

Section 02 Plan Change Design Response

2.1 Design Response

2.1.2 Introduction

The Plan Change Design Response provides a high-level overview of the Open Space Network, Movement and Transport and Built Form and Housing strategies that address the Vision, Key Outcomes and Design Principles set out in the Structure Plan and Neighbourhood Design Statement across the Plan Change area. This section of the Masterplan Design Report seeks to highlight the following strategies and objectives:

Open Space Network Objectives

- Celebrate the coastal edge and links to the coast
- A diverse range of opportunities for passive and active recreation
- An ecological approach to planting

Movement and Transport Objectives

- Sustainable and convenient public transport options
- Streets as places for people
- An efficient multi-modal network

Built Form and Housing Objectives

- Strong community and neighbourhood character
- Variety of housing choice and affordability models
- High-quality and compact urban form

Additionally, the Beachlands South Sustainability Strategy sets out objectives, initiatives and performance targets across six key areas to ensure that this development fulfils its vision as a sustainable and low-impact masterplan.

A brief summary of the purpose and key areas is provided on the following page. **Refer to plan change attachments for the full document.**

2.2 Sustainability

2.2.2 Sustainability Assessment

A Sustainability Assessment will need to be provided to the privately-appointed Beachlands South DRP for review.

The purpose of the Sustainability Assessment is to ensure that the sustainability initiatives of the Structure Plan and Precinct Provisions are upheld and the accompanying masterplan concept will be delivered through the detailed outworking of sub-precinct plans and planning provisions in accordance with the objectives, initiatives and performance targets set out in the document.

The Sustainability Assessment must provide an appropriately detailed delivery strategy for each of the sustainability initiatives that it seeks to address, including identifying the developer's role in how these initiatives will be delivered and whether the initiative has been incorporated into the Subdivision and Land Use Development Consent application and/or whether details of it require developing post-plan change.

Legislation and best practice in sustainability is an evolving landscape. Therefore, with many of these initiatives, the monitoring and adoption of the most up to date guidance and industry targets will be required.



2.2.3 Sustainability Strategy

The Sustainability Strategy is an external document that sets out the sustainability credentials for Beachlands South and includes the objectives, proposed initiatives and performance targets required to fulfill the development's vision.

It forms part of the Beachlands South plan change application, signifying the high environmental aspirations of the development.

The sustainability strategy for Beachlands South is a holistic approach that encompasses six key focus areas:

1. Water Management and Water Sensitive Design

An innovative and resilient three waters (water supply, stormwater and wastewater) management strategy to ensure long-term benefit to the development, the wider community and surrounding natural environment.

2. Biodiversity and Ecological Regeneration

Protect and enhance existing ecological systems and improve ecological connectivity throughout the site and with the wider landscape. This includes extensive restorative and regenerative planting, especially around waterways, creating new habitat areas for fauna and flora and a healthy environment for residents and visitors to enjoy.

3. Health, Well-being and Culture

A built environment that embodies principles that foster the physical, mental, social, cultural and economic well-being of residents and visitors of Beachlands South. This includes design principles that align with Te Ao Māori values, providing neighbourhoods with strong emotional, visual and physical connections with nature, and including employment opportunity areas and public amenities that promote communities that can sustain themselves.

4. Low-carbon Development

Low carbon development, with significantly reduced embodied and operational energy for buildings and infrastructure, alongside the enhancement and introduction of significant on-site carbon sequestration through native planting.

5. Renewable Energy and Energy Efficiency

An all-electric, renewable energy sourced residential development with on-site energy generation, energy efficient infrastructure and buildings, reduced water and operational energy demand.

6. Transport – Modal Shift and Healthy Streets

A movement network that prioritises active modes of transport such as walking and cycling, shifting away from car-dependent transportation, making streets safer, quieter and healthier.

2.3 Open Space Network

A well-connected network of open spaces and walkways that integrates access to nature into everyday life activities, while protecting and conserving our natural environment.

2.3.1 An Integrated Open Space Network

Open Spaces in Beachlands South are part of a high-quality, safe and well-connected network of natural and ecological spaces that provide a range of social, cultural, economic and environmental benefits for the local and wider Beachlands community.

The open space network of Beachlands South has 3 key components:

- A diverse range of programmed and informal recreation and play spaces, with a variety of walkways, tracks and cycleways for people of different ages and abilities.
- A series of strong green links to the coast, including a coastal pathway that extends along the top of escarpment and along the edge of the estuary.
- An ecological approach to planting that responds to the various ecosystems that already exist on-site and extends it throughout the open space, streets and neighbourhoods.

Open Space Provision

As outlined in the Beachlands South Structure Plan, the Auckland Council Open Space Provision Policy (OSPP) informs investment decisions to create a high-quality open space network and principles that guide how high-quality open spaces should be located and configured in relation to the social, built and natural environment.

In line with the principles and provision metrics under the OSPP, the following indicative open and recreational spaces are provided.

- A publicly accessible coastal pathway along the entire coastal edge, with well-defined connections into adjacent neighbourhoods and centres.
- The strategic implementation of open space reserves that enable green links form a network of open space connections between the coastal edge and key locations such as bus stops, parks and primary roads.
- Opportunities for informal recreation, walking and cycling within the ecological and open space network.
- The Village Park, a compact model of a destination park.
- Neighbourhood parks and play spaces embedded within residential areas accessible by residents within a 5 minute or 400 metre walk.
- A civic space at the Village Centre that sits in line with a key viewshaft to Rangitoto Island and Hauraki Gulf, engendering a sense of place and identity as a coastal community.

Key Objectives

Celebrates the coastal edge and links to the coast

A diverse range of opportunities for passive and active recreation

An ecological approach to planting

Connecting to Nature

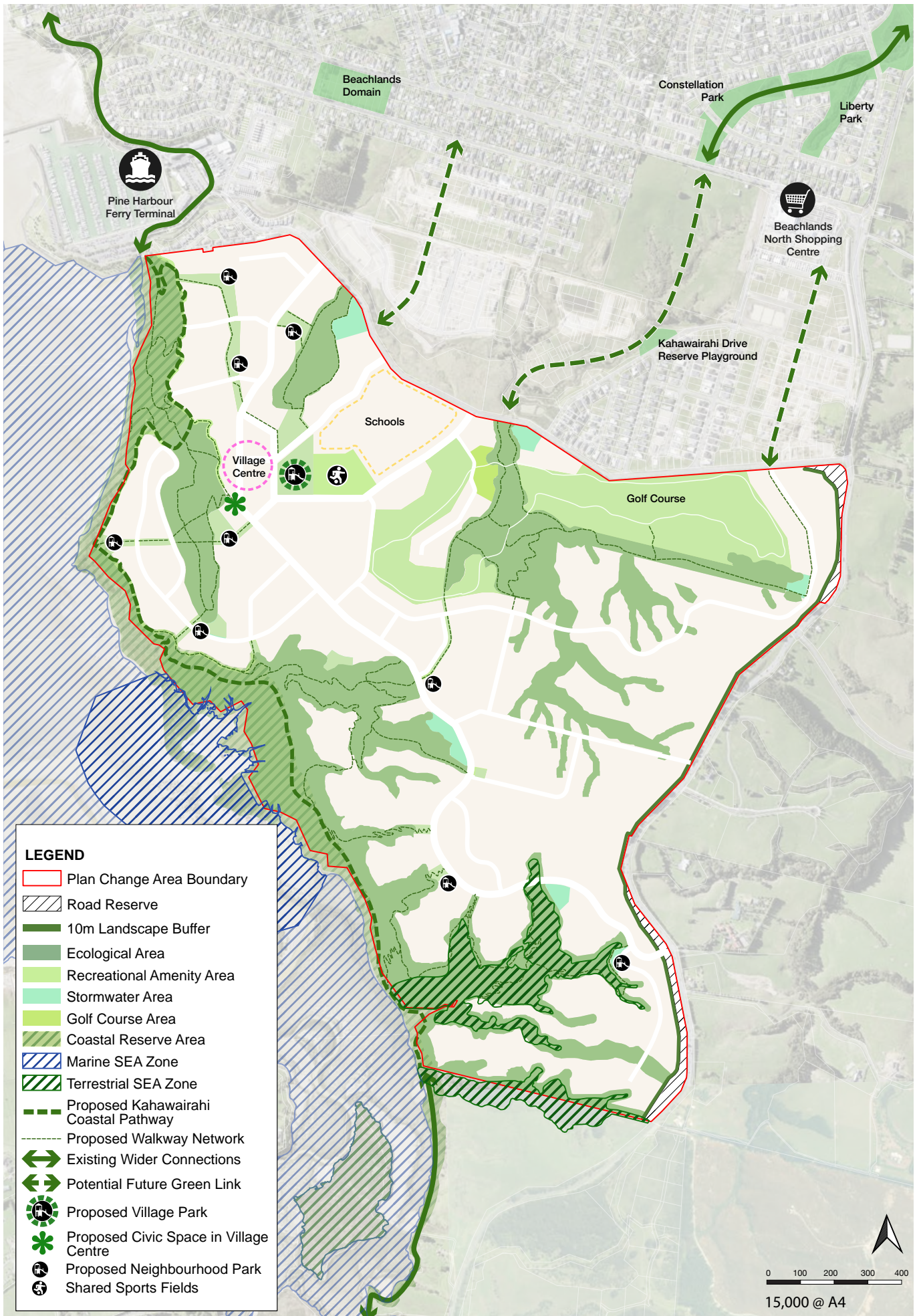
The protection and enhancement of both intermittent and permanent streams within ecological areas through 20m wide planted riparian buffers provide ecological linkages and opportunities for informal recreation and an extensive cycling and walking network. By integrating a well-connected and legible network of walkways, shared paths and cycleways with safe and attractive open and natural spaces, people living and working in Beachlands South are able to lead a lifestyle that is focused around improving their health and wellbeing and building a stronger sense of place and community.

Wider Open Space Network

A well-connected open space network provides opportunities for movement of people and fauna and can help strengthen Auckland's natural environment. The Coastal pathway creates a coastal link between the Pine Harbour Marina and existing coastal pathway to the south of the Plan Change area.

Additional opportunities beyond the extent of the Plan Change area include the potential to create a connection across the unnamed tributaries in the northern and eastern stream catchments to the north of the site, linking into the existing Beachlands settlement and the chain of parks including Te Puru Park and beyond to Maraetai.

Figure 5. Beachlands South Open Space Network Plan



2.3.2 Celebrate the Coastal Edge and Links to the Coast

The Kahawairahi Coastal Pathway, meaning *plentiful kahawai*, extends along the entire west coast of Beachlands South - from the Pine Harbour Marina in the north, to an existing coastal pathway to the south.

The Kahawairahi Coastal Pathway traverses a range of coastal ecosystems as well as coastal edge conditions. It consists of a series of pathway typologies that allow users to enjoy sweeping vistas of the Hauraki Gulf and the Waikōpua Estuary, while maintain a light-touch to the underlying landscape.

It is important that during the construction and usage of the coastal pathway, culturally significant sites for mana whenua are respected and enhanced and enable a strong connection with the natural environment, including opportunities to learn about cultivation of the land.

The Kahawairahi Coastal Pathway

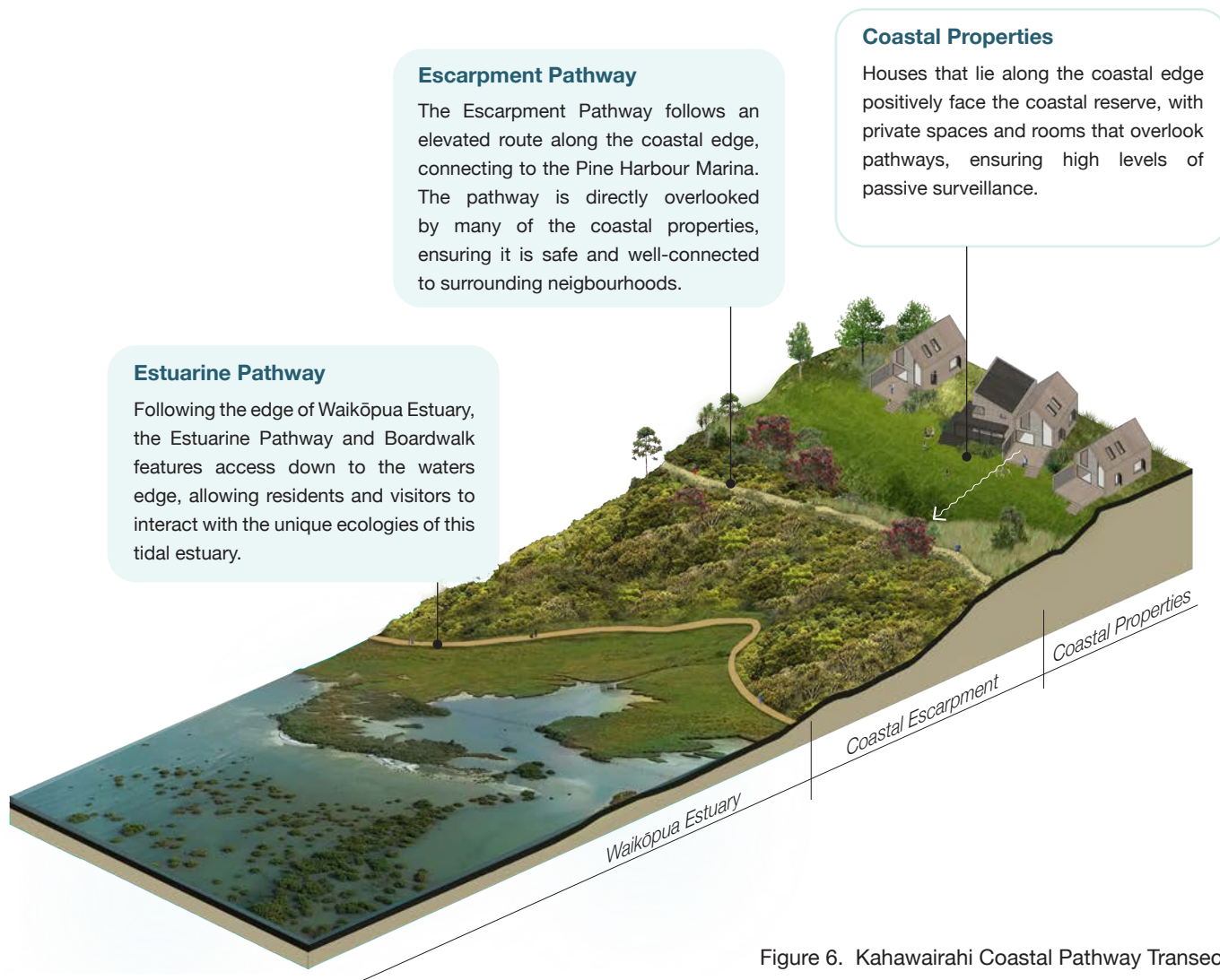


Figure 6. Kahawairahi Coastal Pathway Transect

Estuarine Pathways

Estuarine pathways extend along the southern edge of the coast, allowing users to experience the fluctuations of the tidal estuary and closely examine the unique ecologies that exist here.

The coastal boardwalk is a length of the pathway that gently meanders out into the estuary, allowing the unique experience of walking along the salt marshes and connect to the significance of the Waikōpua Estuary.

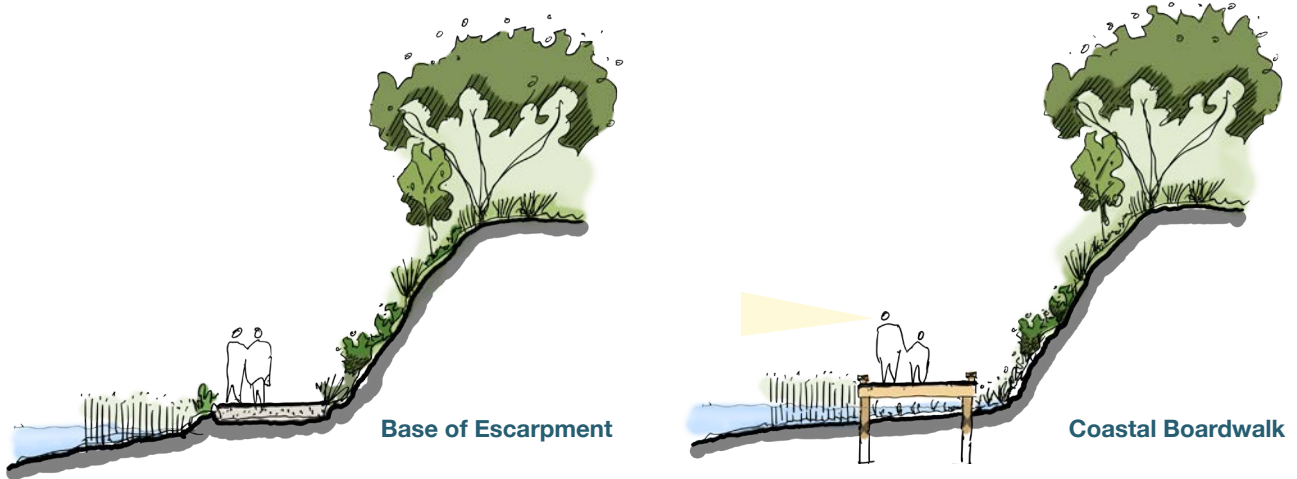


Figure 7. Kahawairahi Coastal Pathway Estuarine (sketches)

Escarpment Pathways

The escarpment pathways extend along the northern edge of the coast, often fronting open spaces or coastal properties. The elevated position means that amazing views are a given, and the nature of the public reserve means that it is open to everybody.

The escarpment pathways are gently sloping in elevation allowing users of all ages and abilities to experience this space.

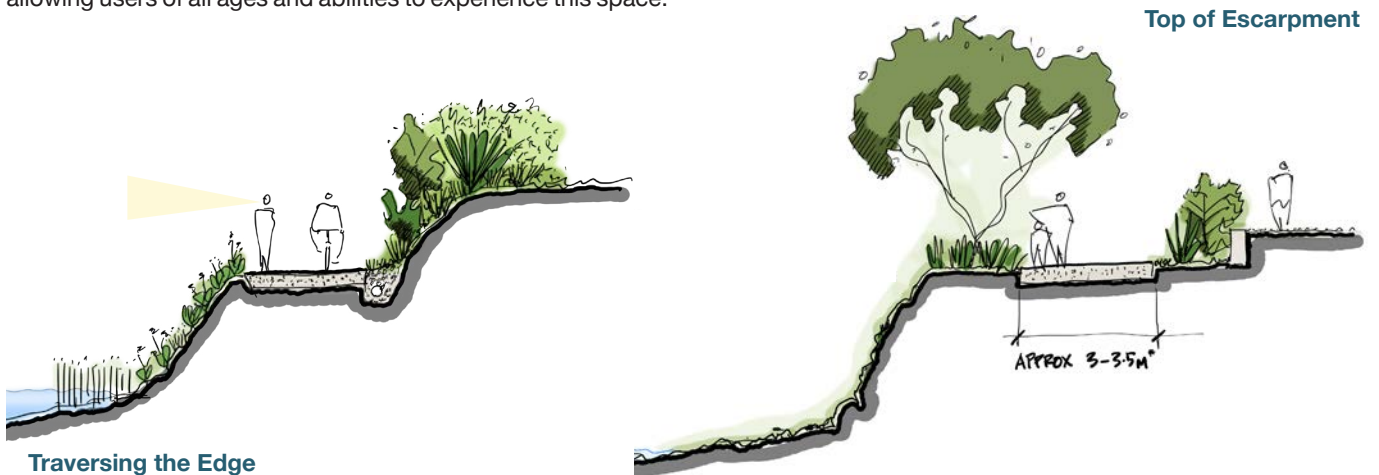


Figure 8. Kahawairahi Coastal Pathway Escarpment (sketches)

2.3.3 A Diverse Range of Opportunities for Recreation and Play

People are increasingly living in urban and suburban environments where they have a limited exposure to natural spaces.

Access to green spaces and natural areas are often associated with a wide range of short and long-term benefits such as lower levels of anxiety and depression as well as improved mental recovery from stress and fatigue.

Easy Access to High-quality Open Spaces

Providing access to spaces that offer opportunities for passive and active recreation and play have an important role in supporting people living in medium and high density housing. These spaces need to be multi-purpose and facilitate a range of social, cultural and recreational activities to meet the demands of the growing community.

An accessible open space network provides a diverse range of social and recreational opportunities that can be used by a range of groups of all ages and abilities. Such a network would incorporate access to and contact with natural and open spaces into everyday life activities, such as commuting to work or picking up groceries, providing opportunities for respite from the fatigue-inducing stressors of daily life.

Village Park

The Village Park is a compact model of a destination park and is intended for larger numbers of people who may be visiting for an extended period of time, and/or have travelled from across Auckland to Beachlands South. It features a destination playground for a range of age groups, including informal recreational spaces and ancillary facilities such as a BBQ, shelter and toilets.

It functions as the key recreational open space and play space for Beachlands South, leveraging off of the adjacent Village Centre, schools, sports fields and connections to the coastal edge and nearby gullies.

Neighbourhood Parks

Neighbourhood parks provide informal recreational, play and social opportunities within a short distance of the surrounding residential areas. While all residents should be within walking distances to recreational opportunities and play, these requirements will vary throughout a neighbourhood depending on the needs of the community, population density, and types of housing provided in an area and should respond to:

- Changes in the composition of the local community, as well as ensure that where possible, facilities are designed to be used by all ages and abilities (including the mobility impaired).
- Future changes or increases in housing density
- Proximity to town centres, shops and areas of high social activity

Village Park

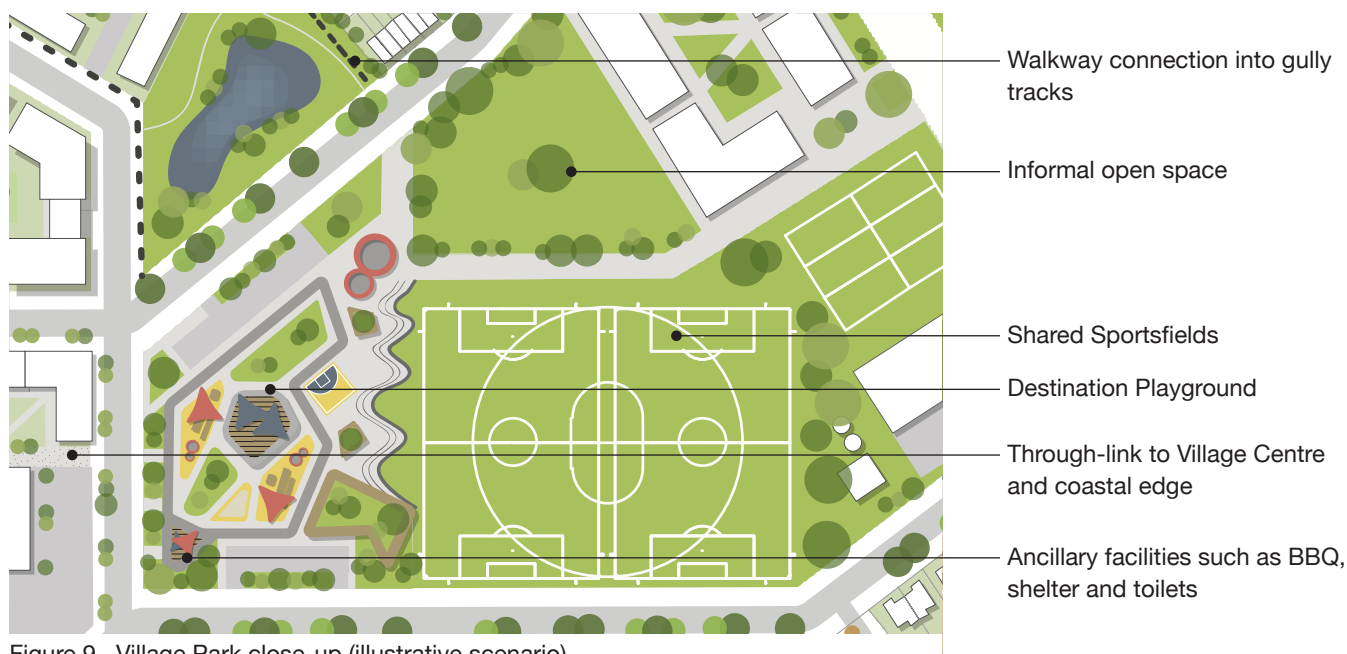


Figure 10. Informal Recreation and Play Space diagrams

Informal Recreation and Play Spaces

In addition to programmed open spaces, the open space network of Beachlands South will provide opportunities for informal and unstructured recreation and play.

- Walkways and Cycleways**
 Pathways that range from wide and gentle links to key amenities and neighbourhoods to more challenging gully tracks and coastal connections.
- Flexible Flat Space**
 Open and flat lawn areas, of at least approximately 30m x30m, which are well-draining and clear of vegetation and paths that can be used for a variety of functions including activities such as concerts and shows, markets and fairs, or informal sports and social events.
- Nature Play**
 Reserve areas which have mature tree and bush areas and streams can be used for nature play, promoting environmental engagement/education, visual arts, social place-making and storytelling.
- Play Spaces**
 Open spaces that have play spaces appeal and cater to a wider range of age groups and abilities. Local playgrounds are intended for nearby users and are suited for smaller groups and should provide space for informal recreation, seating and shade.
- Play-Along-The-Way**
 A network of interesting and engaging moments throughout the street and open space network make walking and cycling journeys more playful. For example, by utilising art, super-graphic paint, and playable street furniture.



Walkways and Cycleways



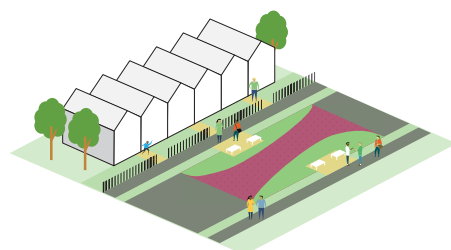
Flexible Flat Space



Nature Play



Play Spaces



Play-along-the-way

2.3.4 An Ecological Approach to Planting

The planting strategy is a critical part of achieving the vision for Beachlands South – a place that is to be defined by its symbiotic relationship with the natural environment. This includes a vibrant, healthy network of streets, open spaces and reserves that are full of natural capital, where people can connect with nature. A key imperative is to ensure that Planting Strategy is complementary to the existing ecological areas, particularly the existing terrestrial and marine Significant Ecological Areas (SEA) and areas significant to Mana Whenua.

This strategy sets out the broad structure and direction for the planting that is to be developed for the site and includes indicative planting palettes to help define the desired style, feature and character of the flora. It is a precursor to more detailed planting plans and strategies.

This strategy takes into account Auckland Council guidance including the Indigenous Terrestrial and Wetland Ecosystems of Auckland (2017) and Te Rautaki Ngahere ā-Tāone o Tāmaki Makaurau Auckland’s Urban Ngahere (Forest) Strategy (2019).

Beyond the plan change, a comprehensive planting strategy and long-term ecological management plan for the public reserves will need to be developed. This will include measures to control mammalian predators, such as limiting dog and cat access to sensitive areas, e.g. coast intertidal zones and breeding areas. The planting design for the streets will also need to be developed, based upon those identified within this report.

Key Features

The Beachlands South planting strategy focusses on a species palette which reflects the surrounding coastal environment with an emphasis on native plants, incorporating the following features:

- **A culturally inspired** planting palette that aligns with mana whenua cultural values and enables the undertaking of cultural practices. This includes rongoa (medicinal) species and habitats for mahinga kai – opportunities to harvest

food and resources such as material for weaving – plus the provision of taonga (treasured) species for whakairo (carving).

- **Different habitat types** that will provide valuable flora and fauna habitat for a variety of species, reduce erosion, improve soil structure and form local ecological corridors – including restorative planting palettes for inland forest, coastal margin, riparian margin, wetland, etc.
- **An ecosystems approach** that seeks to support and enhance biological diversity of the site, including protecting and enhancing the existing terrestrial and marine SEA’s in line with the ecologists (Tonkin + Taylor) recommendations.

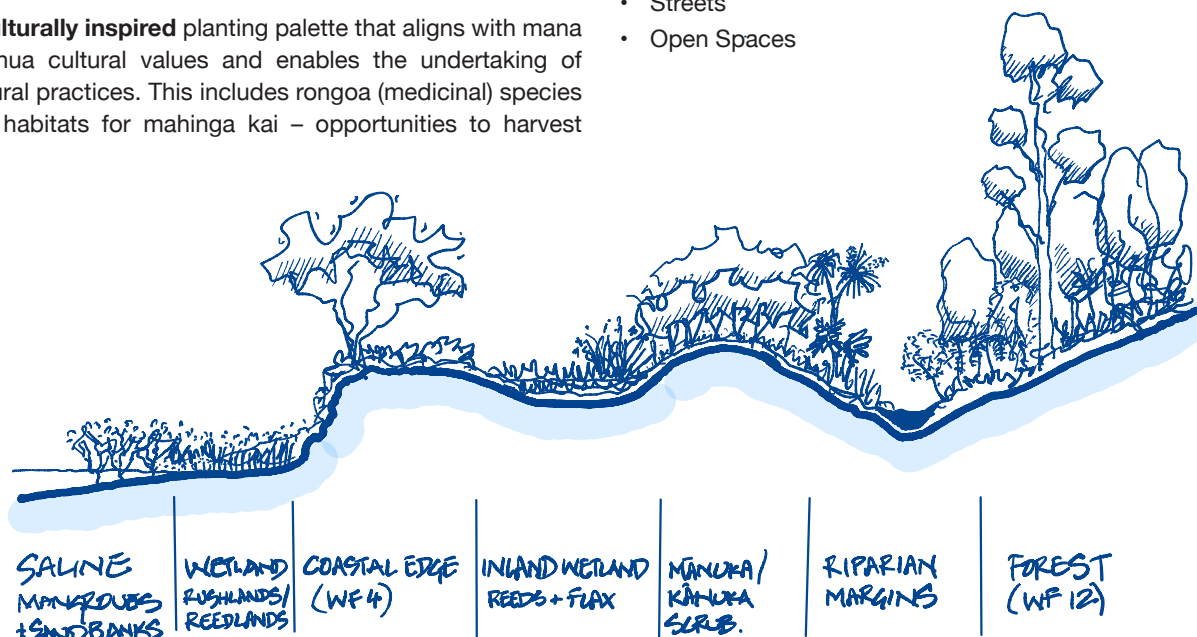
As well as the above, plant selection should be based upon the following criteria:

- Cultural significance
- Site and soil conditions
- Seasonal colour and variation
- Hardiness
- Food for pollinators
- Amenity
- Shade provision

Approach

The following broad categories have been identified in order to provide a legible planting strategy that orders how plant species are to be selected for the various locations, areas and habitats:

- Coastal (cliffs and saline margins)
- Riparian Margins (including constructed wetlands)
- Native Forest (coastal and inland)
- Native Forest Margin (low planting)
- Streets
- Open Spaces



Coastal Planting Palette

The coastal planting zone requires a hardy mix of plants that are salt tolerant and provide habitat and food for local fauna, especially native birds and insects. Plant mixes should represent local plant communities in order to enhance existing habitats. Pohutukawa are to feature along the coastal edge, reinforcing the 'Pohutukawa Coast' name.

Indicative tree species:



Metrosideros excelsa
Pōhutukawa



Rhopalostylis sapida
Nikau



Vitex lucens
Puriri



Meryta sinclairii
Puka



Corynocarpus laevigatus
Karaka



Beilschmiedia tawa
Tawa



Alectyron excelsus
Tītōki



Myoporum laetum
Ngaio

Indicative medium and low planting species:



Coprosma repens
Taupata



Hebe stricta
Koromiko



Dysoxylum spectabile
Kohekohe



Muehlenbeckia axillaris
Pōhuehue



Plagianthus divaricatus
Makaka



Juncus australis
Wīwī



Ozothamnus leptophyllus
Tauhinu



Sarcocornia quinqueflora
Ureure

Riparian Margins Palette

These are important edges to water bodies including natural streams and constructed stormwater wetlands. They buffer and help connect ecologically sensitive areas while providing important habitat for local fauna. The planting will provide water treatment and stream bank stabilisation, and as such, needs to withstand periodic inundation.

Indicative tree species:



Sophora microphylla
Kōwhai



Rhopalostylis sapida
Nikau



Melictyus ramiflorus
Māhoe



Prumnopitys taxifolia
Matai



Cordyline australis
Ti Kōuka



Dacrycarpus dacrydioides
Kahikatea



Dicksonia fibrosa
Whēkī Ponga

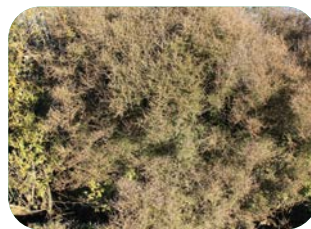
Indicative medium and low planting species:



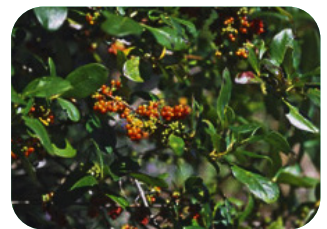
Syzygium maire
Maire Tawake



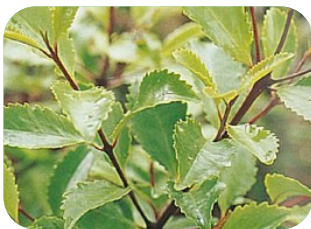
Cortaderia fulvida
Toetoe



Coprosma propinqua
Mingimingi



Coprosma robusta
Karamū



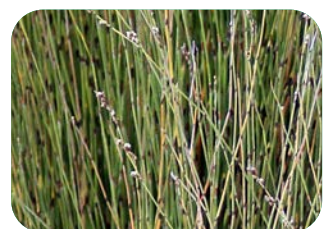
Laurelia novae-zelandiae
Pukatea



Astelja banksii
Kōwharawhara



Phormium tenax
Harakeke



Apodasmia similis
Oioi

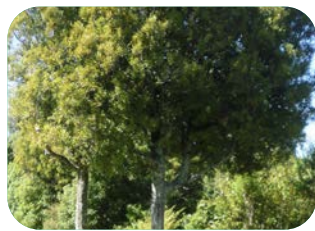
Native Forest Palette

Revegetation areas within the site that promote the regeneration of the forest that used to be here before, such as Kauri, podocarp, broadleaved and beech forest. These are the more inland ecological reaches of the site. Emergent trees are included for their cultural (tāonga) value and carbon sequestration potential.

Indicative tree species:



Beilschmiedia tarairi
Taraire



Beilschmiedia tawa
Tawa



Knightia excelsa
Rewarewa



Podocarpus totara
Totara



Corynocarpus laevigatus
Karaka



Agathis australis
Kauri



Fuscospora truncata
Hard Beech



Elaeocarpus dentatus
Hīnau

Indicative medium and low planting species:



Dysoxylum spectabile
Kohekohe



Macropiper excelsum
Kawakawa



Olearia furfuracea
Akepiro



Muehlenbeckia complexa
Pōhuehue



Cyathea dealbata
Ponga



Dicksonia fibrosa
Whēkī ponga



Pseudopanax arboreus
Whauwhaupaku

Native Forest Margin Palette

This palette is similar to the native forest palette but the planting is typically lower, with some taller trees interspersed, so that views (to the sea in particular) are maintained, good sight lines are achieved and neighbouring houses are not overshadowed.

Indicative tree species:



Cordyline australis
Ti Kōuka



Rhopalostylis sapida
Nikau



Pseudopanax arboreus
Whauwhaupaku



Litsea calicaris
Mangeao



Myrsine australis
Māpou



Cyathea medullaris
Mamaku



Leptospermum scoparium
Manuka



Kunzea ericoides
Kanuka

Indicative medium and low planting species:



Syzygium maire
Maire Tawake



Phormium tenax
Harakeke



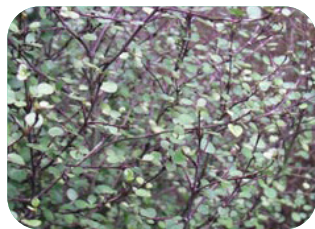
Macropiper excelsum
Kawakawa



Olearia furfuracea
Akepiro



Pittosporum crassifolium
Karo



Melicope simplex
Poataniwha



Hebe stricta
Koromiko

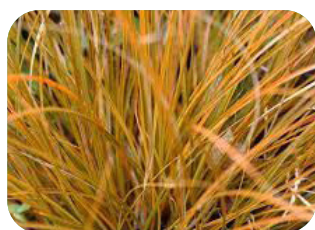
Street Trees

Extensive tree, shrub and groundcover planting is proposed for the Beachlands South street network. This means ‘healthy streets’ with amenity, shade and habitat value. By using a palette of (mostly native) trees, definition between collector and local roads can be reinforced by associating tree species with road typologies. An example matrix is provided below.

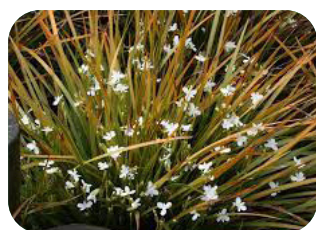
For shrub and ground cover species, a native palette is also recommended and coastal species should be used more in closer proximity of the coast. Refer also to the street cross sections for the proposed street typologies and their planting character.

	Pohutukawa	Puriri	Five Finger	Nikau	Kauri	Kowhai	Houhere	Ti Kouka
Primary Collector (Public Transport)	●	●	●					
Primary Collector (Village Centre)	●	●	●	●				
Primary Collector (School Zone)	●	●	●	●				
Village Centre Secondary Road	●	●	●		●			
Local-Collector Road	●					●	●	
Local Street	●					●	●	
Home-zone	●					●	●	●

Indicative medium and low planting species:



Carex testacea
Carex



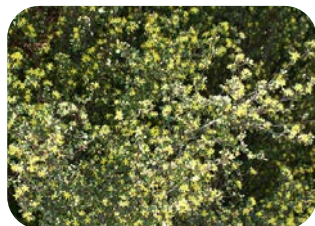
Libertia grandiflora
Mikoikoi



Pratia angulata
Panakenake



Arthropodium cirratum
Rengarenga



Corokia cotoneaster
Korokia Taranga



Hebe stricta
Koromiko



Muehlenbeckia complexa
Pöhuehue



Astelia banksii
Kōwharawhara

Open Spaces

The species palette for the open spaces should reflect the surrounding coastal environment, with an emphasis on native plants, seasonal colour and local ecologies. Tree selection should be tailored to the size of the open spaces, with opportunities to include larger emergent forest species such as hard beech, kauri and rewarewa in larger open spaces. Exotic specimen trees could also be considered for appropriate locations.

Indicative tree species:



Metrosideros excelsa
Pōhutukawa



Rhopalostylis sapida
Nikau



Vitex lucens
Puriri



Sophora microphylla
Kōwhai



Corynocarpus laevigatus
Karaka



Beilschmiedia tawa
Tawa



Alectryon excelsus
Titoki



Cordyline australis
Ti Kōuka



Meryta sinclairii
Puka



Fuscospora truncata
Hard Beech

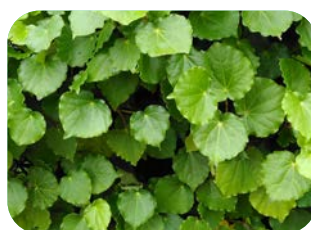
Indicative medium and low planting species:



Pseudowintera colorata
Horopito



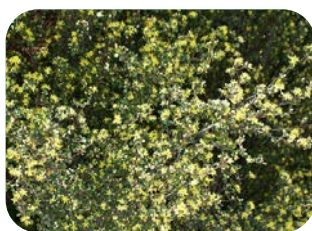
Phormium tenax
Harakeke



Macropiper excelsum
Kawakawa



Clematis paniculata
Puawhananga



Corokia cotoneaster
Korokia Taranga



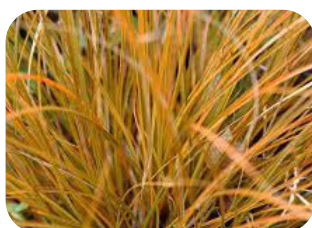
Hebe stricta
Koromiko



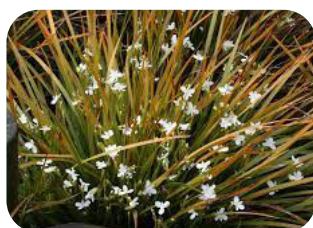
Carmichaelia australis
Mākaka



Astelia banksii
Kōwharawhara



Carex testacea
Carex



Libertia grandiflora
Mikoikoi



Brachyglottis repanda
Rangiora



Arthropodium cirratum
Rengarenga

2.4 Movement and Transport

A movement network that prioritises public and active modes of transport such as walking and cycling, shifting away from car-dependent transportation, making streets safer, quieter, healthier and more sustainable.

2.4.1 A Sustainable and Healthy Movement Network

Active transportation is the most healthy, affordable, environmentally-friendly, and inclusive form of transport. A sustainable and healthy movement network focusses on providing active and multi-modal transport choices that promote a healthy lifestyle and reduce car-dependent transport.

The vision is to create a network of slow-speed streets that will reduce the need for short vehicle journeys by prioritising safe and convenient walking and cycling connections to key amenities and public transport options.

Key objectives of the movement network are to create:

- Sustainable and convenient public transport options by establishing a new bus route and improving accessibility to the Pine Harbour ferry service.
- Streets as places for people, prioritising pedestrians and cyclists as primary users of the street network and creating attractive and safe, human-scaled streets.
- An efficient multi-modal network that integrates the needs and safety of for users of all modes, including making streets inclusive and accessible.

In addition to the street network, the indicative off-road walkways network of Beachlands South features:

- The Kahawairahi Coastal Pathway, a 3km shared pathway along the coastal edge extending south from Pine Harbour Marina towards Whitford.
- Well-defined east-west connections that form a link between existing and new neighbourhoods and the coastal edge.
- An extensive network of walkways, shared paths and cycleways that enable a convenient lifestyle within the development without car ownership.
- Wider network connections, including a potential bridge link across the unnamed tributary to the north of the site to Whawhaki Road, integrating the development into the existing community and enabling access to wider amenities and recreational opportunities.

Key Objectives

Sustainable and convenient public transport options

Streets as places for people

An efficient multi-modal network

Street Typologies

There are 8 street typologies that have been utilised across the Beachlands South movement network. The design of the street typologies has been considered to include:

- An abundance of multi-generational street trees and plantings for beauty, shade, food, carbon sequestration, biodiversity and stormwater treatment.
- Streetscape character that is distinctive to the Beachlands South coastal location and its cultural context.
- Streets that reinforce slow vehicle speeds.
- The use of home-zones and laneways to promote lower vehicle speeds and to minimise vehicle crossings on primary streets thus providing a more seamless cycle network with few interruptions.
- Street intersections and crossings that prioritise pedestrian and cycle movement, thus further reducing vehicle speeds and car dependency.
- A holistic approach to on-street car parking

Street Facility Indicators



Footpath



Shared Path



Cycleway



Shared Carriageway (Sharrow)

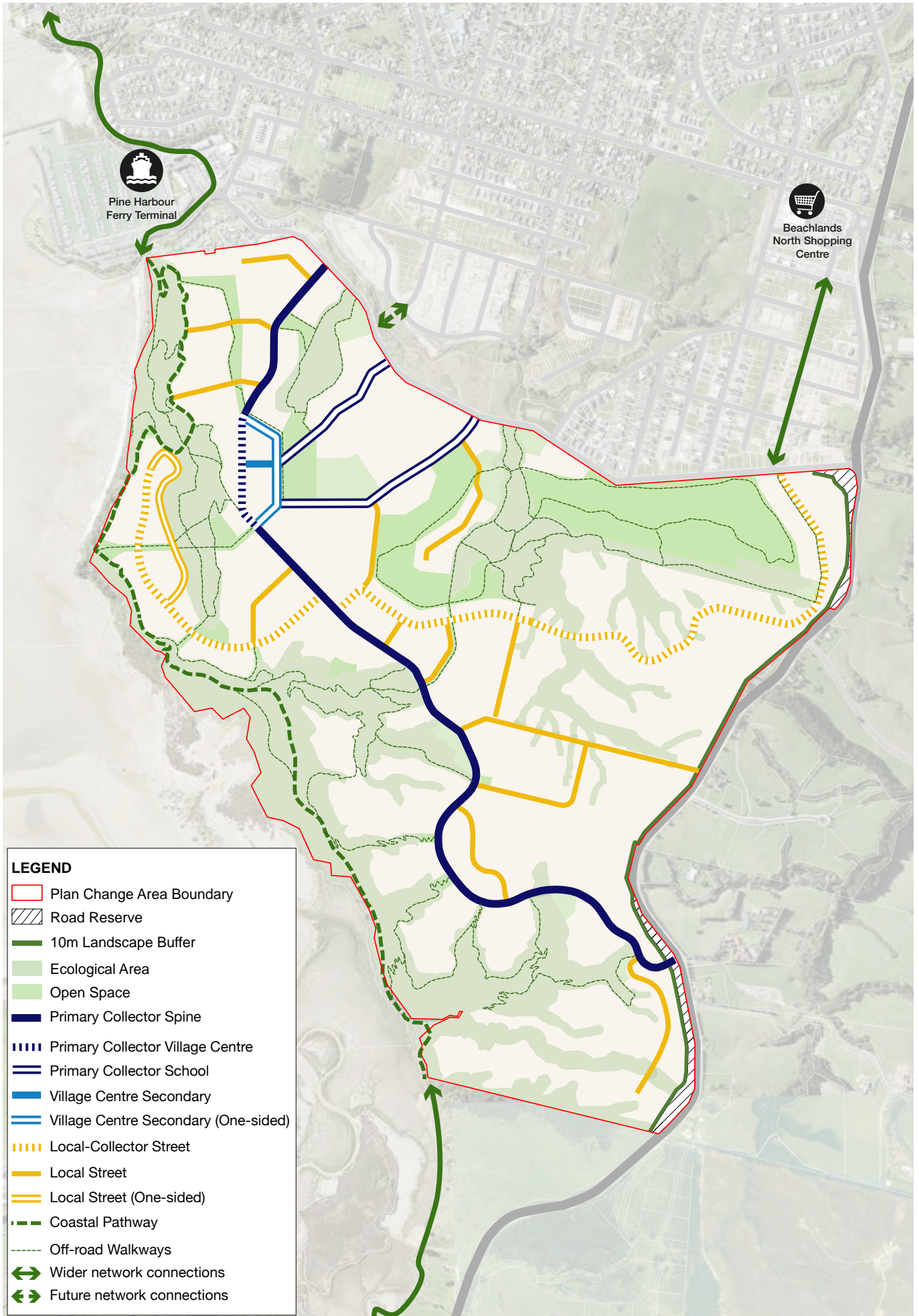


Bus Priority Lane



Future Bus Lane

Figure 11. Beachlands South Movement and Transport Plan





2.4.2 Primary Collector with Public Transport

Constant road reserve: 23.8m

The primary collector ‘Spine Road’ delivers access to the whole precinct with a proposed bus route and a one-sided two-way separated cycleway. This road provides a consolidated access point into Beachlands South from Whitford-Maraetai Road and Jack Lachlan Drive.

Key features are as below:

- Primary movement corridor for vehicles, pedestrians and cyclists through whole of site
- People-focused with narrow carriageway widths and separated cycle and walking paths
- Generous planting each side of carriageway to provide habitat, biodiversity and passive stormwater treatment
- Planting strips accommodate indented bus infrastructure, lighting, seating and signage

Key Plan

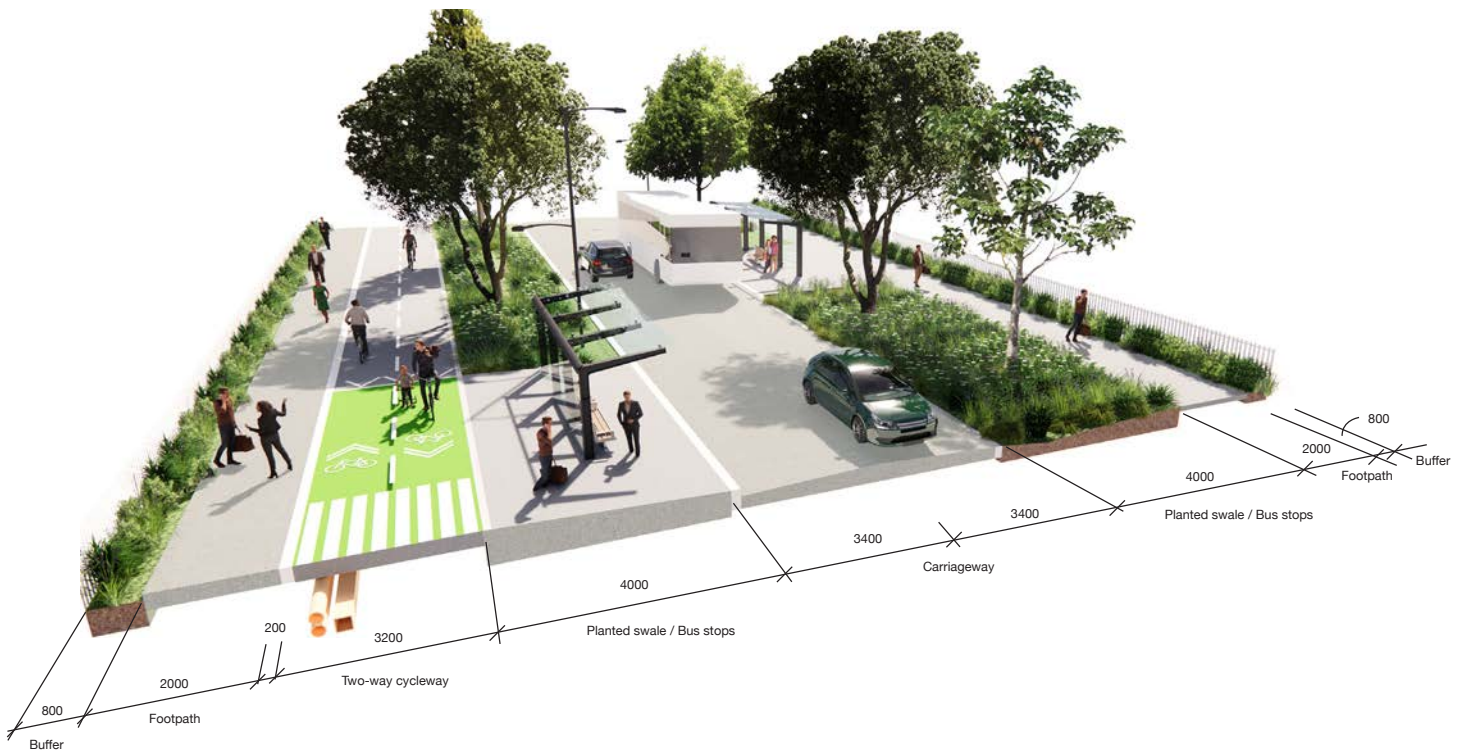
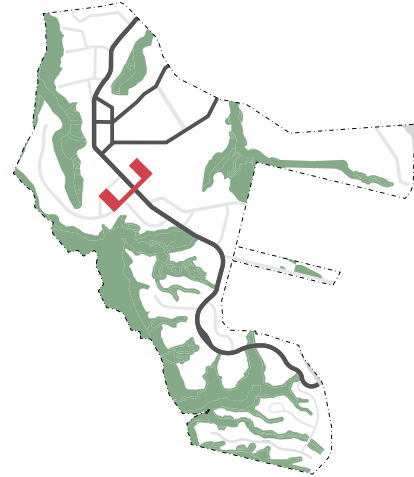


Figure 12. Street Cross-section: Primary Collector with Public Transport



2.4.3 Primary Collector (Village Centre)

Constant road reserve: 23.6m

At the Village Centre, the Spine Road enters a slow-speed zone that is demarcated by a change in the surface treatment and materials selection.

Cyclists are also encouraged to slow, emphasising the pedestrian priority in an area with high footfall and a variety of users, including children and elderly.

Key features are as below:

- No road markings, flush carriageway and common surface materials to reinforce slow traffic speeds and prioritise pedestrians/cyclists
- Multiple mid-block crossings to safely connect both sides of the street
- People-focused street with wide pedestrian surfaces for movement, spill out and placemaking.
- Planting strips accommodate car and cycle parking, seating, signage and lighting

Key Plan

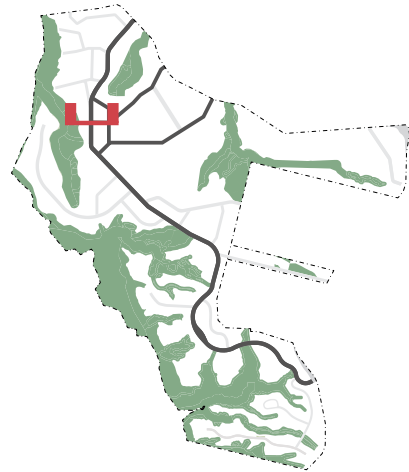


Figure 13. Street Cross-section: Primary Collector (Village Centre)



2.4.4 Primary Collector (School Zone)

Constant road reserve: 23.6m

The School Zone primary collectors run either side to the north and south of the area identified as a potential location for a high school and primary school.

Wide footpaths provide for the heavy footfall at peak times with generous planted berms that create safe buffers between general traffic and cycleways. The width of the carriageway has been designed for flexibility to allow a school bus route to pass through.

Key features are as below:

- A safe people focused street with two-way cycleway on the school side of street
- Signalised mid-block crossings between schools and residential areas
- A green tree lined street with rows of trees that are unique to each street
- Kerb-less carriageway with minimal road markings

Key Plan

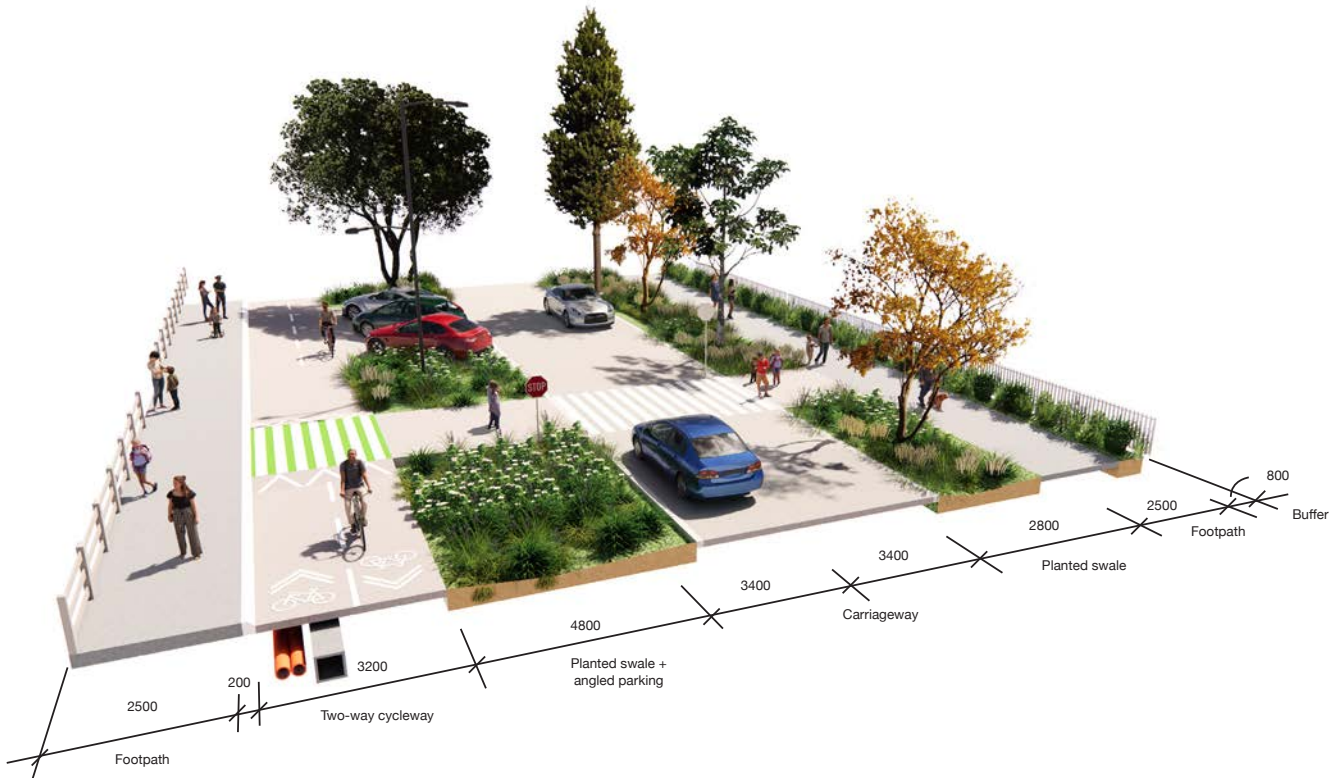
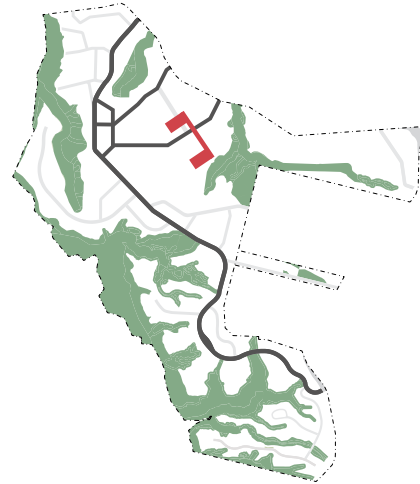


Figure 14. Street Cross-section: Primary Collector (School Zone)



2.4.5 Village Centre Secondary Road

Constant road reserve: 19.2m

A similar design intent to the Village Centre primary collector, this road typology is designed as a slow-speed zone that prioritises pedestrian movement and safety.

Parallel parking spaces are tucked between planted build-outs to support local businesses with frequent resting areas and street furniture.

Key features are as below:

- Illustrative scenario showing opportunity for increased parking in the planting strip to support the businesses and employment in the Village Centre
- In line with the Village Centre primary collector: no road markings, flush carriageway and common surface materials to reinforce slow traffic speeds and prioritise pedestrians/cyclists
- Multiple mid-block crossings to safely connect both sides of the street

Key Plan

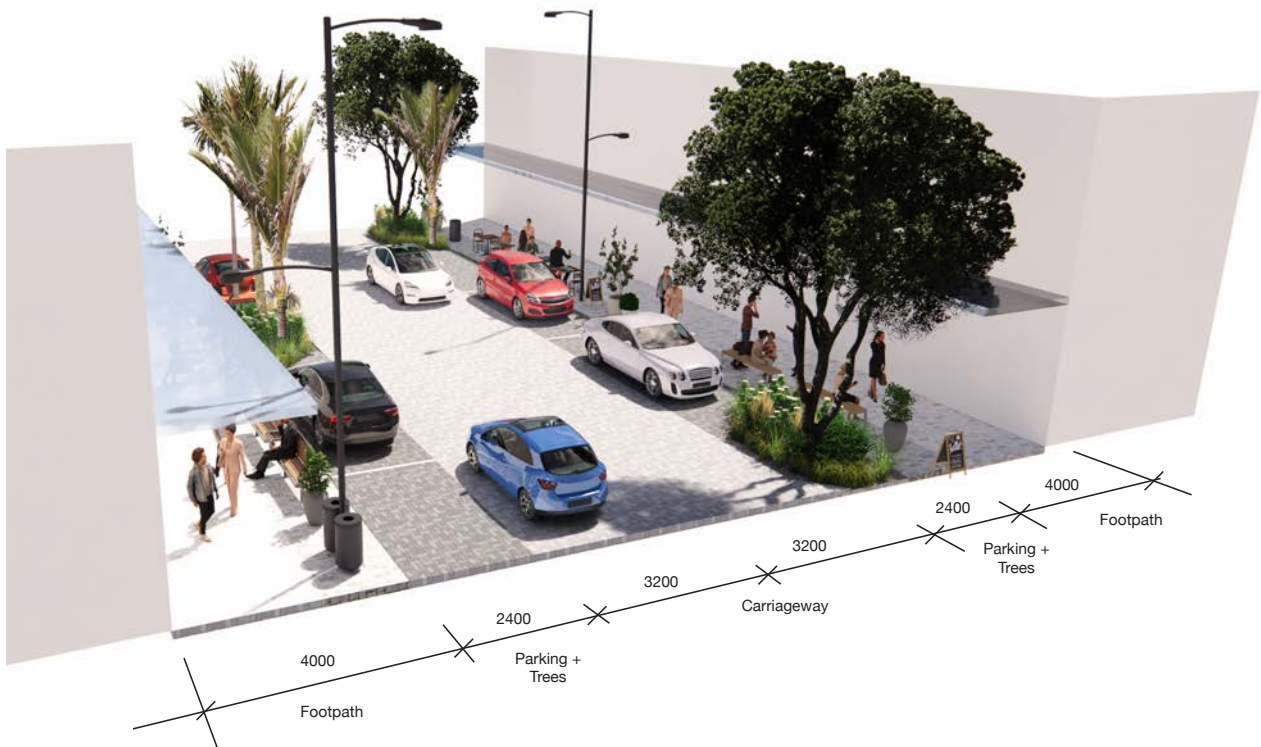
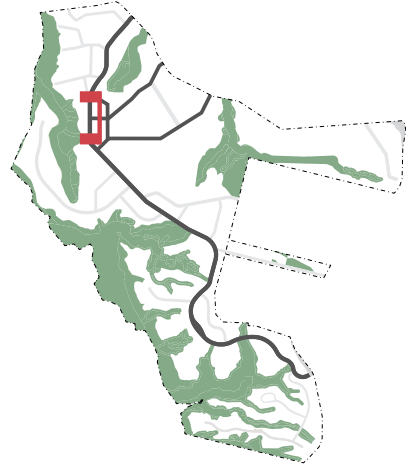


Figure 15. Street Cross-section: Village Centre Secondary Road



2.4.6 Village Centre Secondary Road (One-sided)

Constant road reserve: 19.2m

A variation of the Village Centre secondary road where commercial activity is limited to one side of the street. Parallel parking spaces are distributed between planted build-outs with a separated two-way cycleway to one side.

Key features are as below:

- Illustrative scenario showing park on one side of road carriageway.
- Protected cycleway connects spine road to surrounding local roads.
- Increased opportunity for parking in the planting strip to support the businesses and employment in the Village Centre
- In line with the primary Village Centre Street: no road markings, flush carriageway and common surface materials to reinforce slow

Key Plan

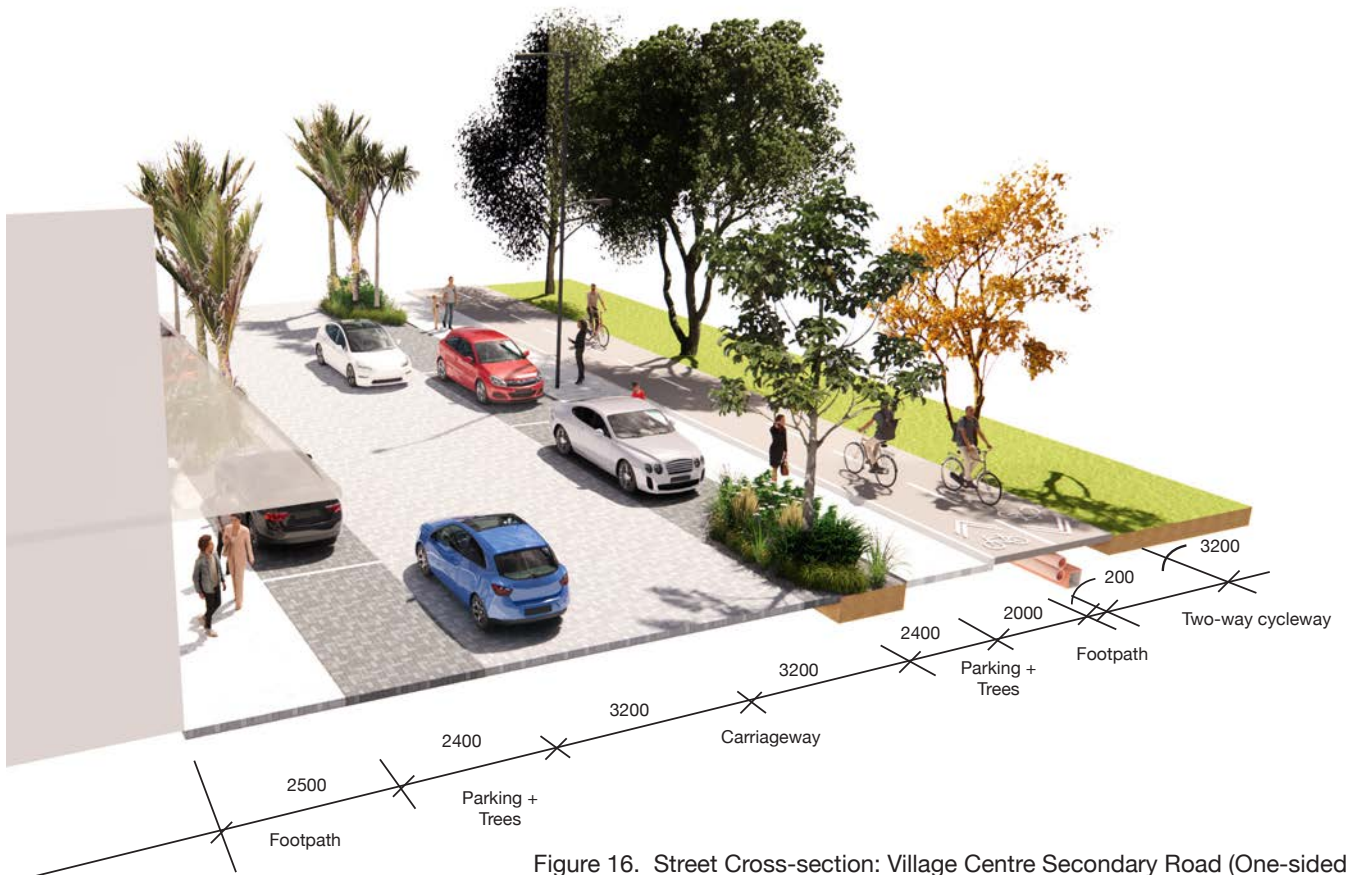
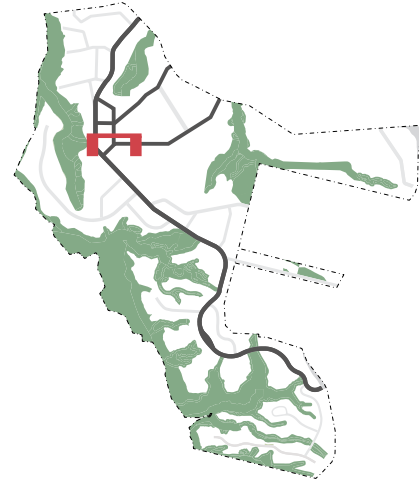


Figure 16. Street Cross-section: Village Centre Secondary Road (One-sided)



2.4.7 Local-Collector Street

Constant road reserve: 16.5m

The Local-Collector Street is a high order variation of the Local Street (on following page). It differs in the footpath width on one side, which is a shared cycle path, further extending the cycle network. This is particularly important to encourage young or inexperienced cyclists that are not yet confident to ride on the shared carriageway.

Key features are as below:

- Slow speed, residential street connecting home zones and housing clusters to collector routes.
- Shared cycle path on one side ensures cyclists have a safe connection to the primary movement routes.
- Footpath on alternate side provides a protected pedestrian environment.
- Narrow carriageways to encourage slow speeds.
- Potential for clusters of visitor parking in places.
- No road markings and kerb-less edges.

Key Plan

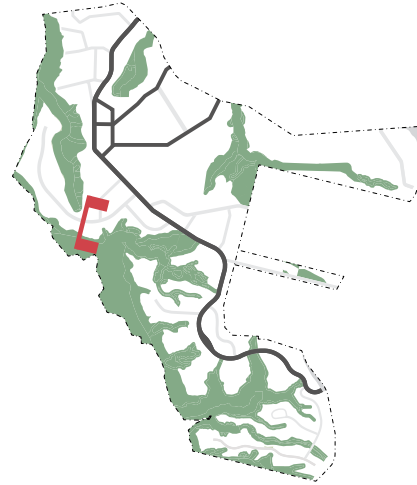


Figure 17. Street Cross-section: Local-Collector Street



2.4.8 Local Street

Constant road reserve: 15m

The Local Street is a low order residential street that connects home zones to secondary and collector roads. It is a slow-speed street environment with a shared carriageway and footpaths on either side of the street protected by planted berms.

Key features are as below:

- Slow speed, residential street connecting home zones and housing clusters to collector routes (where the street is short and does not warrant a collector/ local hybrid).
- Narrow carriageways to encourage slow speeds.
- Protected footpath either side.
- No road markings and kerb-less edges

Key Plan

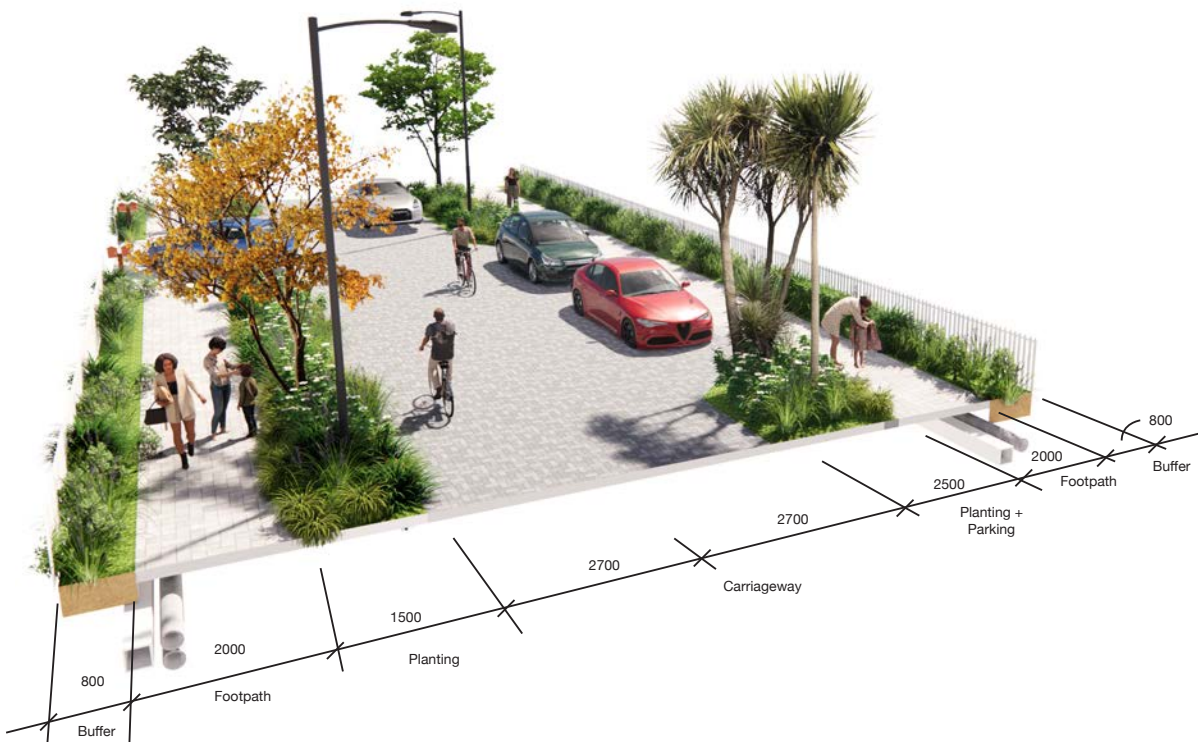
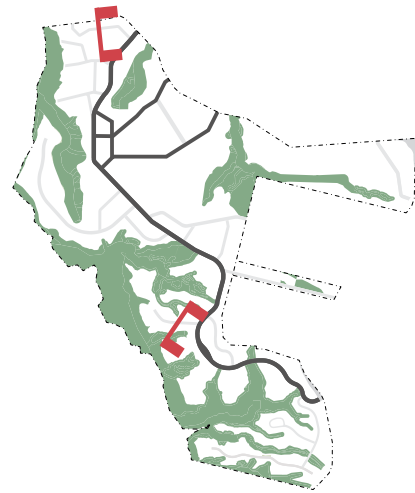


Figure 18. Street Cross-section: Local Street



2.4.9 Local Street (One-sided)

Constant road reserve: 11.5m

A variation to the Local Street, this typology applies where a local street fronts to an open space. The carriageway is narrower as residential lots are located only on one side.

Key features are as below:

- Variation of a local street where it fronts an open space.
- Protected footpath on building side, assuming there is a path within the open space.
- Narrow carriageways to encourage slow speeds.
- Opportunity for indented parking between street trees in the planting zone.
- No road markings and kerb-less edges.

Key Plan

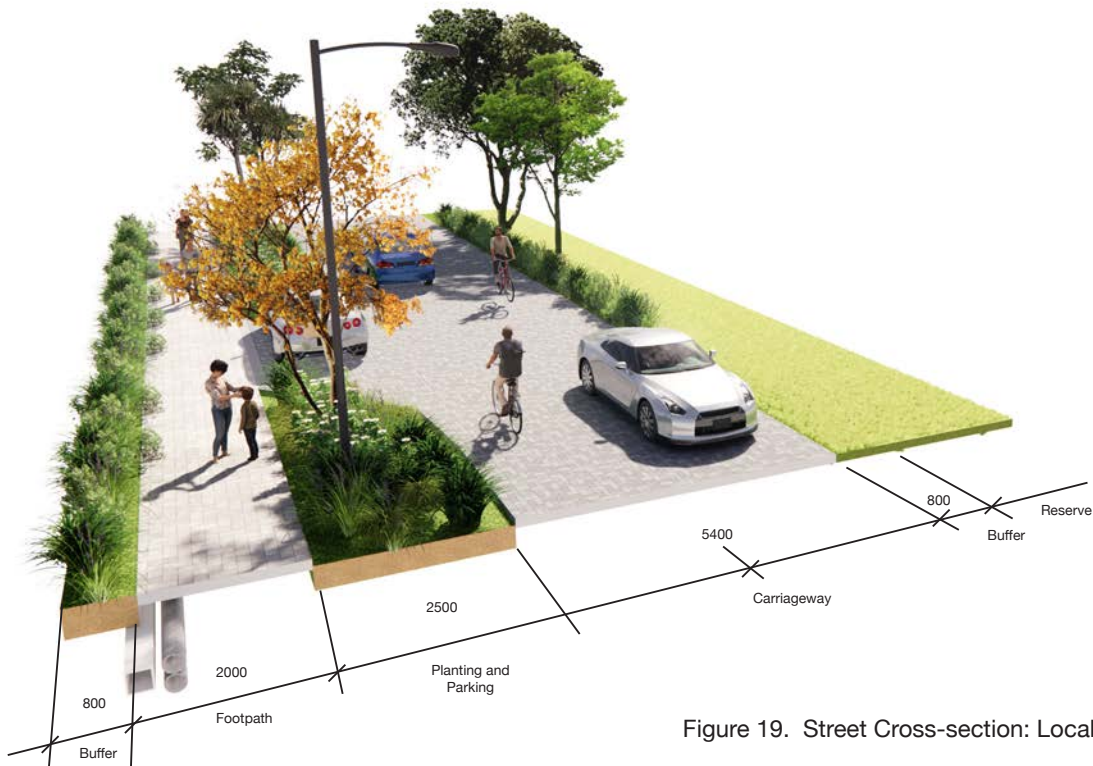
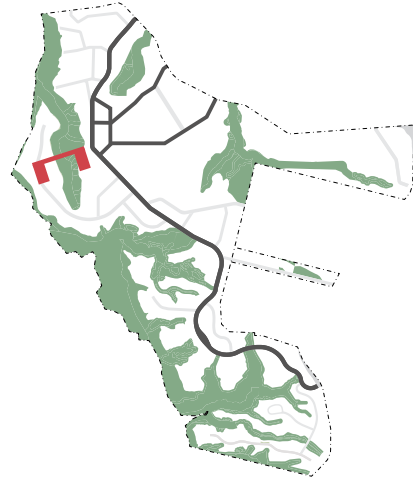


Figure 19. Street Cross-section: Local Street (One-sided)



2.4.10 Home-zones

Home-zones and laneways provide rear-access to residential units and are encouraged to avoid an excessive number of vehicle crossings on primary streets. Home-zones should be well overlooked and natural surveillance is strongly encouraged to create a safe and attractive network of laneways that create small, intimate communities where neighbours can easily get to know each other.

- Shared-surface home-zones reduce land take and create attractive multi-function spaces
- Provide a safe space for children to play
- Provide regular connection points to the adjacent public open space and walking network
- Design for slow speeds, with opportunities for planting and water-retention devices.



Figure 20. Visualisation: Home-zone

2.5 Built Form and Housing

Sustainable, walkable and compact neighbourhoods with a strong sense of place and high architectural character.

2.5.1 Compact Neighbourhoods

Neighbourhoods in Beachlands South will promote a walkable and compact urban form that enables access to key amenities and spaces within a short journey of their homes. These compact neighbourhoods will build on the expansion of the existing village character, emphasising its connection to the natural environment, coastal feel and strong sense of place.

Neighbourhoods will be designed with a greater provision of high-quality recreation and play spaces that have been purposefully-designed to meet a wide range of community needs, where residents can relax and connect with nature as part of a healthy and resilient community.

Local streets within neighbourhoods are reclaimed as places for people and not just for cars. Streets are designed to be slower, safer and more inclusive spaces that enable incidental play, opportunities for community art; a place to get to know your neighbours and strengthen the community.

Key objectives of compact neighbourhoods are to:

- Develop a strong community and neighbourhood character that reflects its coastal setting and fosters a sense of place
- Provide a variety of housing choices and affordability models
- Promote a high-quality urban form with opportunities to live, work and play close to home.

Scale and Density - Zoning

The majority of sub-precincts will consist predominantly of residential buildings of a variety of scales and densities, ranging from high-density apartment buildings and terraced houses through to large stand-alone houses. It is important that there is a variety of dwelling types and sizes on offer to ensure that there is an adequate supply of affordable housing options available.

Intensive residential development is proposed in close proximity to high-frequency public transport, local centres and amenities. These areas are generally co-located with mixed-use zone areas, where it is anticipated that there will be a provision of business and employment opportunities that would benefit the wider community, such as shared spaces that enable remote working or a small workshop.

Key Objectives

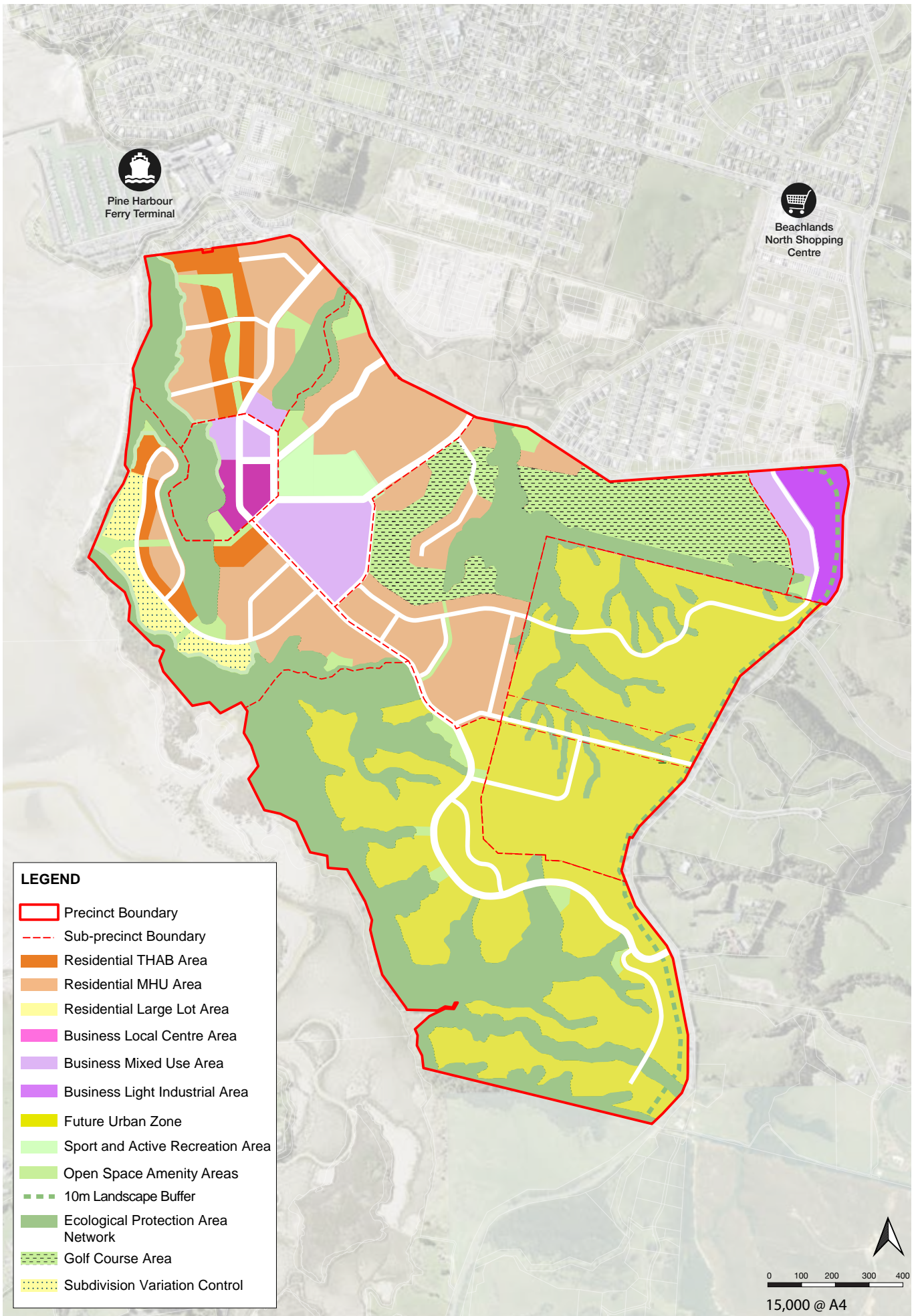
Strong community and neighbourhood character

Variety of housing choice and affordability models

High-quality and compact urban form

The scale of buildings should be commensurate with the proposed density of the respective sub-precincts together with the location within the precinct. For example, larger buildings should be located along the primary routes and within the centre of the sub-precincts, whilst lower buildings are encouraged around the edges, particularly the coastal edge.

Figure 21. Beachlands South Built Form and Housing Plan





2.5.2 Local Centre Zones

The primary purpose of the Local Centre zone is to provide for the local convenience needs of surrounding residential areas, including local retail, commercial services, offices, food and beverage, and appropriately scaled supermarkets.

Development within the zone must be designed to a high standard which enhances the quality of the centre's streets and public open spaces, making the Village Centre an attractive place to live.

Mixed-use zoning enables a unique opportunity to provide live-work units with greater flexibility on the type of employment activities allowed than in the THAB zone.

The Village Centre in Beachlands South is strategically located to be supported by the adjacent Village Park, schools and Mixed-use zoning to the north and south to enable future expansion as the community grows. Provisions typically enable buildings up to four storeys high, enabling residential use at upper floors.

Dwellings in the Village Centre will typically consist of apartments on the upper floors, with commercial or retail floors below. These residential units will have excellent access to public transport, retail and commercial space and recreational amenity, with stunning view out toward the Hauraki Gulf and Rangitōtō Island.

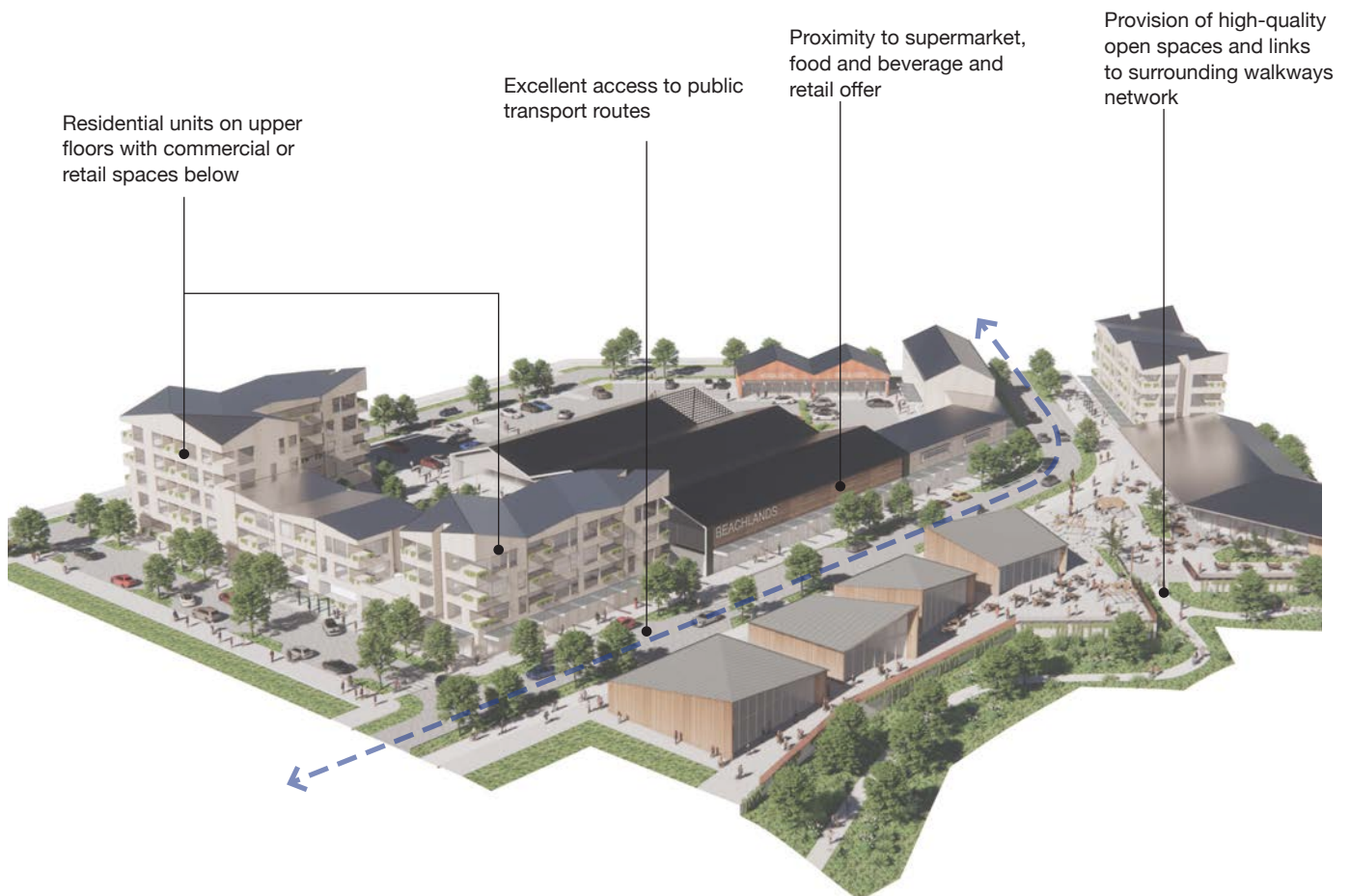


Figure 22. Local Centre Zone Visualisation



2.5.3 High Density Zones

High-density residential areas in Beachlands South consist of both lifted and walk-up apartments and 3-storey terraced houses. As mentioned in the NDS, scale and materiality will need to be appropriate to the area. Lifted apartments within the THAB zone should be no more than 5 storeys high, keeping in line with the character of the area, while maximising intensive development in proximity to areas adjacent or near public transportation and local centres.

High-density areas are characterised by high provision of open space and recreational amenity and have convenient access to a wide range of services such as employment, education facilities, retail, entertainment and public transport.

Residential zones include THAB and MHU zones, although it is expected that not all areas zoned MHU would be suitable for apartments or tall terraced houses, and would be appropriately scaled in relation to distance from public transportation and local centres.

A key objective of Beachlands South is to develop a compact urban form that promotes walkable neighbourhoods that encourages local travel by walking and cycling.

The use of home zones in high density areas is expected, with particular guidelines around frontages to the street, passive surveillance and additional provision of on-lot open space will need to be further developed to ensure the success of these areas.



Figure 23. High Density Zone Visualisation



2.5.4 Medium Density Zones

Medium-density residential areas make up the majority of proposed housing zones in Beachlands South. These areas are commensurate with the MHU zoning and consist of low-rise apartments, 2 and 3-storey terraced houses, semi-detached (duplex), zero-lot and detached housing typologies on a range of lot sizes.

In accordance with the key objectives outlined in this chapter, these neighbourhoods will represent a high-quality and compact urban form that provides a variety of housing choices and affordability models to ensure that Beachlands South is a place for everyone and fosters a sense of community

As with high density areas, medium density areas will promote walkable neighbourhoods and encourage local travel by walking and cycling.

Home zones in medium density residential areas play a significant role in creating a well-connected movement network by providing through-links to walkways and tracks that line the many gullies and open spaces. As properties front open spaces, it is important that a high quality landscape and boundary treatment is achieved for the success of the residential areas.

In addition to creating a safe communal space within home zones, car parking should be discretely located to minimise visual dominance. Guidelines around the appropriate scale and materiality will likely need to be further developed to ensure these areas maintain the character of their sub-precincts.



Figure 24. Medium Density Zone Visualisation



2.5.5 Low Density Zones

Low density or Large-lot residential areas are proposed in areas where tall buildings or an intensive urban form would not be appropriate, such as along the coastal edge or along prominent ridgelines.

Houses in this area are expected to predominately consist of large detached houses and some smaller detached and duplex (semi-detached) houses.

These areas also include land that is often steep or with geotechnical constraints, and therefore have a lower capacity for intensive residential development. In such locations it will be important to work with the landform and natural features in order to construct dwellings that maintain the character of the landform and sit comfortably within their landscape.

Home zones have a valuable role in low density neighbourhoods to provide communal spaces for informal play and recreation. Shared spaces such as home zones have an important local, community-building function that are key components in developing safe and well-connected neighbourhoods.



Figure 25. Low Density Zone Visualisation