KAWARAU HEIGHTS DESIGN GUIDELINES

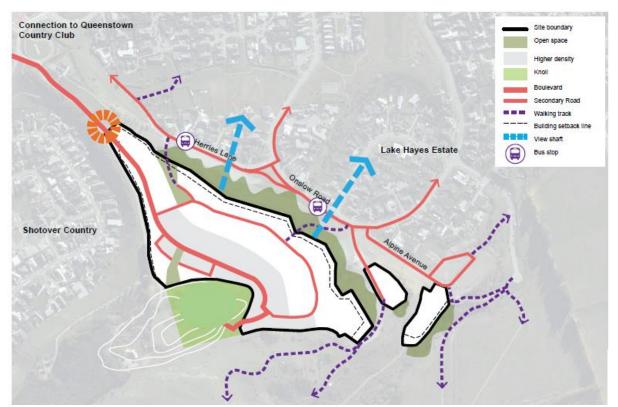
PURPOSE

The purpose of these design guidelines is to provide guidance to assist in the assessment of subdivision and land use consents for development within Kawarau Heights.

DESIGN OUTCOMES

The concept for Kawarau Heights is a comprehensive, master planned development providing a range of densities and house typologies while achieving high suburban amenity values. Key design outcomes are:

- A high quality built environment with an overarching design language responsive to the natural character of the site and the wider context.
- A range of densities and lot sizes.
- Provision for single story pavilion style dwellings around the edges of the site, with provision for double story centrally within the site.
- Buildings that integrate with the existing topography of the land and surrounding area.
- A natural palette of materials with recessive tones to ensure the buildings are subservient to the landscape and surrounding alpine character.
- Buildings that are simple in architectural form.
- A strongly native plant palette derived from the surrounding environment.



SITE LAYOUT

The key components of the Kawarau Heights conceptual layout design include:

Central boulevard – providing connection linking to the existing Jones Road.

Street network and design - providing for simple and legible circulation pattern with a clear road hierarchy.

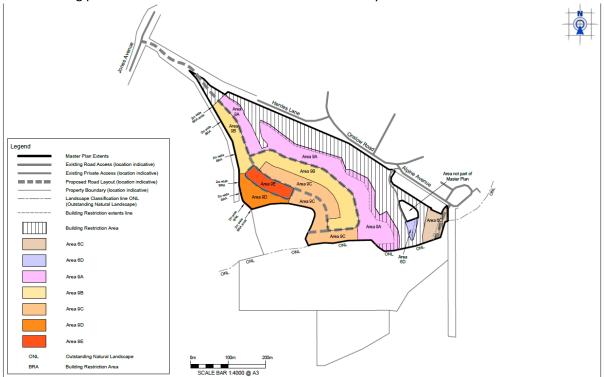
Landscape buffers and boundary treatment - The application of Building Restriction Areas will ensure that buildings are set back from the escarpments, terrace edges and the ONL. The terrace edges and escarpments will be planted with a mixture of native and amenity planting, while the escarpment areas will consist of mostly native planting. Together these areas will maintain a natural buffer to the developed areas, and assist in mitigating and softening views from neighbouring communities. These areas will also assist with maintaining a rural character as viewed from the river corridor.

Amenity and open space - The central boulevard is a key feature of the development and connecting device to the QCC medical precinct, retirement village and adjoining neighbourhoods. The boulevard leads to denser housing located centrally within the site, the open space on the knoll and walkways to the adjoining rural area. The open space area in the northern part of the development provides a key connection via a walkway to Lakes Hayes Estate. A greenway provides a direct pedestrian and cycle connection from the boulevard to the knoll and adds character to a cluster of denser housing.

Pedestrian and cycle network - Footpaths will provide connections to all parts of the development. Walkways are also proposed at the bottom of the terraces and will connect with the Lake Hayes and Shotover Country developments and the wider recreational pathways along the river corridor.

Planting – amenity tree and shrub planting throughout the development, with naturalistic planting around the edges.

LOCATION OF ACTIVITY AREAS



The following plan illustrates the location of each of the activity areas.

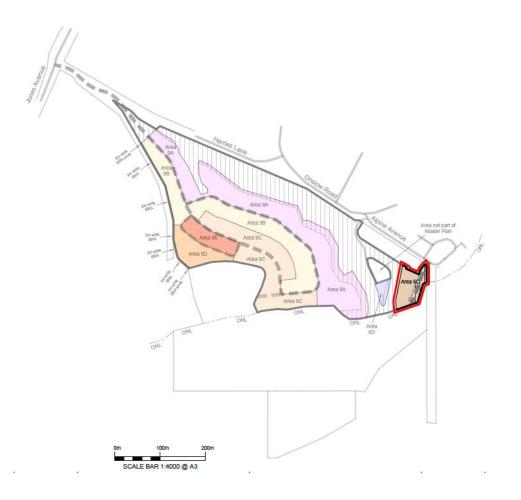
GENERAL GUIDELINES FOR KAWARAU HEIGHTS

The following guidelines apply to Kawarau Heights generally:

DESIGN CONTROLS ACROSS THE DEVELOPMENT		
GENERAL		
Colours	 All building material and landscape features (Including fencing) are to be of dark recessive tones only and have an LRV in the range of 5% to 35%. 	
Building materials	 Roofing to include slate, timber shingles or light weight metal roofing (including corrugated roofing or equivalent imitation materials). Cladding to include stacked schist stone materials, painted weatherboards, recessive metal cladding, stained or natural wood and solid plaster on no more than 60% of the facade. Materials shall relate to the form of the building. Use of arbitrary materials to façades is to be avoided. Use of unpainted brick to be avoided. 	
ARCHITECTURE		
Buildings	• Cladding materials shall relate to the form of the building with arbitrary use of materials to façades to be avoided. Painted brick, stone, cedar or similar stained weatherboard, plaster no more than 60%, tray metal cladding no more than 60%.	
	 Where possible, front doors shall be visible from the street and garages subservient to the main part of the dwelling. 	
Roof form	 Simple mono-pitch or gable roofs are preferred, with no stacked roofs, hips and valley forms. Specific roof forms and pitches are specified for each area. 	
Lighting	 All exterior lighting shall be fixed and no higher than 1.8m above finished ground level, filtered and pointed downwards and screened so as to reduce lux spill. 	
Windows	All windows shall be of low reflective glass.	
LANDSCAPE		
Landscape – general	 Materials used for landscape features such as decks, pergolas, screening, fireplaces or retaining walls shall be complementary to the architectural materials to ensure continuity of design. 	
Boundary Lot Fencing	 No fencing (front or side) between the house and road boundary. Fencing between houses permitted. 	
	• Fencing that borders the ONL, terrace edges or that are within the building restriction areas (if any) shall be post and rail fencing only.	
	All other fencing shall have a maximum height of 1.5m.	
Internal Lot Fencing	 Internal lot fencing shall include high quality materials in recessive colours including stone, timber, concrete, glass, post and rail and transparent steel fencing (pool fencing). 	
Planting	 Any planting within lots that is visible from the ONL shall be native planting so as to ensure that the values of the adjacent Rural Zone ONL are protected. 	

GUIDELINES FOR SPECIFIC AREAS

AREA 6C: ONSLOW ROAD WEST



HOUSE TYPOLOGY

Key features:

- Single pavilion style house
- Large sized garden with views
- House size varies from 120m² to 180m²
- Lot size varies from 380m² to 540m²

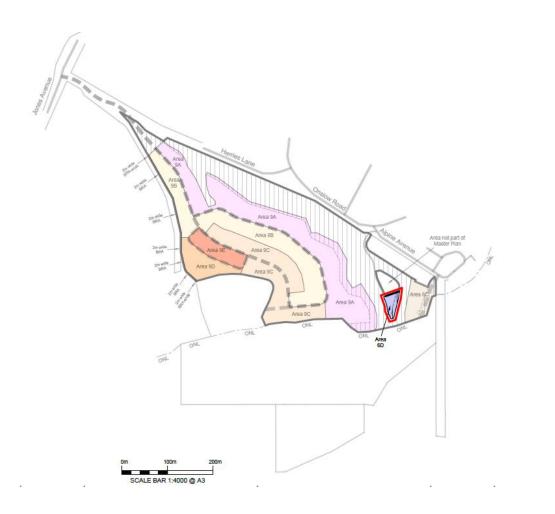


KEY SITE CHARACTERISTICS

- Highly sensitive site directly adjoining the ONL (refer Policies 27.3.x.3 and 27.3.x.4 and Matter of control 27.7.x.1.b).
- Visible from Lake Hayes Estate and from Kawarau Reserve / Twin Rivers Cycleway.
- Natural terrain
- Access off Alpine Lane.
- Abuts existing two storied housing.

- Planted mounding to screen development from the ONL at the southern edge. Ecological / native approach to shrub planting to blur property boundaries and substantial trees (native mix) along ONL line to assist with assimilating built forms into the natural environment.
- Lots to be developed sensitively to respond to the adjacent ONL and Kawarau River corridor. Careful placement of small / low scale buildings to integrate with topography and the natural environment. Any earthworks to be undertaken in a naturalistic form.
- Architecture to blend with the character of adjacent developments.
- Any planting that is visible from the ONL shall be native planting so as to ensure that the values of the adjacent Rural Zone ONL are protected.
- Mounding to be constructed at a minimum height of 1m above the finished ground level of dwellings and 3m wide centred on the ONL.
- Simple mono-pitch or gable roofs are preferred, with no stacked roofs, hips and valley forms. Roof pitch shall be below 30 degrees.

AREA 6D- ONSLOW ROAD MID TERRACE





- Single pavilion style house
- Large sized garden with views

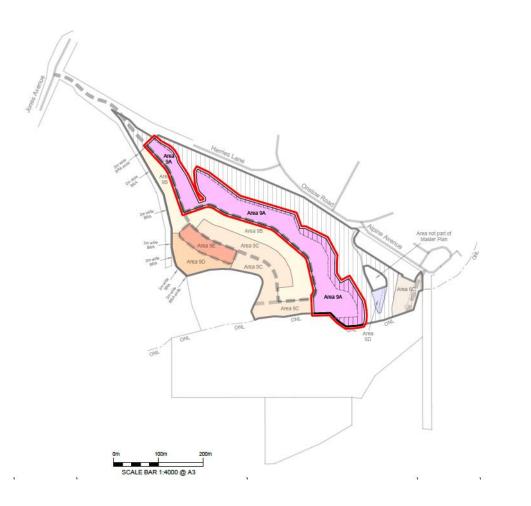


KEY SITE CHARACTERISTICS

- Adjacent to natural terrace edge.
- Visible from Lake Hayes Estate and from Kawarau Reserve / Twin Rivers Cycleway.
- Abuts gully
- Access off Onslow Road.
- Highly sensitive site to the ONL (refer Policies 27.3.x.3 and 27.3.x.4 and Matter of control 27.7.x.1.b).

- Opportunity for a single lot in this area. Lot to be developed sensitively to respond to the nearby ONL and Kawarau River corridor. Careful placement of a low scale building to integrate with topography and the natural environment. Any earthworks to be undertaken in a naturalistic form.
- Soft terrace edge and escarpment landscape treatment, comprising indigenous trees and indigenous shrubs for visual mitigation. Ecological/ native approach to shrub planting to blur property boundaries and substantial trees (native mix) along terrace edge to assist with assimilating built forms into the natural environment.
- Simple mono-pitch or gable roofs are preferred, with no stacked roofs, hips and valley forms. Roof pitch shall be below 30 degrees.

AREA 9A – NORTHERN TERRACE



Key features:

- Single and double pavilion style houses
- Large gardens with views
- House sizes from 200m² to 310m²
- Lot size varies from 700m² to 1650m²

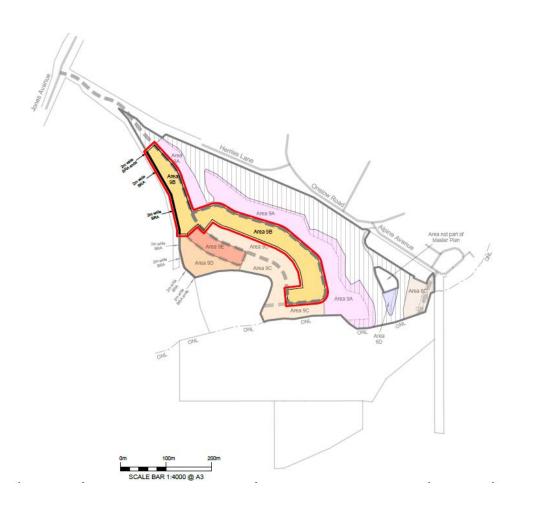


KEY SITE CHARACTERISTICS

- Adjacent to natural terrace edge.
- Abuts ONL at southern extent (refer Policies 27.3.x.3 and 27.3.x.4 and Matter of control 27.7.x.1.b).
- Visible from Lake Hayes Estate and from Kawarau Reserve / Twin Rivers Cycleway.
- Abuts gully
- Access off perimeter road.
- Forms part of northern entrance gateway.

- Generous landscape permeability between buildings.
- Lots to be developed sensitively to respond to the terrace edge / ONL. Careful placement of buildings to integrate with topography and the natural environment. Any earthworks to be undertaken in a naturalistic form.
- Soft terrace edge and escarpment landscape treatment, comprising a mix of exotic/ indigenous trees and indigenous shrubs for visual mitigation. Ecological/ native approach to shrub planting to blur property boundaries and substantial trees (exotic and native mix) along terrace edge to assist with assimilating built forms into the natural environment.
- Any planting that is visible from the ONL shall be native planting so as to ensure that the values of the adjacent Rural Zone ONL are protected.
- Simple mono-pitch or gable roofs are preferred, with no stacked roofs, hips and valley forms. Roof pitch shall be between 30 and 45 degrees and below 30 degrees for dwellings adjacent to the ONL line.

AREA 9B- MID BLOCK AND WESTERN TERRACE



HOUSE TYPOLOGY

Key features:

- Single pavilion style houses
- Medium sized gardens
- House size from 180m² to 300m²
- Lot size varies from 460m² to 830m²

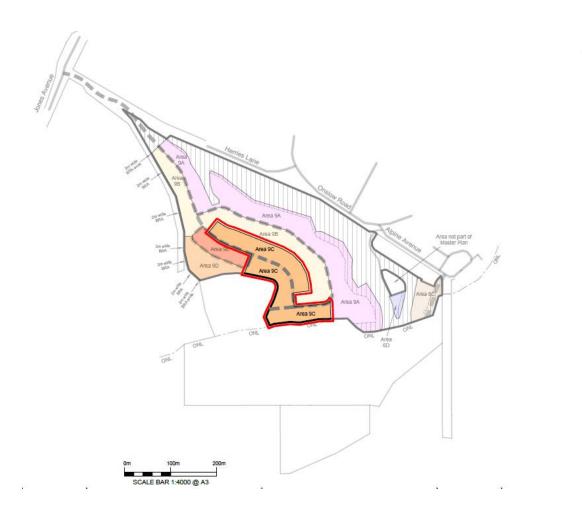


KEY SITE CHARACTERISTICS

- Partly adjacent to terrace edge overlooking Shotover Country, or mid-block location.
- Lots adjacent to terrace visible from parts of Shotover Country (refer Policy 27.3.x.4).
- Abuts perimeter road.
- Forms part of northern entrance gateway.

- Generous landscape permeability between buildings.
- Lots to be developed sensitively to respond to the terrace edge with building placement to integrate with topography and the natural environment. Any earthworks to be undertaken in a naturalistic form.
- Soft terrace edge landscape treatment to terrace edge lots, comprising a mix of exotic/ indigenous trees and indigenous shrubs for visual mitigation. Ecological / native approach to shrub planting to blur property boundaries and substantial trees (exotic and native mix) along terrace edge to assist with assimilating built forms into the natural environment.
- Simple gable roofs are preferred, with no stacked roofs, hips and valley forms. Roof pitch shall be between 30 and 45 degrees.

AREA 9C- BOULEVARD AND SECTIONS ABUTTING THE ONL



Key features:

- Double-storey pavilion style house
- Medium sized garden
- House size from 180m² to 300m²
- Lot size from 340-590m²

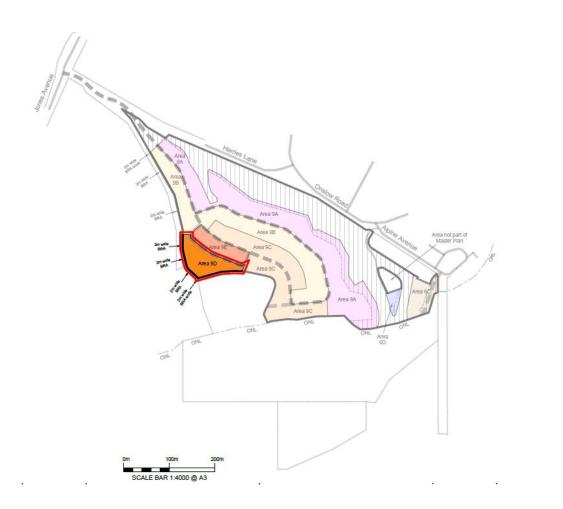


KEY SITE CHARACTERISTICS

- Southmost lots adjacent to ONL and Knoll.
- Abutting area with topographical variation.
- Fronting perimeter road.
- Central lots located where there is limited wider visibility from outside site.
- Potential to absorb denser development.

- Increased building height is anticipated and can be absorbed due to the central positioning of Area 9C and its location adjacent to the hillside, which provides a backdrop to the built form.
- Landscape provision between buildings.
- Lots to be developed sensitively to respond to the location, with building placement to integrate with topography and the natural environment. Any earthworks to be undertaken in a naturalistic form.
- Simple gable roofs are preferred, with no stacked roofs, hips and valley forms. Roof pitch shall be between 30 and 45 degrees.

AREA 9D ADJACENT TO KNOLL AND WESTERN TERRACE



Key features:

- Small, single storey houses
- Small gardens
- House size varies from 120m² to 180m²
- Lot size varies from 370m² to 560m²

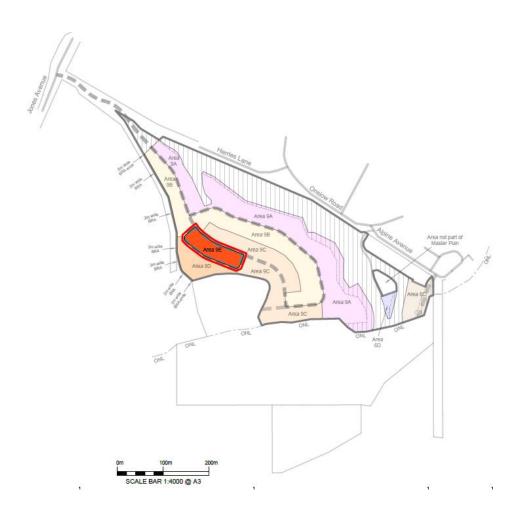


KEY SITE CHARACTERISTICS

- Adjacent to terrace edge overlooking Shotover Country.
- Adjacent to the natural steep slope of the Knoll.
- Partly visible from Shotover Country (refer Policy 27.3.x.4).

- Sensitive edge treatment to terrace edge and Knoll with building placement to integrate with topography and the natural environment. Any earthworks to be undertaken in a sensitive and naturalistic form.
- Lower building heights due to greater visibility from within Shotover Country, and compact development form internally due to lot sizes and shape of Area 9D.
- Design to integrate with Area 9E as part of a wider comprehensive denser development node. Connection greenway linking the Boulevard to the Knoll.
- Shared internal laneway for access with Areas 9E. Accessway to have high visual amenity.
- Simple gable roofs are preferred, with no stacked roofs, hips and valley forms. Roof pitch shall be between 30 and 45 degrees.

AREA 9E- BOULEVARD





Key features:

- Two storey housing (boulevard)
- Single pavilion houses with front doors facing the street, and garages on laneway joined to neighbouring property.
- · Courtyard garden along street frontage
- House sizes from 130m² to 180m²
- Lot size of approximately 300-340m²
- Minimum Lot depth 20m



KEY SITE CHARACTERISTICS

- Internal location away from sensitive edges.
- Abuts boulevard
- Limited wider visibility
- Potential to absorb denser development.

- Potential for increased building height (up to two stories) given limited wider visibility.
- Design to integrate with Area 9D as part of a wider comprehensive smaller lot development node and shared internal laneway for access with Areas 9D. Accessway to have high visual amenity.
- Strong built frontage relationship with boulevard, and boulevard gateway to be achieved by increased height and coverage.
- Simple gable roofs are preferred, with no stacked roofs, hips and valley forms. Roof pitch shall be between 30 and 45 degrees.

PLANT LIST

4.15 Plant List

Rural Boundary Trees

Botanical Name Aesculus hippocastanum Fagus sylvatica Fraxinus excelsion Juglans regia Liquidamber styraciflua Platanus orientalis Quercus cerris Quercus dentata Quercus palustris Quercus robur Quercus rubra 'Maxima' Tília cordata Tília x europaea Tilia tomentosa "Obicularis" Ulmus parvitolia Ulmus procera

Orchard Trees

Botanical Name Maanolia 'Little Gem' Prunus avium 'pendula' Prunus 'Awanui' Prunus 'Thunder Cloud' Malus x domestica Prunus armeniaca Prunus avium Pyrus communis Prunus domestica

Common Name Horse Chestnut English Beech Ash Common wainut Liquidamber Oriental Plane Turkey Oak Japanese Oak Pin Oak English Oak Red Oak Small-leaved Lime European Lime Silver Lime Chinese Elm

Green English Em Common Name

Evergreen Magnolia
Flowering Plum
Sweet Cherry
Flowering Cherry
Apple
Apricot
Cherry
Pear
Plum

Amenity Trees Botanical Name Acer davidii Acer rubrum Acer saccharinum Acerspp, weeping Amelanchier canadensis Betula utilis Jacquemontii

Cedrus deodara Cercis canadensis Cornus 'Edales 'White Wonder' Gleditsia 'Ruby Lace' Liquidamber styracifiua Magnolia "Little Gem" Magnolía stellata Malus Golden Hornet Malus trilobata Parrotia persica Prunus avium 'pendula' Prunus 'Awanui' Prunus 'Kanzan' Prunus nigra Prunus 'Thunder Cloud' Prunus Shimidsu Sakura Prunus Shirotae Prunus subhirtella Prunus spp, weeping Prunus Ukon Prunus yedeonsis 'Awanui' Robinia pseudoacacia Thuja occidentalis 'Smaragd'

Common Name Snakebark Maple Maple Maple Maple Service Berry Himalayan Birch Deodar cedar Forest pansy Dogwood Honey locust Liquidamber Evergreen Magnolia Star Magnolia Crabapple Lebonese Wild Apple Persian Ironwood Sweet Cherry Flowering Cherry Flowering Cherry Canada Plum Flowering Plum Flowering Cherry Flowering Cherry Flowering Cherry Flowering Cherry Flowering Cherry Flowering Cherry Robinia Thuia



Rural Boundary Trees / Avenue Trees



Rural Shelterbeits



Carpark Trees



Terrace Native Trees





Evergreen Screen Planting



Amenity Trees



Avenue Trees Botanical Name

Carpinus betulinus 'Fastigiata' Magnolia 'Little Gem' Prunus avium 'pendula' Prunus 'Awanui' Prunus 'Thunder Cloud'

Common Name Upright Hornbeam Evergreen Magnolia' Rowering Cherry **Howering Plum** Sweet Cherry



Botanical Name Carpinus betulinus Fastigiata Fraxinus excelsior Quercus cerris Tilia cordata

Tília x europaea

Common Name Upright Hombeam Hanmer Ash Turkey Oak Small-leaved Lime Common Lime









Terrace native shrubs and grasses



Hvaranaea soo



Corokia 'Frosted Chocolate'



Poa cita, silver tussock



Amenity Ground covers & Grasses Botanical Name Common Name

Agapanthus 'Peter Pan'

Agapanthus 'Snowball'

Agapanthus Tinkerbell

Chinochloa flavicons

Coprosma 'red rocks'

Parahebe 'baby blue

Parahebe 'snowcap'

Pimelea prostrata

Pachystegia rufa

Rosemary prostrata

Carex comas

Carex testacea

Coprosma 'kirkii'

Lithodora spp

Agapanthus Agapanthus Agapanthus Carex Carex Dwarf toe toe Convolvulus mauritanicus Trailing Convolvulus Groundcover coprosma Red coprosma Blue flowering ground cover Parahebe, blue Parahebe white Pinatoro Marlborough Rock Daisy Phormium cookianum 'Emerald Green' Dwarf mountain flax Rosemary 'Lockwood de forest' Rosemary, groundcover Rosemary, groundcover Euonymus microphylla 'emerald gem' Cipped shrub

Amenity Shrubs & Hedges

Botanical Name Aucuba Crotonoides Azalea sop Camellia spp Choisya Ternata Daphne bholua Erica carnea 'Springwood White' Hebe alosmifolia Hydrangea spp llex aquifolium 'Green Pillar' Lavendar Lemon meyer Magnolía stellata Michelia spp Nandina 'Gulfstream' Nandina 'Pygmea' Phormium cookianum Pieris formosa 'Wakehurst' Pieris - Temple Bells Pittosporum tenuifolium 'mountain green' Prunus Iusitanica

Common Name Spotted laurei Azalea Camellia Mexican orange blossom Daphne Erica/Heath Hebe Hydrangea English Holly Lavandula angustifolia Eating lemon Star magnolia Michelia Nandina Nandina Mountain flax

Pieris

Pieris

Pittosporum

Portuguese i gurel

Amenity Shrubs & Hedges cont.

Botanical Name Common Name Buxus Micropylla Japanese Box Camellia 'Setsugekka' Hedge Camelia Corokia 'Frosted Chocolate' Corokia, bronze Corokia 'Geentys Green' Corokia, green Escallonia 'White Knight' Escallonia Griselinia littoralis Kapuka Loropetalum 'China Pink' Loropetalum Pittosporum 'Golfball' Pittosporum



Common Name

Common Name

Mountain beech

Red beech/ tawhai raunui

Leyland cypress (trimmed) Kohuhu

Botanical Name Kunzea ericioides Fuscospora cliffortioides Fuscospora fusca Podocarpus halli Hoheria Lyalli Sophora microphylla Griselinia littoralis

Pittosporum tenuifolium

Terrace Native Trees



Botanical Name Cop COD Pho Poo Chie Discaria tournatou



Mingimingi Coprosma Mountain flax/harakeke Silver tussock Narrow-leaved tussock Matagouri, wild Irishman

prosma propinqua	
prosma rhamnoides	
ormium cookianum	
a cita	
ionochloa rigida	
A REAL PROPERTY OF A READ PROPERTY OF A REAL PROPER	

Hall's totara

Kanuka

Common Name

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