




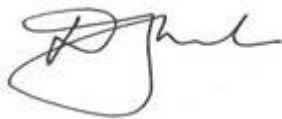
DESIGN GUIDELINES

TE AWAMUTU T11 GROWTH CELL

25 June 2020



Document Quality Assurance

Bibliographic reference for citation: Boffa Miskell, 2019. <i>Waipa Structure Plan T11 Growth Cell, Design Guidelines</i> . Report by Boffa Miskell Limited for Waipa District Council.		
Prepared by:	Thomas Keal Landscape Architect Boffa Miskell Ltd Brooke Foley Landscape Architect Boffa Miskell Ltd	 
Reviewed by:	Morné Hugo Landscape Architect / Urban Designer Associate Partner Boffa Miskell Ltd Dave Moule Planner Senior Principal Boffa Miskell Ltd	 
Status: [FINAL]	Revision / version: B	Issue date: June 2020

Disclaimer: Any variation or waiver to the guidelines will be considered unique and will not set a precedent for other variations or waivers. A variation is defined as the approval of a practice which is considered to be consistent with the general intent of these guidelines, but may not be consistent with, or provided for by, a specific provision. All final decisions relating to the implementation of this design guide are at the discretion of the Developer & Development Controller.

File ref: Design_Guide_T11_Rev_B.indd

Contents

1. Introduction	1
1.1 Purpose	2
1.2 Site Context	2
1.2 Design Principles	3
2. Open space framework	4
2.1 Reserves and Stormwater Management	5
2.2 Vegetation and Natural Site Features	6
2.3 Parks and Play-spaces	6
3. Roads and Streetscape	7
3.1 Road Hierarchy	7
3.2 Road Typologies	8
3.3 Pedestrian and Cycle Connectivity	9
3.4 Paving and Surface Treatments	10
3.5 Site Furniture and Lighting	10
4. Built Form	11
4.1 Building Placement	12
4.2 Street Frontage	12
4.3 Building Setbacks	13
4.4 Boundary Treatments	15
4.5 Retaining	15
4.6 Building Size, Height, Form	16
4.7 Materials and Colours	17
5. Neighbourhood Centre	18
5.1 Neighbourhood Commerical Centre	18
5.2 Neighbourhood Centre Character	18
5.3 Neighbourhood Centre Landscape	18
5.4 Neighbourhood Centre Built Form	19

1. Introduction

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

Te Awamutu is forecast to grow by 5,400 people by 2050. To provide for this growth, a structure plan for the T11 growth cell is required, as identified in the Waipa 2050 Growth Strategy (2017), Plan Change 5 – Waipa Growth Strategy, and Waipa 2018-28 Long Term Plan.

The T11 growth cell is a 47ha area of land located on the eastern side of Te Awamutu to the south of the Cambridge Road commercial node. The growth cell has been identified as a residential growth cell with a dwelling capacity of approximately 380 dwellings and represents an opportunity for housing in proximity to a commercial node which provides necessary social infrastructure shopping / medical services.

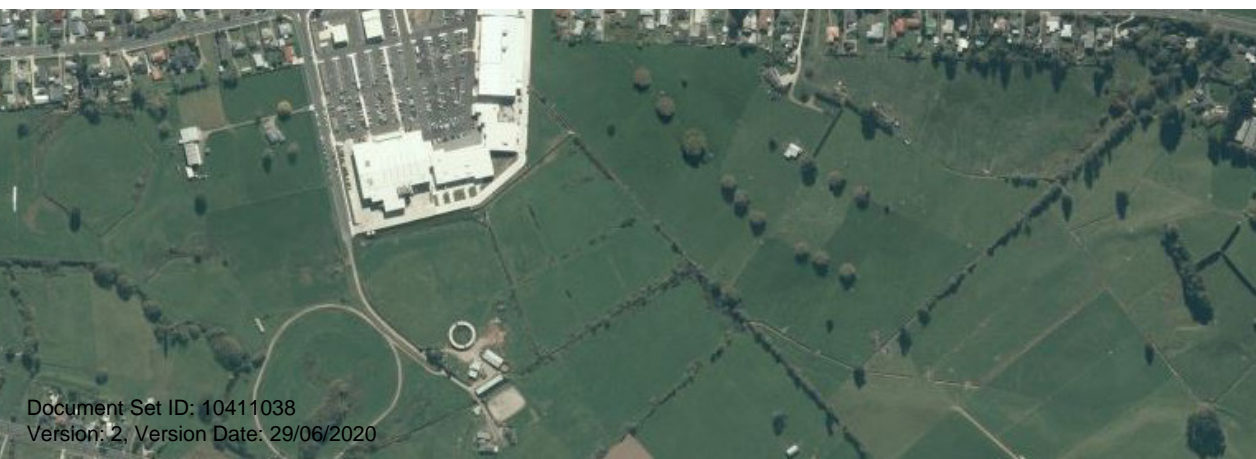
The growth cell is currently zoned Deferred Residential.

Specific provision for residential development is identified within T11. This location is considered suitable for this land use as it expands on the existing residential area on Cambridge Road and provides for some growth in close proximity to the Cambridge Road commercial node.

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 T11 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 T11 growth cell is predominantly characterised by rural farming and cropping blocks, large mature vegetation, with a limited number of residential dwellings. The topography generally slopes to the south and the land drains to the Mangaohoi Stream which runs along the southern boundary of the growth cell. There are significant flooding constraints within this growth cell associated with the Mangaohoi Stream.

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. It is acknowledged 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.

It is important that the distinguishing characteristics of this particular place are maintained, including reflecting the existing semi-rural character, and ensuring appropriate boundary setback rules maintain this character.

The deferred residential zone status of the land makes future provision for more sustainable forms of living. Sustainable forms of living are required in order to manage resources that have a limited supply (such as land) as well as to reduce the overall 'footprint' on the environment. In the Residential Zone this outcome is achieved by providing for appropriate infill development, and compact housing development options (such as may include semi-detached dwellings, duplexes, terrace housing or low rise apartments).

Any development options of this nature on the site will be required to be comprehensively designed, coordinated with infrastructure provision, take into account key elements of character, and address effects on neighbouring properties. Sustainable living is also supported through rules that require dwellings to be positioned for passive solar gain and by ensuring enough open space is provided on site for a range of activities such as recreation activity, pedestrian and cycle connectivity, and amenity outcomes.

1.2 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 T11 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 T11 growth cell open space framework is made up of:

- » Reserves
- » Green Streets
- » Open Spaces
- » 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.
- » The compact residential area is located 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.
- » 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.
- » 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 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.
- » 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.
- » 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.
- » 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 reduce potable demand.
- » 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.
- » Vegetated swales are recommended to convey overland flow.



2.2 Vegetation and Natural Site Features

- » 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 incorporate 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 can be incorporated into the designs, which provides exposure to, and encourages interaction with New Zealand's culture and history.
- » Reserve spaces 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

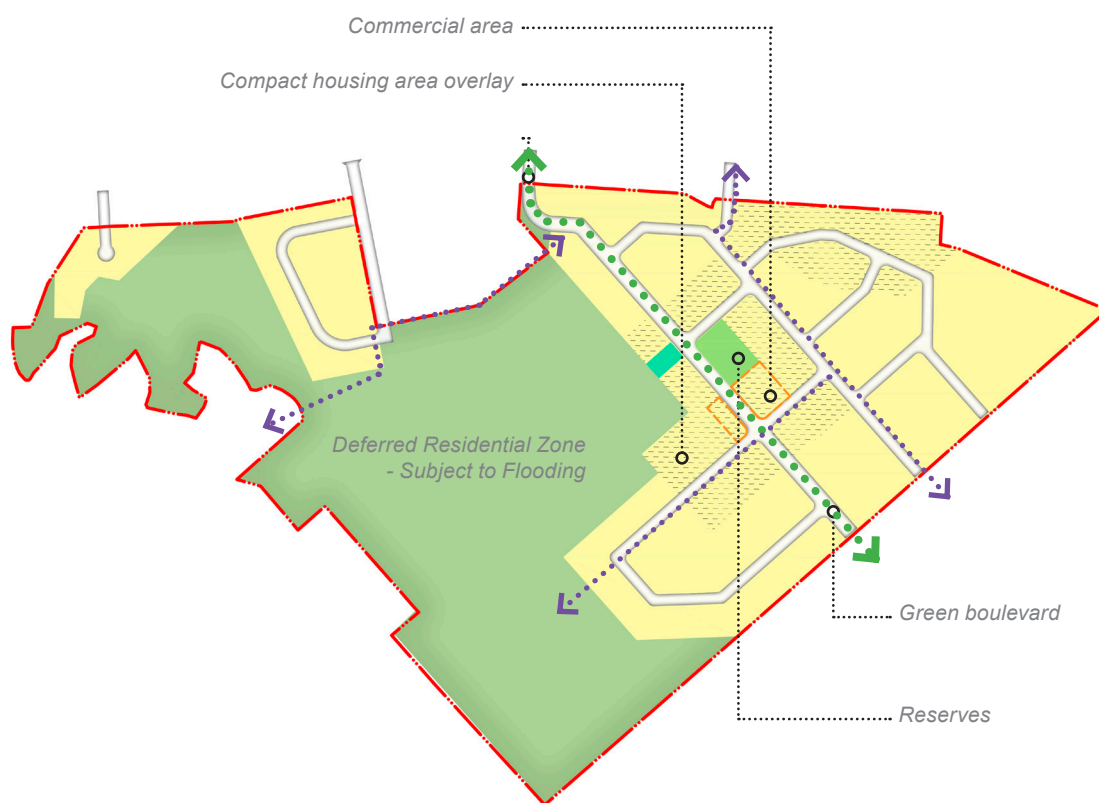
The roading connections are considered holistically, to integrate cars, pedestrians, cyclists, stormwater management, and ecology.

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

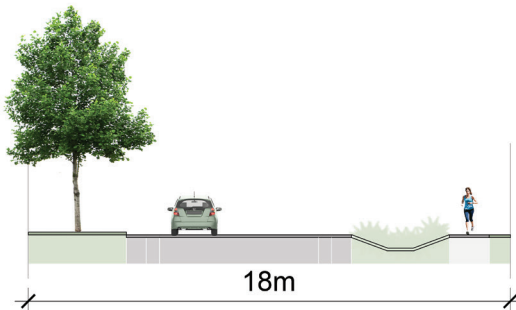
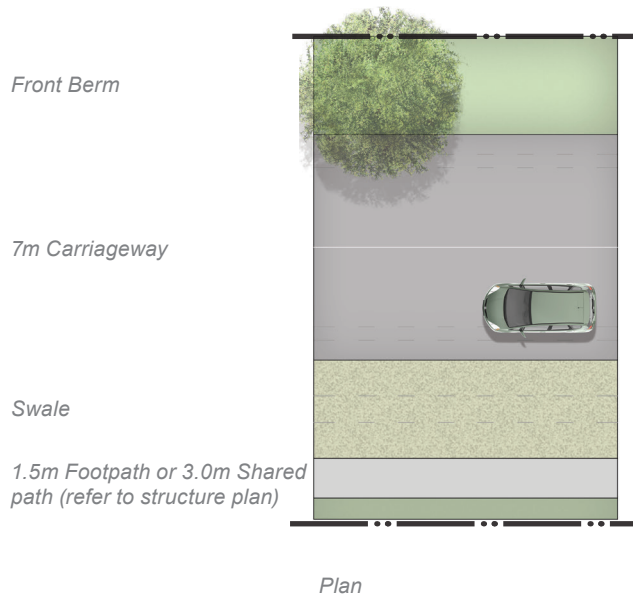
A 25m green boulevard / tree framed collector road through the sites which become the main spine road for vehicles, pedestrians, and cyclists

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



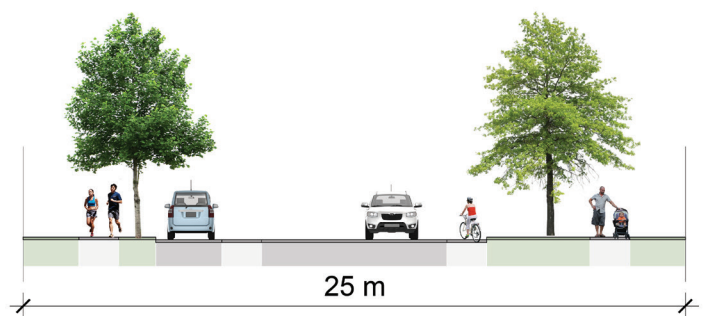
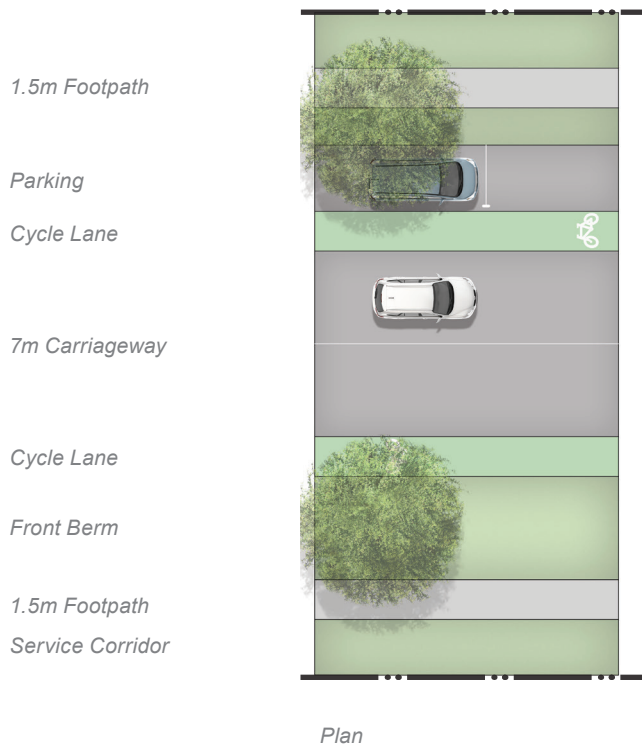
3.2 Road Typologies

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.



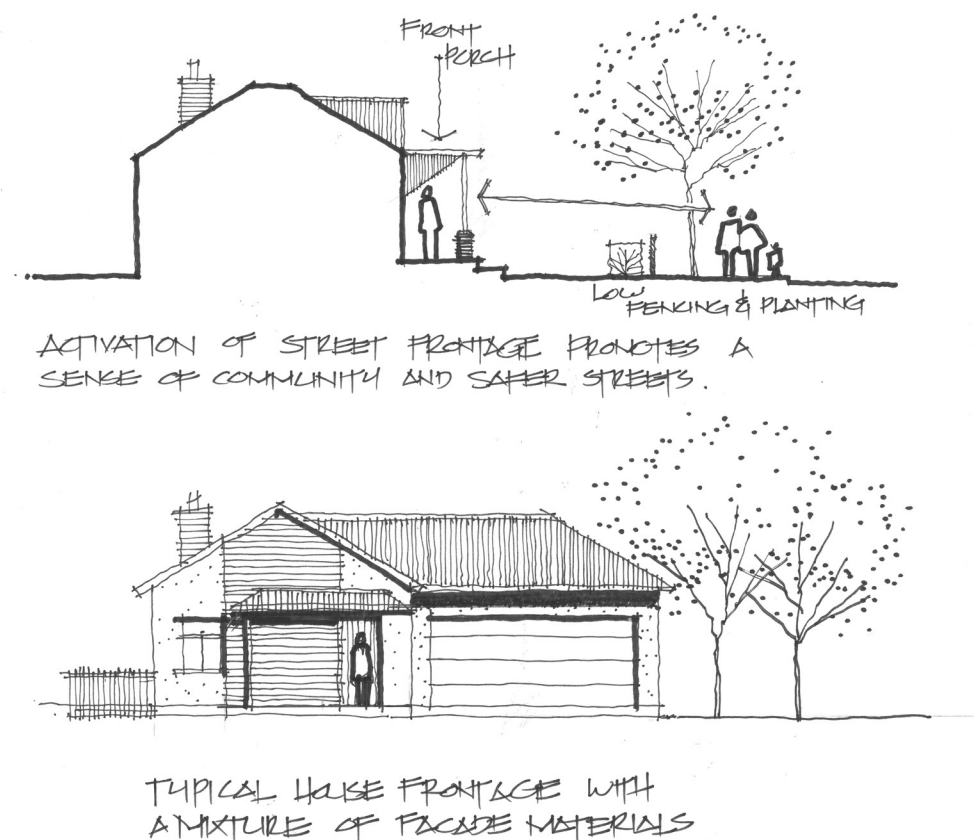
4.1 Building Placement

- » 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 design 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 off street parking. The garage must be recessed from the house frontage.

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 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.
- » Driveway materials should be of good quality, such as asphalt or exposed aggregate concrete. 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 Residential Zone - 500 to 1,000m² Lots

500 - 1,00m ² Lot Building Set Backs	Meters
State Highways	15
Front boundary setback	10
Rear boundary setback	3
Side boundary setback	3

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 4m



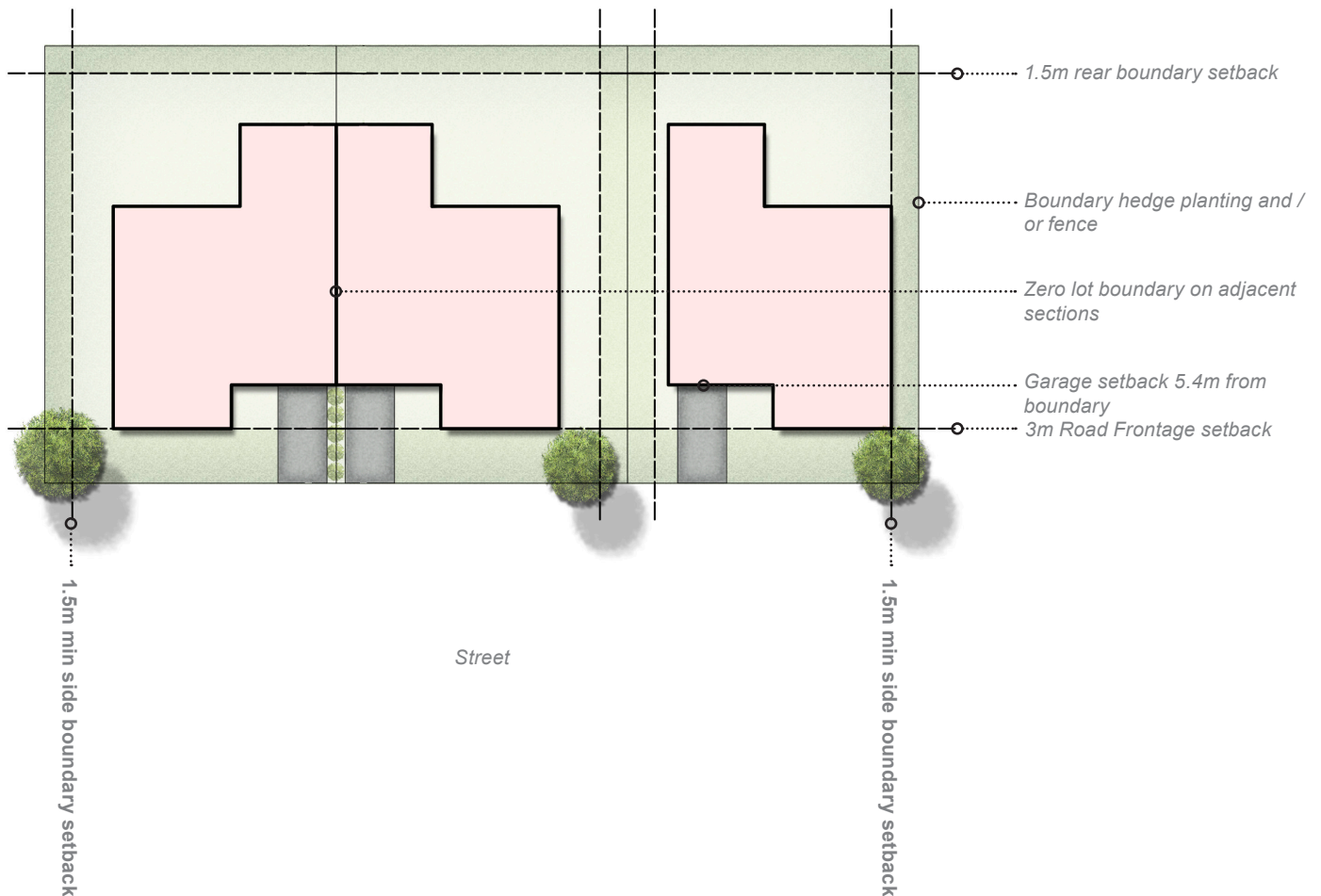
**Building design, driveways and landscaping for illustrative purposes only*

Building Setbacks Compact Residential Overlay

Lot Building Set Backs	Meters
Front boundary setback	3
Rear boundary setback	1.5
Side boundary setback	1.5
Garage setback	5.4

Adjacent lots may have one zero lot boundary to allow for duplex house design.

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 3m.



**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.
- » The same style of fence on the front boundary must continue along the side boundaries until parallel with the house.
- » Utility areas are to be screened from public view with high quality screens and gates.
- » 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.
- » Planting should 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.

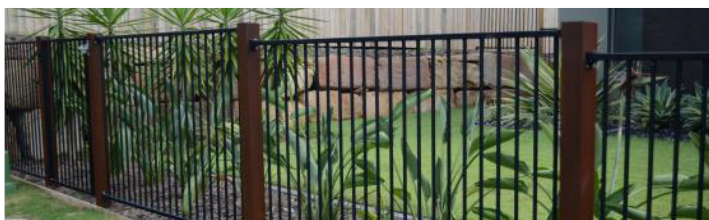
Example images. Approved boundary fences and walls



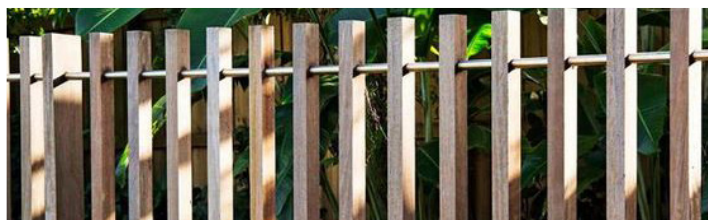
High quality 1.8m timber fence



High quality 1.8m timber fence



High quality 1.2m pool style fence



High quality 1.2m timber fence



Visually permeable metal fencing



Privacy screen and 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 T11 Growth cell is 8m.

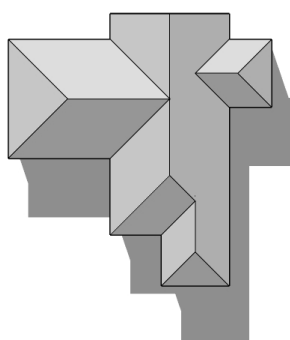
» Site coverage should not exceed 40% of the net area of the site where no garage or carport has been provided the maximum site coverage shall be reduced by 20m², provided that this rule does not apply to the compact housing overlay area (refer to Rule 2.4.2.43 in the District Plan)

» Each site should be grassed, planted in trees and/or shrubs or otherwise landscaped in a manner that retains a minimum of 40% of the gross site area in permeable surfaces. For the avoidance of doubt Rule 2.4.2.43 shall apply to the compact housing overlay area.

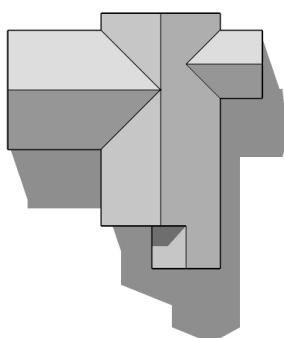
» The recommended roof designs are gable-end roofs, combination gable and hip roof, and monopitch roofs. Variation of rooflines adds to the interest and quality of the public realm. (see diagram below)

» Full hip roofs are not recommended.

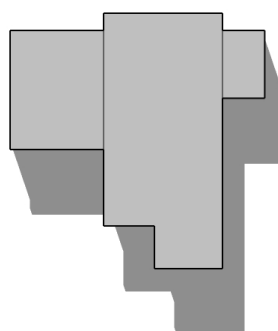
Examples of approved roof styles



Combination of roof styles



Gable end roof



Monopitch roof

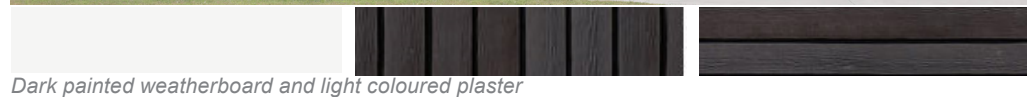


4.7 Materials and Colour

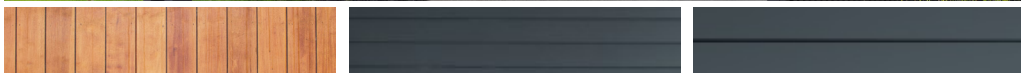
It is recommended that:

- » 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.

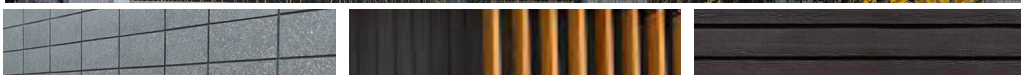
Example images of material and colour palettes



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.

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 shall comply to the following requirements:

- » Building heights would be limited to 14m in height within the Neighbourhood Centre.
- » The architecture is to 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.

www.boffamiskell.co.nz

Auckland	Hamilton	Tauranga	Wellington	Christchurch	Queenstown	Dunedin
09 358 2526	07 960 0006	07 571 5511	04 385 9315	03 366 8891	03 441 1670	03 470 0460