced by plant cover using a suitable shrub, groundcover, or climber.
- » Retaining walls within 2m of boundaries should be avoided where practicable.

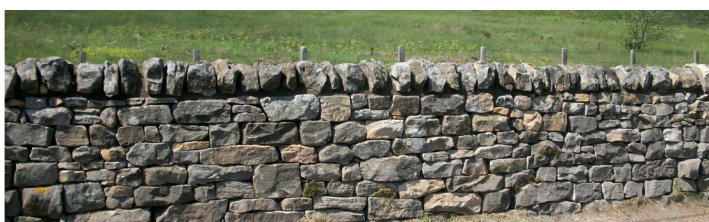
Example image. Recommended boundary fences and walls



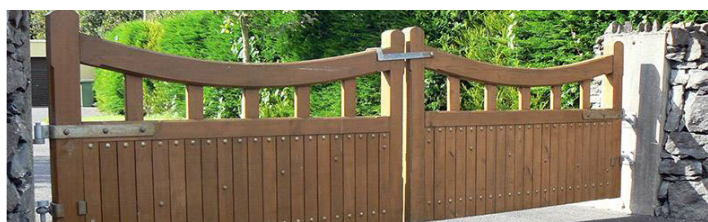
Timber farm style fence



Timber farm style gate



Farm style stone wall



Timber farm style formal gate



Visually permeable metal fencing



Visually permeable metal gate

4.6 Building Size, Height, Form

» The maximum height gives a consistency through the neighbourhood, and maintains a rural character. The maximum height for all houses within the T6 Growth cell is 8m.

» The maximum total building coverage on a site should be designed to comply with Rule 3.4.2.7 in the District Plan.

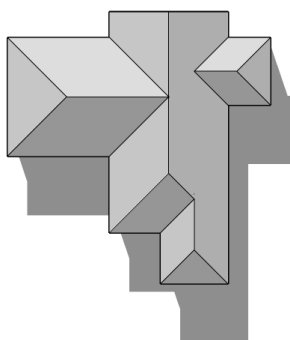
» Impermeable surface coverage on a site should be designed to comply with Rule 3.4.2.8 in the District Plan.

» The recommended roof designs are gable-end roofs, combination gable and hip roof, and monopitch roofs. Variation of rooflines adds to the interest and quality of the public realm. (see diagram below)

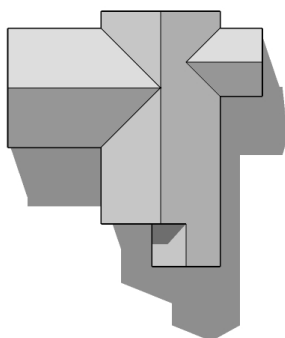
» Full hip roofs are not recommended.

» Design and layout of development adjoining water bodies and reserves - Within the Large Lot Residential Zone, the design and layout of development should ensure that water bodies and reserves are fronted by either the front or side façade of a dwelling in accordance with Rule 3.4.2.21 of the District Plan.

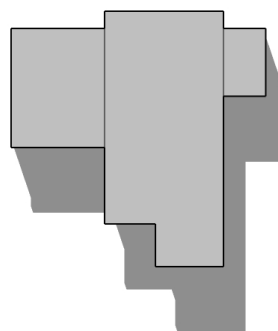
Examples of approved roof styles



Combination of roof styles



Gable end roof



Monopitch roof



4.7 Materials and Colours

It is recommended that:

- » Houses should use natural and muted colour tones, which blend into the surrounding landscape. Bright colours and highly reflective materials should be avoided.
- » Houses should be composed of two to three complementary materials. The Front facade should have a minimum of two materials. Brick cladding should not exceed 40% of any publicly visible frontage.
- » Fences to be dark neutral colours.

Example images of material and colour palettes



Dark painted weatherboard and light coloured plaster



Dark painted weatherboard and cedar



Dark painted weatherboard, honed and sealed concrete block and timber

5.1 Neighbourhood Centre

The design of streets, buildings and spaces within the Neighbourhood Centre affects the future vitality and economic potential of the area. This document is intended to provide guidance for the development of a vibrant, community-focused, and economically viable commercial centre within the growth cell.

Design guidance for the Neighbourhood Centre is not intended to be either overly complicated or prescriptive but is instead aimed at providing direction to potential future developers as to the outcomes supported by the local community and key stakeholders. These design criteria cover a wide range of matters to ensure that developments within the Centre reflect good urban design practice. A range of activities are promoted within the Centre, and pedestrian scale frontages reinforce the pedestrian focus and vibrancy of this area.

The built form of the Neighbourhood Centre should be of high quality and of an appropriate scale that is sympathetic to the unique character of the area. The architectural design should be reflective of the smaller scale of the Neighbourhood Centre, using simple and appropriate materials and finishes.

5.2 Neighbourhood Centre Character

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.

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 could incorporate shared spaces, which activate the area, by providing different modes of transport through the spaces.

The Neighbourhood Centre is not intended to compete with the commercial offerings within the Kihikihi township, and as such only commercial activities to service the local neighbourhood are encouraged.

Lighting throughout the centre is to be a warm colour LED for consistency with the rest of the neighbourhood streetscape.

5.3 Neighbourhood Centre Landscape

Landscaping plays an important role in supporting retail activities and providing spaces for residents to linger and enjoy social interactions with their community. The centre's landscaping should incorporate:

- » High-amenity open space and quality planting
- » Strong connectivity for pedestrians and cyclists.
- » Appropriate use of materials to create a relaxed character with flexible spaces.
- » Landscaping should be low maintenance and incorporate predominantly native trees, shrubs and groundcover species.



5.4 Neighbourhood Centre Built Form

Neighbourhood Centre built form should comply to the following requirements:

- » Buildings must not exceed 14m in height and must be no more than three floors within the Centre.
- » The architecture should have a pedestrian scale, with large and welcoming doors and openings adjacent to public space. Buildings with large blank walls on the first level are inappropriate.
- » The built form is designed to allow flexible use of spaces, so the character of the area can develop and adapt over time.
- » Each individual retail and services tenancy should have a floor area of not more than 250m² GFA (excluding community amenities and facilities, administration offices, and professional offices).
- » All commercial building street frontage should be constructed to a 0m front lot boundary.
- » All street frontages should have a minimum 3m wide continuous covered veranda to allow for weather protection.
- » All commercial buildings should have a minimum 3m setback from all adjoining residential zone, reserves and public open space boundaries.
- » All buildings fronting a road or reserve should have an active frontage, incorporating 70% permeable, glazed shop frontage at ground floor. Active frontages should also include wide double doorways to allow for easy pedestrian access.
- » Where a site adjoins the Residential Zone, no building or stored materials should penetrate a recession plane at right angles to the Residential Zone boundary inclined inwards at an angle of 45° from 2.7m above ground level.
- » Any storage or service area (including mechanical, electrical and utility equipment, refuse, and recycling activities) not enclosed within a building or where a shipping container is being used for storage, should be fully screened by landscaping or solid walls or fences not less than 1.8m in height.
- » Walls and fences over 1.8m in height should be setback a minimum of 5m from the road boundary unless a landscaping strip of a minimum of 2m wide is provided on the external side of the fence.
- » Walls and fences along any road or reserve should not exceed 1.6m in height, except where at least 40% of the fence is visually permeable, in which case the fence may be constructed to a maximum height of 1.8m.

The above guidelines should be read in conjunction with Section 6: Commercial Zone of the Operative Waipa District Plan.



About Boffa Miskell

Boffa Miskell is a leading New Zealand professional services consultancy with offices in Auckland, Hamilton, Tauranga, Wellington, Christchurch, Dunedin and Queenstown. We work with a wide range of local and international private and public sector clients in the areas of planning, urban design, landscape architecture, landscape planning, ecology, biosecurity, cultural heritage, graphics and mapping. Over the past four decades we have built a reputation for professionalism, innovation and excellence. During this time we have been associated with a significant number of projects that have shaped New Zealand's environment.

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