

Whau Neighbourhood Greenways

August 2015



Message from the Chair of Whau Local Board

This greenways plan communicates a vision and path towards making the Whau Local Board Area more walkable and accessible by bike. It is an agenda for creating safe and attractive hiking and biking trails that will better connect people to where they want to go, improve health through opportunity for active living, focus more attention on the environmental stewardship of our greenway corridors and strengthen our communities.

Whau's community have said that there is need for greenways in the Whau Local Board Area. People wanted local connections, safe and accessible places to exercise, bike, walk and jog and ecological corridors. They wanted connections between neighbourhoods joined to regional networks.

Our local board plan talks about a 20 minute lifestyle where we can get to the things we need by public transport, walking and cycling within 20 minutes. We have also prioritised valuing and restoring our natural environment. This Greenways Plan delivers on our local board plan and the Board has also made the actioning the Greenways plan a priority. The board took the early feedback and started concept planning before the plan was fully finalised.

Whau Neighbourhood Greenways planning began in 2013 and has taken three years. This longer timeframe has enabled wider community engagement and integration into other Board's, organisations and regional planning. A draft plan was completed in April 2014 and as was reviewed by stakeholders, general public and staff with the final plan adopted by the Whau Local Board on 19 August 2015.

The Local Board has outlined its priorities in the Plan, and is particularly excited by the recently created partnership with the Whau Coastal Walkway Environmental Trust, formed to develop a shared walking and cycling track (Te Whau pathway) along the bank of the Whau River from Te Atatu Peninsula through to Olympic Park in New Lynn. The Trust will fund construction works for Te Whau pathway, with planning aspects covered by the Local Board, and we anticipate that a significant length of this greenway route will be developed over the next three years.

The board is also progressing other priorities including a link around Riversdale Reserve, the Holly Street to Heron Park link and a promotional campaign.

We are well on track to achieving our goal that 'people in the Whau Local Board area regularly use the greenways to go safely about their daily business, and take pleasure in the social connections, the thriving natural areas and the learning opportunities afforded along the greenways network.'



Catherine Farmer
Chair, Whau Local Board



Members of Whau Local Board at Olympic Park, from left: Catherine Farmer (Chair), Derek Battersby, Ami Chand, Simon Matafai and Ruby Manukia-Schaumkel. Photo by Aroha Webster, 2015.

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Figure 1. View looking west over New Lynn from Titirangi Golf Course. Auckland Council Stock Photo, 2012.

1.0 Introduction

Whau Neighbourhood Greenways

1.1 What is a Greenway?

Neighbourhood Greenways in the Whau area will be cycling and walking connections which are safe and enjoyable. They will provide an alternative to using busy roads and will encourage people to get active by walking or cycling rather than always using the car. They will access places that local people want to go, such as schools, libraries, halls, parks, shopping, and public transport nodes (train and bus stations).

At the same time, development of a greenways trail will help raise awareness of our unique New Zealand flora and fauna and enable attention to be focused on the restoration of the landscape and ecology along the streams, coastlines and other natural areas along the greenway route.

There are many organisations in the Whau area dedicated to restoring the natural environment and particularly the streams, and a greenway can both encourage and showcase these restoration efforts. The benefits are not only environmental. As these neighbourhood greenway areas are looked after and begin to mature into their natural beauty they will attract more people. This will, in turn, help to ensure ongoing stewardship of the area.

Greenways may cross existing areas of parkland, stream esplanades, coastline or other public land or access easements, and follow street connections between these areas. The network typically follows natural landforms such as streams and the coast as well as built features such as streets and motorways.

1.2 What is the Whau Neighbourhood Greenways Plan?

The Whau Neighbourhood Greenways Plan is a long-term plan aimed at improving walking, cycling and ecological connections across the Whau Local Board area. The boundaries of the Whau Local Board are shown at Figure 2.

The plan maps the potential network of local greenways connections in the Whau area, and identifies priority projects.

The plan will guide the expansion of the walking and cycleway network. Creating all of the greenways connections identified through this plan will occur over a period of many years, as funding becomes available.

This document is intended for use by elected members, Council officers, community groups, private developers and other interested parties seeking to expand the network of walking and cycling paths.

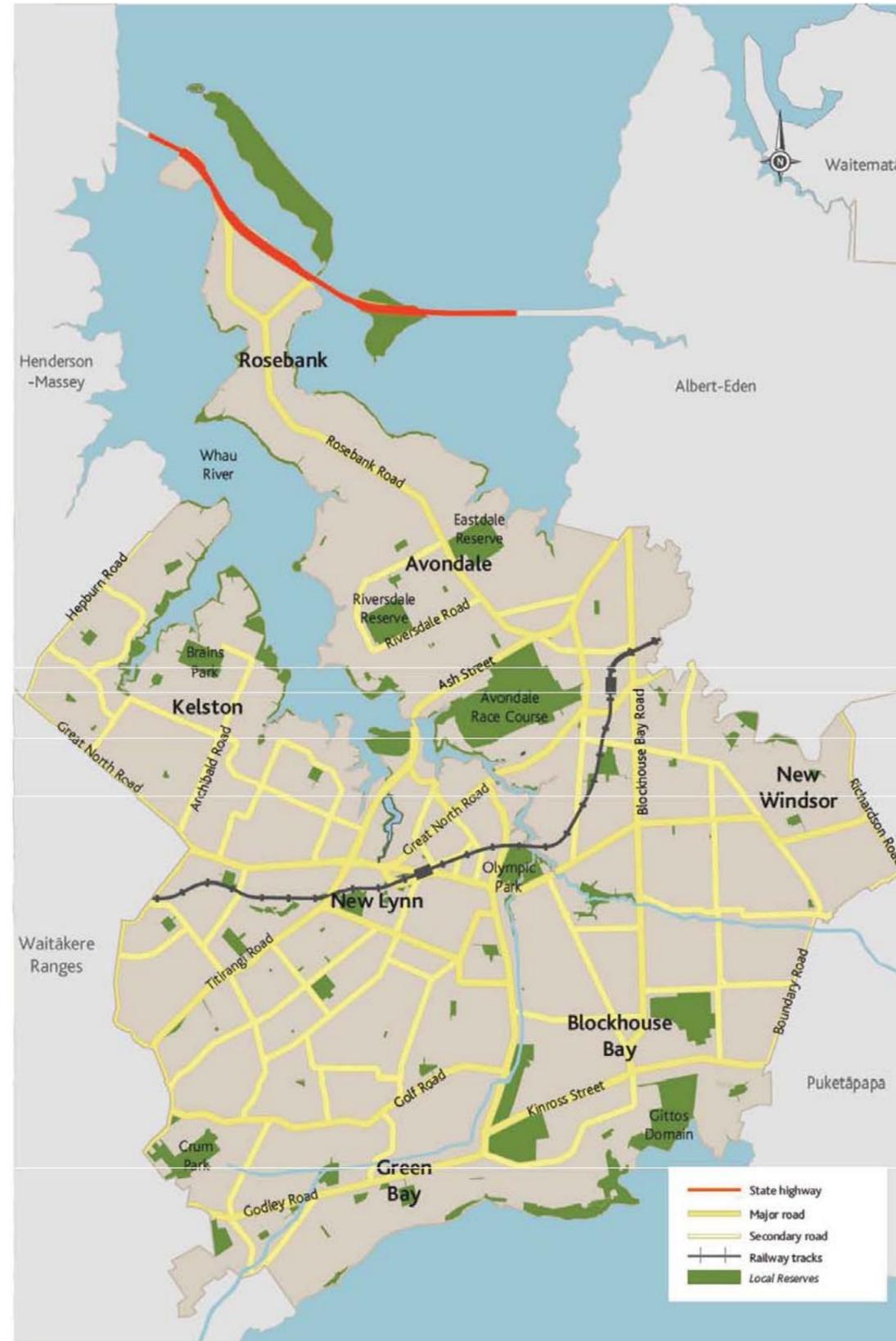


Figure 2. Extent of the Whau Local Board area

1.3 Greenways Benefits

There are many benefits from developing a network of neighbourhood greenways, including:

Recreation

Improving people's access to outdoor recreation and enjoyment close to their home;

Environmental

Reducing our reliance on fossil fuels by providing attractive and safe alternative transport choices, improving water quality and reducing flooding peaks through low impact design (LID) measures, and enhancing ecosystems, habitat and the beauty of the area;

History, heritage and identity

Providing opportunities to showcase and celebrate (through interpretation and artwork) elements of Māori culture, heritage and identity, and the area's non-Māori history;

Social

Providing improved opportunities for people to get out of their cars and meet their neighbours, to be engaged with a diverse range of communities and to be connected with local community facilities;

Health and safety

Creating attractive safe places for people to improve their health through active outdoor living, physical activity and fitness;

Transport and accessibility

Allowing people to circulate through the area in a safe, efficient and fun way: walking or biking to schools, shops, local town centres, public transport, parks and connecting with the wider area;

Education and awareness

Providing opportunities to learn about the natural world - vegetation, wildlife, ecology, the history and the people of the landscapes that the greenways pass through;

Economic

High-performing greenways can create improved local employment opportunities as areas become more desirable for businesses and shoppers. Greenways can also provide a tourist destination for international and national visitors.

1.4 Area Covered by the Greenways Plan

The Whau Neighbourhood Greenways Plan covers the Whau Local Board area, shown on the map at Figure 2, and includes Avondale, Blockhouse Bay, Green Bay, Kelston, New

1.5 Goal and Objectives

The Whau Local Board set the following goal and objectives for neighbourhood greenways in the Whau Local Board area:

Goal

"People in the Whau Local Board area regularly use the greenways to go safely about their daily business, and take pleasure in the social connections, the thriving natural areas and the learning opportunities afforded along the greenways network."

Objective

"To provide a network of neighbourhood greenways within the Whau Local Board area which will link with the rest of Auckland and provide safe and enjoyable ways for people to get around, get active and get engaged with their community, their environment and their history and heritage. The greenways network will:

- Improve walking connections
- Improve cycling connections
- Improve community connection
- Improve recreation opportunities
- Improve community health and safety
- Improve public access to and along streams and harbours
- Provide interpretation of sites of cultural significance and improve their management
- Increase community knowledge of, and respect for the natural environment
- Improve ecological wellbeing including expanded and enhanced habitats, wildlife movement corridors, and food sources for native fauna
- Improve water quality in greenways streams through stream shading and pollution filtering afforded by riparian planting
- Reduce flood peaks along and downstream of greenways streams through riparian planting
- Provide opportunities to showcase and celebrate restoration projects and the area's special environment, history and culture".

1.6 Strategic fit

Auckland Plan

The Auckland Plan sets Council's long-term strategic direction, and sets out a vision to create the world's most liveable city. The Whau Local Board greenways network will deliver across a range of the outcomes sought in the Auckland Plan, including:

Chapter 5: Auckland's Recreation & Sport

Priority 1: Provide quality opportunities for all Aucklanders to participate in recreation and sport.

Chapter 7: Auckland's Environment

Priority 1: Value our natural heritage

Priority 2: Sustainably manage natural resources

Priority 3: Treasure our coastlines, harbours, islands and marine areas

Chapter 12: Auckland's Physical & Social Infrastructure

Priority 2: Protect, enable, align, integrate and provide social and community infrastructure for present and future generations.

Directive 12.8: Maintain and extend the public open space network, walkways and trails and recreational boating facilities in line with growth needs.

Chapter 13: Auckland's Transport

Priority 3: Prioritise and optimise investment across transport modes.

Other Policy and Plans

In developing this Greenways plan, a number of related Council and non-Council initiatives have been investigated and - where possible - included in the greenways network.

- former Auckland City Council and Waitakere City Council plans and initiatives such as the Avondale/Blockhouse Bay Area Plan, the Rosebank 2030 Business Precinct Plan, the New Lynn Urban Plan and the Glen Eden Urban Design Framework;
- the Whau Local Board Plan;
- Auckland Council Parks and Open Space Strategic Action Plan - one of the four focus areas in this plan is 'connect our parks and open spaces';
- Auckland Council documents such as the Auckland Plan, the Glen Eden Town Centre Implementation Plan and the draft Avondale Town Centre Action Plan;
- New Zealand Transport Authority (NZTA) developments such as the SH16 and SH20 Cycleway extensions;
- local stormwater improvement/stream restoration projects;
- the Auckland Cycleway Network (ACN), prepared by Auckland Transport (AT);
- individual reserve management plans;
- walking school bus routes; and
- initiatives currently underway or proposed by community and ecological restoration groups.

The Whau Local Board Plan

The Whau Local Board plan is a reflection of what elected members have heard from their community. Feedback gained both formally and informally has been instrumental in shaping the plan, and it provides a touchstone for the aspirations of the Whau community.

High-performing Greenways have potential to fulfil a number of the aspirations set out in the 2015 Whau Local Board Plan. Part of the overall vision statement reads:

"The Whau will be safe and welcoming, linked together and with all that we need within 20 minutes by walking, cycling, bus or train. "

"We want the Whau River to be a waterway to be proud of; it will be clean and have local walking and cycling paths connecting our neighbourhoods from one side of the river to the other and re-establishing a new portage from one harbour to the other.

Open Space Network Plan

An Open Space Network Plan is currently being prepared for the Whau Local Board area. This plan sits under the Open Space Strategy, and will identify gaps in the Open Space Network in the Whau area, providing high level direction on open space needs and priorities. The Greenways plan will ultimately become a 'chapter' of the Open Space Network Plan.

1.7 Iwi engagement

The Whau area is of significance to both Te Kawerau a Maki and Ngati Whatua. Both recognise the Whau River portage to Green Bay as one of the two most important portages routes linking the Waitemata and Manukau Harbours.

Te Kawerau Iwi Tribal Authority has provided a letter of support for the Whau Neighbourhood Greenways Plan (refer Appendix A2) and outlined in general terms the importance of the Whau region for Te Kawerau a Maki, providing a description and map of some of their important sites and features.

The descriptions are outlined on the following page, while Figure 4 overleaf shows the plan prepared by Te Kawerau a Maki of some of these sites of significance. It is noted that this list is not detailed or comprehensive, and as construction of the greenways progresses site specific consultation with iwi will be undertaken.

Ngati Whatua were consulted on the Whau Neighbourhood Greenways Project in November 2013. Ngati Whatua advocate for an eco-sourced indigenous planting theme along the greenways, with an emphasis on plants that provide native bird food. These plants and birds are part of our heritage, and many of the plants and plant associations are found only in Auckland.

Ngati Whatua consider that marking, celebration and interpretation of cultural heritage is important, and has identified key places of interest as Te Whau Pa (in a strategic place to control waka traffic on the Whau Partage) and Kotuitanga (south of Ken Maunder Park), which is the farthest point to which a waka could be paddled before the boat needed to be portaged.



Figure 3. View looking up the Whau River

1.8 Te Kawerau a Maki Sites of Significance

Some of the major cultural sites and places within the Te Whau area are described below and marked on the map (approximate locations only). Sites are marked with black squares, creeks and rivers in italics and general areas in capitals. Other sites and korero are held within the iwi.

Orangihina

A settlement on the east side of Te Atatu Peninsula (also one of the names for Te Atatu Peninsula generally). Named after the princess Rangihina of Ngati Poataniwha (hapu of Te Kawerau) who married Te Au o Te Whenua of Te Kawerau a Maki.

Rangimatariki

The name for the lands at the northern tip of Rosebank Peninsula and the location of a major kainga. This area was known for gardening as it is one of the few locations in the Whau area with suitable productive soils for growing crops. The name relates to the viewshaft from Rangimatariki through the Waitemata Harbour and out to the eastern horizon in the outer Hauraki Gulf where the matariki constellation could be seen.

Motu Karaka (Rangimatariki)

The location of an ancient kainga at the end of Rosebank Peninsula. The site was marked by an ancient karaka grove. Some of the trees may still exist. The site is also associated with a nearby waka landing.

Te Kou

The small island on the northeast of Rosebank Peninsula known today as Traherne Island. The name derives from the fishing which took place here, and references a fish hook.

Motu Manawa

The extensive shell banks and mangroves to the north of Rosebank Peninsula known today as Pollen Island.

Te Pae Kawau

A settlement on a small headland on the western side of the Wai Te Whau mouth. There were many archaeological features which are now destroyed, and the settlement was possibly defended. Kawerau people still camped here occasionally in the mid 20th century when the land was still rural. The name roughly means 'shags perch'.

Te Wahapu

An ancient Kawerau name for the Whau River. Specifically spoken of in relation to the mouth of the river.

Te Rere

A waterfall site.

Kai araara

A small inlet on the western side of Wai Te Whau. The shoreline of the area was a seasonal camp site where travelli were caught.

Wairau

The large inlet near Kelston. Associated with fishing and netting.

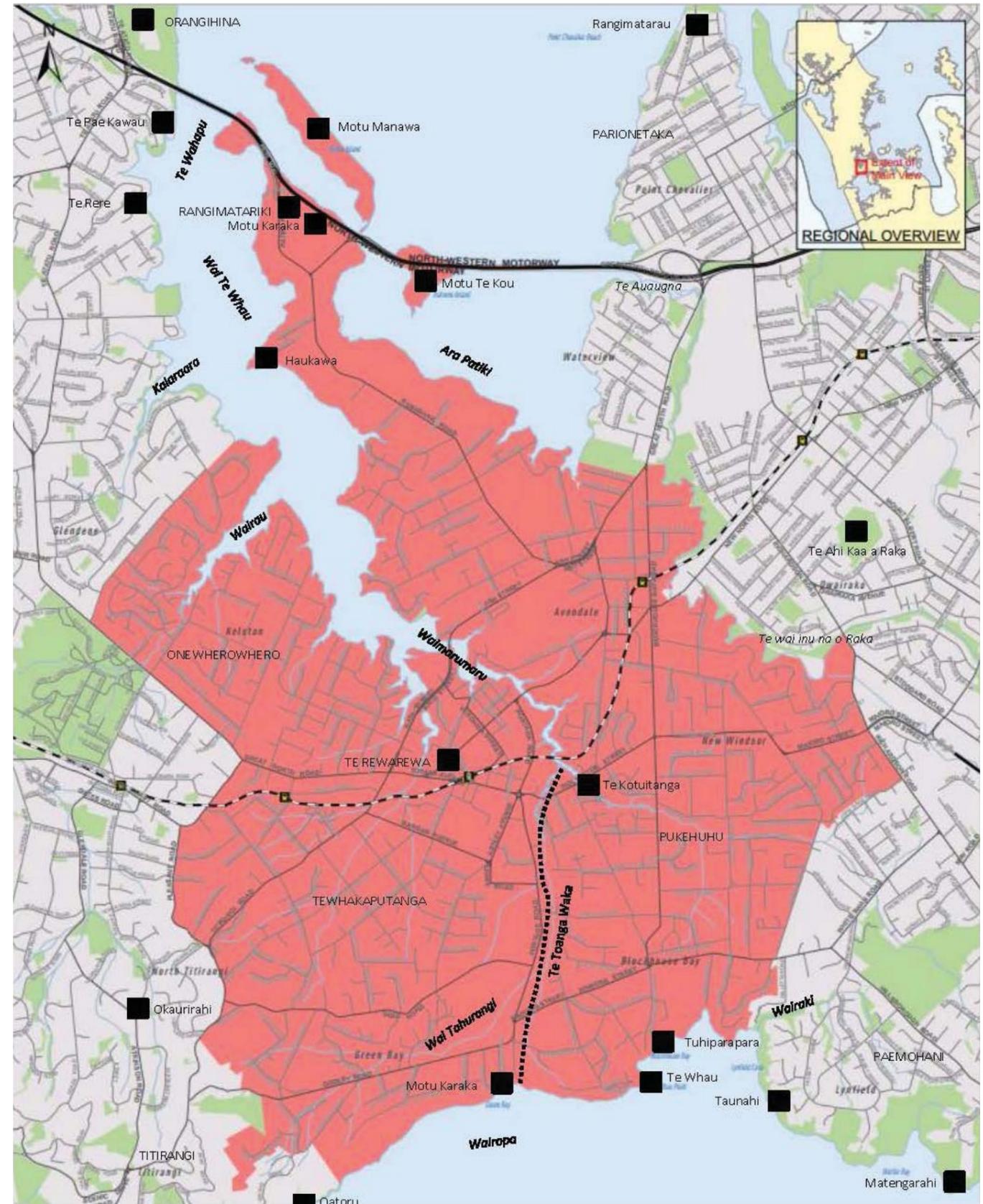


Figure 4. Te Kawerau a Maki Sites of Significance

Haukawa

A settlement located on the eastern side of Wai Te Whau (western side of Rosebank Peninsula) around the small headland at the end of Saunders Place where the West End Rowing Club is situated. The name refers to the blowing south-westerly winds which would have struck the exposed location during winter. The site may have been fortified in the past.

Onewherowhero

An old Kawerau name for the general area encompassing Kelston and Waikumete. Referring to the reddish clays that could be found in the area.

Te Rewarewa

The location of a kainga at the head of Wai Te Whau, roughly in the location of New Lynn. The name references the access to the river for fishing and transport by waka.

Waimarumarū

The sheltered inlet at the head of Wai Te Whau.

Te Kotuitanga

A place at the head of the Whau tidal creek where waka were built and prepared. One tradition tells of the building of a dove-tailed waka here (Kawenga-roimata) and the death of the man for whom it was being built as a result of a taua. The subsequent mourning offerings (roimata) prior to launch were incorporated into the name.

Pukehuhu

The general area of higher land east of the Whau River where trees were felled for the building of waka.

Te Toanga Waka

The traditional name of the Whau portage which ran along what is now Portage Road

Waitahurangi

The Avondale Stream which runs northeast from Titirangi, through Green Bay, to Avondale and to Wai Te Whau. The name is an ancient Kawerau name associated with the Tahurangi (patupaiarehe).

Motu Karaka

A kainga site and the southern end of the Whau portage at Green Bay beach. Named in reference to a sacred karaka grove.

Te Whau

The name of the pa site and kainga situated at Blockhouse Bay. The pa watched over the Whau portage. Te Whau came to be the general name for the wider Whau area. The name relates to various traditions associated with the Whau tree, including the use of its seeds as fishing floats.

Ara Patiki

The bay or inlet on the eastern side of Rosebank Peninsula. Named with reference to an old whakatauki regarding the movement of flounder which was caught here.

Parionetaka

Referring the 'the crumbling cliffs' on the western side of Pt Chevalier.

Okaurirahi

General area near Titirangi where giant kauri could be found.

Wairaki

A stream near Lynnfield that dried up. A small settlement was located adjacent to it.

Paemohani

The ridgeline/higher lands running east from around Lynnfield. This area was known as dense fern land.

Refer to Appendix A2 page 64 for further feedback on the Whau Neighbourhood Greenways Plan on behalf of Te Kawerau a Maki.



LEGEND:

Not to scale

- | | |
|---|-------------------------|
| — Hillary Trail | — State highway network |
| — Te Araroa Walkway (national walkway) | — Railway |
| — Network of walking and cycling trails | — Whau Local Board Area |
| ••• Te Whau Pathway | — State Highway |

Figure 5. Auckland wide context

1.9 Wider Context

The map at Figure 2 shows the Whau Local Board in its wider context within the Auckland Isthmus, nestled between the Manukau and Waitemata harbours. The area is bordered by the Henderson-Massey and Waitakere Ranges Local Board areas to the west, and the Albert-Eden and Puketapapa Local Board areas to the east.

Broader transport connections

Two motorway connections traverse the Whau Local Board area - State Highway 16 and State Highway 20. State Highway 16 runs east-west along a causeway near the northern boundary of the Whau in the Motu Manawa Marine Reserve, connecting to the northern tip of the Rosebank Peninsula. State Highway 20 is currently being extended from Mt Roskill along and under Te Auaunga/Oakley Creek at the east boundary of the Whau Local Board area to meet State Highway 16 at Waterview. A regional cycleway will be constructed in conjunction with this motorway development to follow approximately the same alignment.

The western rail connection runs through the Whau Local Board area with stations located in Fruitvale Road (Kelston), New Lynn and Avondale. This rail line has recently been upgraded to be double-tracked and electric trains have been introduced. Auckland Transport is planning to develop a cycleway along this rail corridor, with a financial contribution from the Local Board.

Broader walking connections

The Whau Local Board area has the potential to provide a greenways linkage between two major walking trails - the Te Araroa national walkway and the Hillary Trail. The proposed Te Araroa national walkway will ultimately become a continuous route that traverses the length of the country, and seeks to connect through the greater Auckland area between Northland and the Waikato.

Within the central isthmus of the Auckland region, Te Araroa follows the existing Coast to Coast Walkway from the city centre to Onehunga. The Hillary Trail is a 70km multi-day trail through native forest in the coastal Waitakere Ranges. It begins at the Arataki Visitor centre on Scenic Drive near Titirangi, which is immediately west of the Whau Local Board area. There is potential to connect the two major walking trails by developing a continuous coastal walkway along the Manukau Foreshore through the Puketapapa and Whau local board areas. The Puketapapa Local Board area is working towards the completion of the Manukau Foreshore walking connections in their area, and the Whau Local Board has also identified the Manukau Foreshore walk as a priority.

A 'coast to coast' trail linking the Waitemata and Manukau Harbours along the edge of the ancient Māori portage through the Whau River and overland to Green Bay, will also connect the Manukau foreshore walkway with both the north-west cycle highway and the trail proposed around the edges of the upper Waitemata Harbour to meet Te Araroa at Devonport.

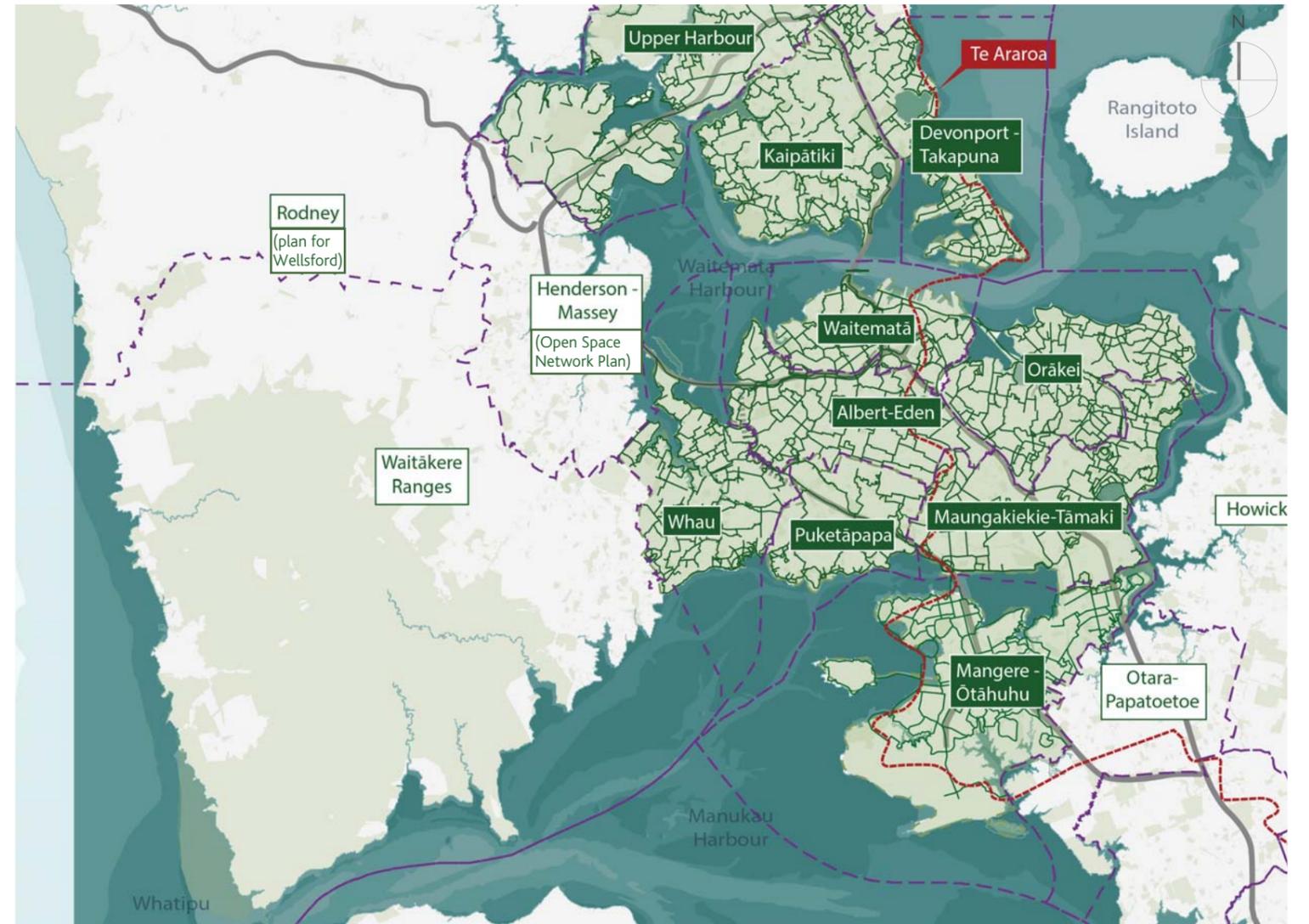
1.10 Links to adjoining Greenways

Where possible, the Greenways trails connect with greenways routes identified in the neighbouring local board areas. Thus, implementation of the Greenways Plan will better connect the Whau to the neighbouring Puketapapa, Albert-Eden and Henderson-Massey and Waitakere Ranges Greenways.

The adjoining map at Figure 6 shows other Greenways Plans that are either in draft form or have been adopted by local boards in the wider Auckland region, as at June 2015. It is noted that a Greenways Plan for Wellsford (Franklin Local Board) was adopted in 2015 and Greenway Plans for the Waitakere Ranges and Hibiscus and Bays Local Boards are due to commence soon. In addition, there is a draft Open Space Network Plan covering the neighbouring Henderson/Massey Local Board, and this plan identifies existing and potential greenways in the area.

Excellent walking and cycling facilities nearby include the Twin Streams shared walk/cycle path (Upper Waikumete Stream section) and the State Highway 16 and 20 cycleway/walkways. Auckland Transport's draft Auckland Cycling Network Plan identifies many more future cycling commuter routes through the area, including the proposed 'cycle highway' following the western railway corridor through New Lynn to Swanson.

The Whau Neighbourhood Greenways Plan builds on the existing walking, cycling and ecological networks across the Whau area by identifying other potential routes for safe and enjoyable localised walking and cycle paths to connect the suburbs of the Whau into local schools, shops, community facilities, public transport centres and parks.



Legend:

Not to scale

- Local Boards with a 'greenways plan' under development or adopted as of August 2014
- Local Boards - currently no 'greenways plan' as of August 2015
- Te Araroa Walkway (national walkway)
- Local Board Boundaries

Figure 6. Local Board Greenways Plans (either draft or adopted by the Local Board)

1.11 Whau Coastal Walkway Environmental Trust

The Whau Coastal Walkway Environmental Trust was launched in 2014, with the aim of constructing 'Te Whau pathway' - a 13km shared walkway and cycleway that will eventually link New Lynn to Te Atatu Peninsula along the western edge of the Whau River. A significant part of the pathway is within the Whau Local Board area. The Trust has wide community membership and operates in partnership with Auckland Council and the Whau and Henderson/ Massey Local Boards.

The project will be staged over five to eight years, with work progressing as funding allows. The proposed stages of the project within the Whau Local Board area are shown on the map.

The Trust is looking to fund construction works for the shared path, with aspects such as design, consultation, resource consenting and project management covered by the Local Board. Below are some conceptual pictures of Te Whau pathway.



Figure 7. Visualisation of Te Whau Pathway, Archibald Park to Lynwood Road



Figure 8. Visualisation of Te Whau Pathway, Harmel Reserve to Aronui Terrace

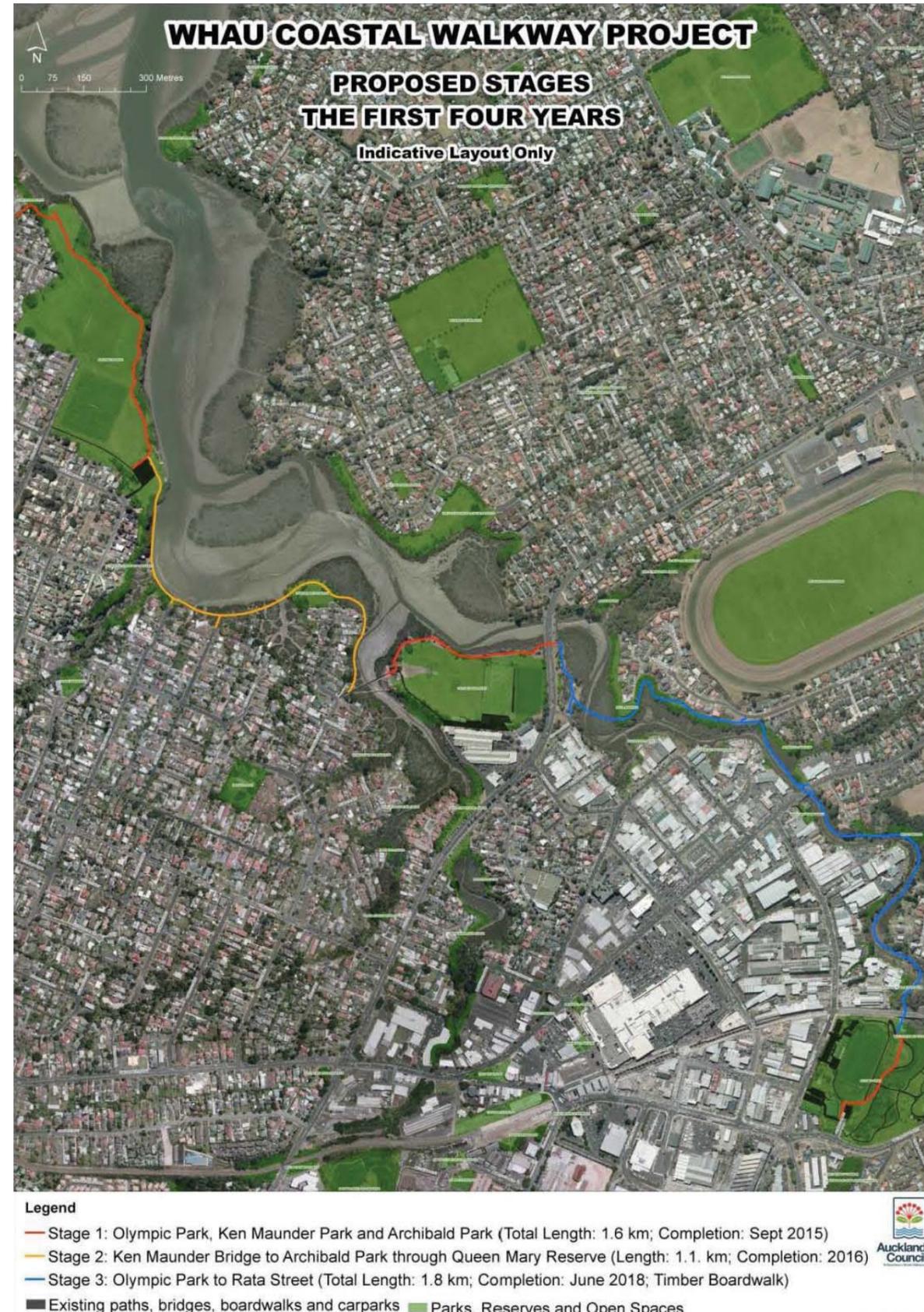


Figure 9. Whau Coastal Walkway Project

1.12 What the Greenways may look like

Neighbourhood greenways can take many forms. The pictures show what a greenway could look like in a variety of settings.

The appearance of the network will vary dependent on its location, for instance, a connection that runs through parkland may look and function quite differently to a connection adjacent to a road or in a built-up urban environment. The adjacent images show what the network could look like in a variety of settings, including:

- parks and reserves and connecting to bush tracks
- coastal areas or alongside streams / estuaries
- adjacent industrial land or residential properties
- connecting to busy urban town centres and/or the ACN's 'cycle metro' or 'connector' routes
- adjacent to a minor road and/or the ACN's 'feeder' routes

The surface treatment will vary depending on site specific aspects such as the location of the path, slope gradient and the existing character of an area.

The illustrations on pages 12-13 show a range of potential retrofits which could be carried out to create the 'on road' portions of the greenways network.



10	11	12
13	14	15
16	17	18

LEGEND:

Figure 10. Twins Streams Walk/ Cycleway, West Auckland, 2013.

Figure 11. Twins Streams Walk/ Cycleway, West Auckland, 2013.

Figure 12. Swales alongside road network, Totara Avenue, New Lynn, 2012.

Figure 13. Cyclelanes, Sydney, Australia, 2013.

Figure 14. On road cycling on a minor road, Sydney, Australia, 2013.

Figure 15. On-road cycling, local street, Vancouver, 2012.

Figure 16. Twins Streams Walk/ Cycleway, West Auckland, 2013.

Figure 17. Twins Streams Walk/ Cycleway, West Auckland, 2013.

Figure 18. Seating / swales, Totara Avenue, New Lynn, 2012.

1.13 Arterial street

The attached diagrams are draft scenarios for how the greenways **may** look in the road corridor of arterial roads (main roads).

Attributes:

- footpath next to property boundary
- designated off road 'one way' cycle lanes next to each side of the road
- planter beds and street trees between parking bays
- planting or swales/rain gardens separating cyclists and pedestrians (swale crossings / bridges required)
- separation of cyclists and opening car doors (1m 'safety strip')
- rain gardens/swales to filter and detain stormwater runoff from hard surfaces
- 'greenways' signage to highlight the network.



footpath / swale / one way cycle / 1m safety strip median / parking and planting / carriageway



footpath / swale / one way cycle / 1m raised safety strip / parking and planting / carriageway

These are visionary diagrams developed for discussion purposes only. Any specific project would be carefully planned with cost, parking, traffic flows and affected parties' needs taken into consideration - ideally these works would be phased with other planned upgrade works, and be delivered by Auckland Transport (AT). Refer to individual road 'Corridor Management plans' by AT.

1.14 Collector roads

The attached diagrams are draft scenarios for how the greenways may look in the road corridor on collector roads (secondary roads).

Attributes:

- designated 2.5-3m of footpath as shared path or;
- designated 2.5-3m of footpath with marked division for the pedestrian and cyclist or;
- designated off road 'one way' cyclelanes next to footpath, separated by kerb
- planter beds and street trees between parking bays
- separation of cyclists and opening car doors (1m 'safety strip' or planting bed)
- rain gardens/swales to filter and detain stormwater runoff from hard surfaces
- 'greenways' signage to highlight the network.
-



footpath and cyclelane (kerb as division) / 1m raised safety strip / parking and planting / carriageway



2.5-3m shared walkway/cycleway / 1m flush safety strip / parking and planting / carriageway / footpath



2.5-3m walkway/cycleway with marked division / planted safety strip / parking and planting / carriageway

These are visionary diagrams developed for discussion purposes only. Any specific project would be carefully planned with cost, parking, traffic flows and affected parties' needs taken into consideration - ideally these works would be phased with other planned upgrade works, and be delivered by Auckland Transport (A.T). Refer to individual road 'Corridor Management plans' by A.T.



Figure 19. View towards New Lynn, Olympic Park to the right. Auckland Council Stock Photo, 2012.



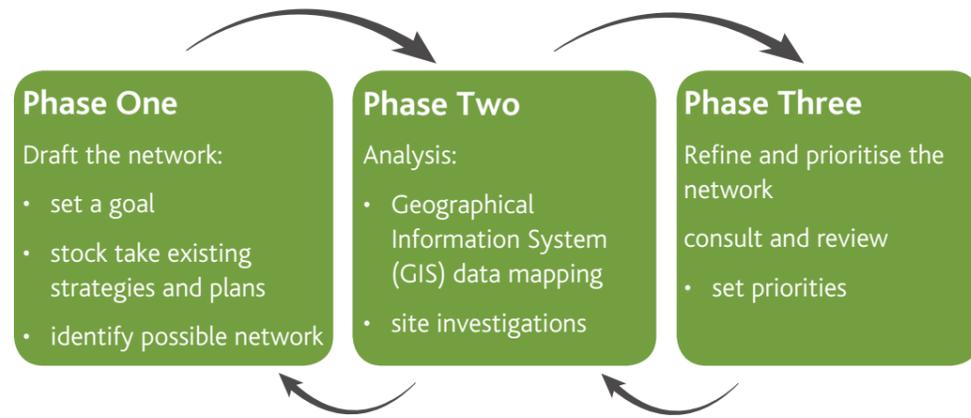
Figure 20. View over Avondale towards Rosebank Peninsula. Auckland Council Stock Photo, 2012.

2.0 Methodology and criteria

Whau Neighbourhood Greenways

2.1 The process

The Whau Neighbourhood Greenways Plan was developed via an iterative three-stage process, with feedback loops, as outlined below:



Phase one - draft network

As a first step, previous studies and planning documents relevant to the area were collected and reviewed. The Whau Local Board Plan was reviewed to gain an understanding of both the strategic vision of the community and also their planned projects. Next, a goal and objectives for the Whau Neighbourhood Greenways was discussed and agreed with the Whau Local Board and a 'working party' set up, which met regularly to review the plan as it developed.

A desktop study was then carried out to map a draft 'high-level' greenways network to provide walking and cycling connections between existing parks, open spaces, reserves and streets. Potential ecological improvements to be gained by linking and enhancing areas of existing vegetation and restoring the ecology of streams/rivers were considered. These desktop studies gave an understanding of the broad landscape patterns within the Whau Local Board area, and were used to guide phase two of the process, where the network was 'ground-truthed'.

This 'desktop' network plan was taken to the working party for review prior to undertaking site investigations, to ensure that it was aligned with the Whau Local Board's aspirations for the project.

During this phase, discussions were held with Auckland Transport and other Council officers to inform them of the project, and to understand linked policies or projects that may affect the Greenways Plan.

Phase two - analysis

The draft neighbourhood greenways plan was assessed or 'ground truthed' on site. This process involved an analysis of the existing site conditions - including topography, vegetation cover, existing asset condition, application of CPTED (Crime Prevention through Environmental Design) principles, location of utility services and the layout of roading corridors.

All potential connections were sighted and evaluated and a photo-record taken. Some connections were found to be inappropriate (where there wasn't enough space for a connection, the connection was unsafe, the terrain was too steep, or a better alternative was found) and the draft network was updated accordingly.

Following this ground-truthing, the route was overlaid with other GIS (Geographical Information System) data to ensure that the network made appropriate connections to all existing facilities, such as schools, town centres, community facilities and transport nodes.

Phase three - refine the network and set priorities

Following the analysis phase, the Whau Local Board, and Council officers from other relevant parts of council including Parks, Auckland Transport and Area Planning reviewed the proposed Greenways routes in detail. A wider audience of stakeholders were engaged on the draft plans, including:

- Iwi - Ngati Whatua Orakei and Te Kawerau a Maki
- Recreational and Stakeholder groups; Avondale Walking Group, Cycle Action Auckland
- Committees and 'Friends of' and advisory groups; Whau River Catchment Trust, EcoMatters
- Local residents

The draft greenways maps were then uploaded to the Whau Local Board website where the public could view and provide feedback. Around the same time, a public event was held at the New Lynn Night Markets to generate public interest in the Whau Neighbourhood Greenways and gain further feedback on the draft routes.

The Whau Neighbourhood Greenways Plan was adopted in draft by the Local Board in April 2014.

A public meeting was held in July 2014 to undertake a final review of the proposed greenways network and discuss priorities. The feedback from this meeting was discussed at a number of Local Board workshops in 2014.

The Whau Local Board set their priorities for the greenways network at meetings in April 2014, November 2014 and April 2015. The priorities are listed in Section 4 'Future development'.



Figure 21. Community consultation at the New Lynn Community Centre, August 2013.

2.2 Criteria to assist with prioritising projects

The Whau Local Board has developed a set of criteria to help evaluate, compare and prioritize greenways projects. These are outlined below.

Greenway Benefits:

Active Recreation/ encouraging healthy lifestyles and social connections

- Would the trail accommodate more than one mode of transport (eg walking, cycling)?
- Would the trail provide access to a number of additional active recreational experiences (eg playgrounds, kayak hubs, swimming)?
- Would the trail provide public access to/ along streams or the coast/harbours?

Safe, active transport and spatial connectivity

- Would the trail connect with destinations that people need to access such as shops, places of work, schools, parks, libraries, public transport or community centres?
- Would the trail complete, join up or extend other existing or proposed greenway routes to create a significantly longer or more useful trail?
- Would the trail create or help to create/ complete a loop track?
- If not a loop trail, would the trail be accessible by public transport for the return trip?
- Would the trail connect a significant population catchment into an existing or proposed greenway or Auckland Transport cycleway (feeder route)
- Would the trail provide a safer route for school pupils and/or enable pedestrians/ cyclists to bypass busy roads?

Landscape and Ecological benefits

- Does the trail follow an attractive route with opportunity to showcase elements of Auckland's distinctive landscapes?
- Would construction of the trail improve the opportunity to address weediness or rubbish issues, trap for animal pests and significantly restore or enhance habitat along degraded areas?
- Could a new ecological linkage between existing bush areas be created alongside the trail?
- Would the trail provide an opportunity to showcase and raise awareness of New Zealand's unique flora and fauna, local ecological issues and/or local restoration projects?

History, Heritage and Māori identity

- Would the trail provide opportunities to showcase (through interpretation and/or artworks) elements of Māori cultural heritage or Māori identity?
- Would the trail provide opportunity to showcase elements of the area's non-Māori history?

Practical considerations

Community Support

- Is the project delivered as a partnership with a community organisation or is there demonstrable stakeholder and local support for the project or a supportive community group working in the area?

Risk level

- Is there private property or easement acquisition required?
- Are there encroachments along the route?

Opportunity

- Is this a rare opportunity to secure public access for this greenway project?

Funding issues

- If prioritised now, can the project leverage another project by an adjoining Local Board or another part of the Council or its Council Controlled Operations?
- Is the project leveraging funding from external sources (such as a community trust)?
- The extent to which the project will serve new population growth, and the size of the catchment of future population the project will benefit NB: the use of development contribution funds requires the percentage of the project that can be attributed to growth to be established. (Enter a percentage)
- The greenways project is in or near a Spatial Priority Area or a Special Housing Area.

Ballpark Cost

- Low cost (less than \$100,000)
- Medium Cost (\$101,000 - \$500,000)
- High cost (\$500,000+)



Figure 22. Community consultation at New Lynn Community Centre, July 2014



Figure 23. View over Avondale Racecourse towards the North West. Auckland Council Stock Photo, 2012.

3.0 Greenways Mapping

Whau Neighbourhood Greenways



Figure 24: View over Avondale looking towards Blockhouse Bay and Green Bay. Auckland Council Stock Photo, 2012.



3.1 Whau Neighbourhood Greenways Network

Introduction

The draft Whau Neighbourhood Greenways Network as shown on this map has been divided into ten maps over the following pages to allow the map information to be shown at a larger scale.

The information on the maps includes the network of Greenways that have existing walking and/or cycling provision but that could be improved and/or promoted as Greenways (bold dark green lines or blue if coastal) as well as the proposed Greenways where there is currently no walking or cycling provision (dashed dark green lines or blue if coastal). The overall Greenways Network is an aspirational vision, and will be reviewed on a regular basis as routes are developed, and as other related projects are completed.

Also shown on the maps is the draft Auckland Cycling Network (ACN). It is worth noting that the Greenways do not often overlap with the ACN's 'metro' or 'connector' routes, as these are predominantly on busy roads, where opportunities for the amenity, recreational and ecological improvements envisaged as part of the draft Greenways Network are very difficult to achieve. Greenways overlap with the ACN's 'feeder' routes much more closely, and are included in Auckland Transport's definition of a feeder route. These routes are usually on low traffic volume, 'minor' streets or in open spaces.

It is also of note that the ACN is currently in draft, and a process to better align and add to the 'feeder' routes as shown on the various Local Board's Greenways Plans is currently underway. It is intended that both the ACN and the Greenways Plans are 'live' documents, which will be updated at regular intervals. The draft ACN shown on these maps was current as of December 2013.

The draft Greenways Network maps also show key destinations for the Greenways to connect to. These include schools, parks, train stations, community facilities and ecological areas.

Map 1 - Rosebank (connections from Te Atatu)



LEGEND:

<ul style="list-style-type: none"> Schools inc. public and private Parks, reserves and open spaces Ecological areas Local board boundary 	<ul style="list-style-type: none"> Roads Streams and rivers Railway and railway stations Other Greenways Networks* 	<p>Community facilities</p> <ul style="list-style-type: none"> L Library C Community centre Ch Community hall † Place of worship 	<p>Draft ACN</p> <ul style="list-style-type: none"> Marae Boat ramp Existing pathways 	<p>Greenway connections</p> <ul style="list-style-type: none"> Feeder routes Connector routes Metro routes Route utilising existing path / road network Proposed new route Other connections Te Whau Pathway
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Scale: 1:10,000 @ A3

map 1	map 2
map 3	map 4
map 5	map 6
map 7	map 8
map 9	map 10

Map 2 - Rosebank (connections from Waterview and Point Chevalier)



LEGEND:

- Schools inc. public and private
- Parks, reserves and open spaces
- Ecological areas
- Local board boundary

- Roads
- Streams and rivers
- Railway and railway stations
- Other Greenways Networks*

Community facilities

- L Library
- C Community centre
- Ch Community hall
- † Place of worship
- M Marae
- B Boat ramp
- Existing pathways

Draft ACN

- Feeders routes
- Connector routes
- Metro routes

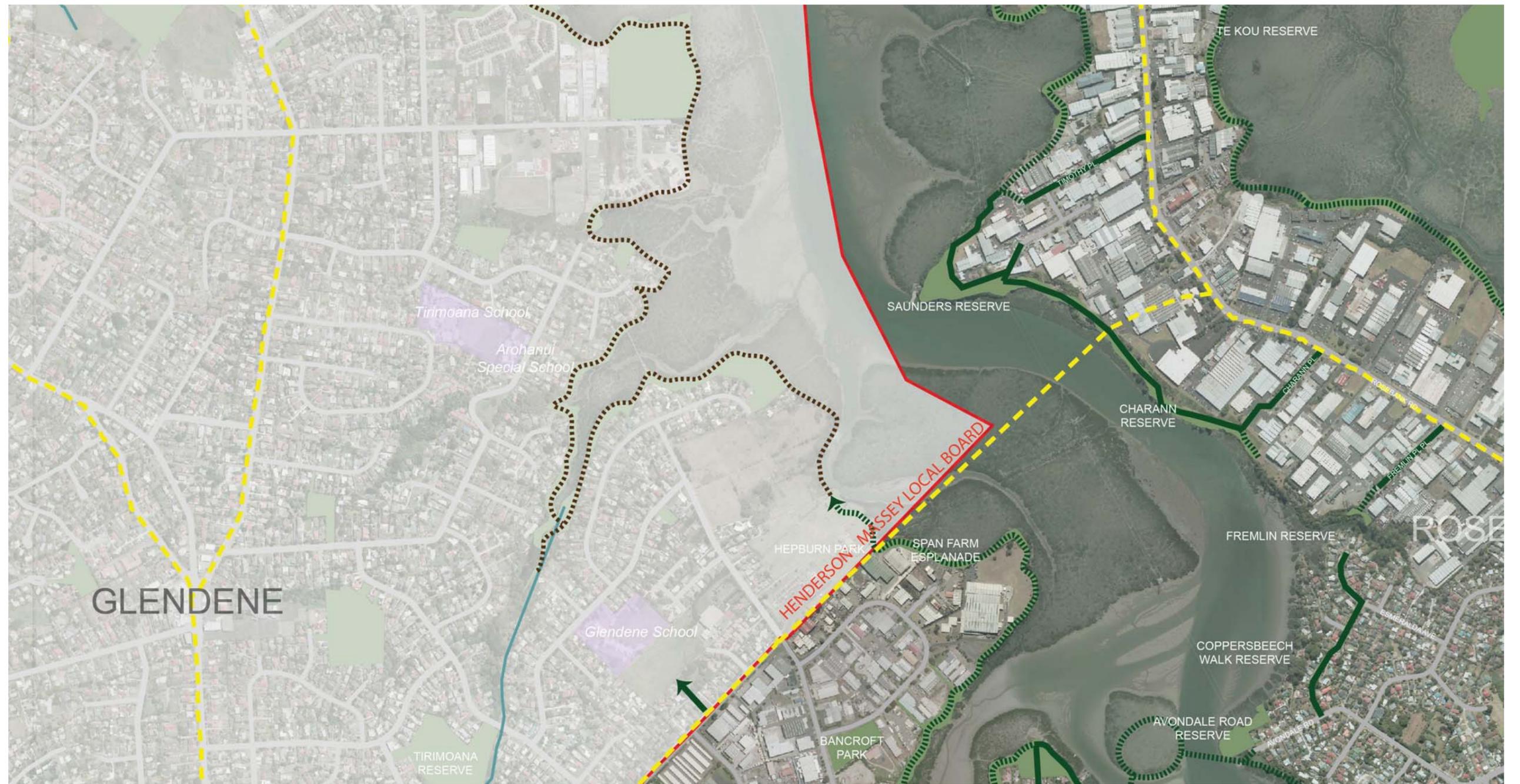
Greenway connections

- Route utilising existing path / road network
- Proposed new route

Scale: 1:10,000 @ A3

- map 1
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- map 10

Map 3 - Rosebank / Kelston (connections to Glendene)



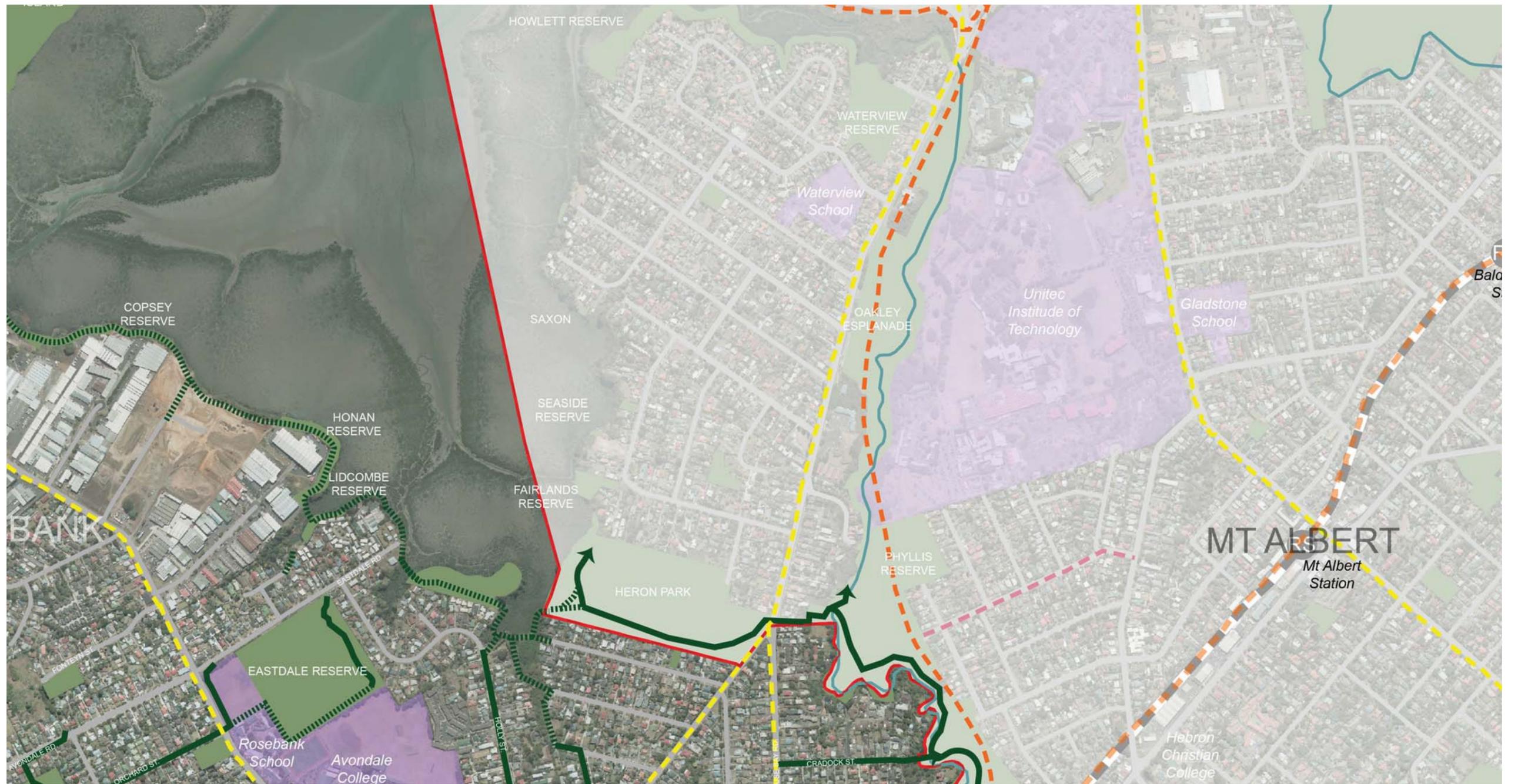
LEGEND:

Schools inc. public and private	Roads	Library	Marae	Feeder routes	Route utilising existing path / road network
Parks, reserves and open spaces	Streams and rivers	Community centre	Boat ramp	Connector routes	Proposed new route
Ecological areas	Railway and railway stations	Community hall	Existing pathways	Metro routes	Other connections
Local board boundary	Other Greenways Networks*	Place of worship		Te Whau Pathway	

Scale: 1:10,000 @ A3

map 1	map 2
map 3	map 4
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map 7	map 8
map 9	map 10

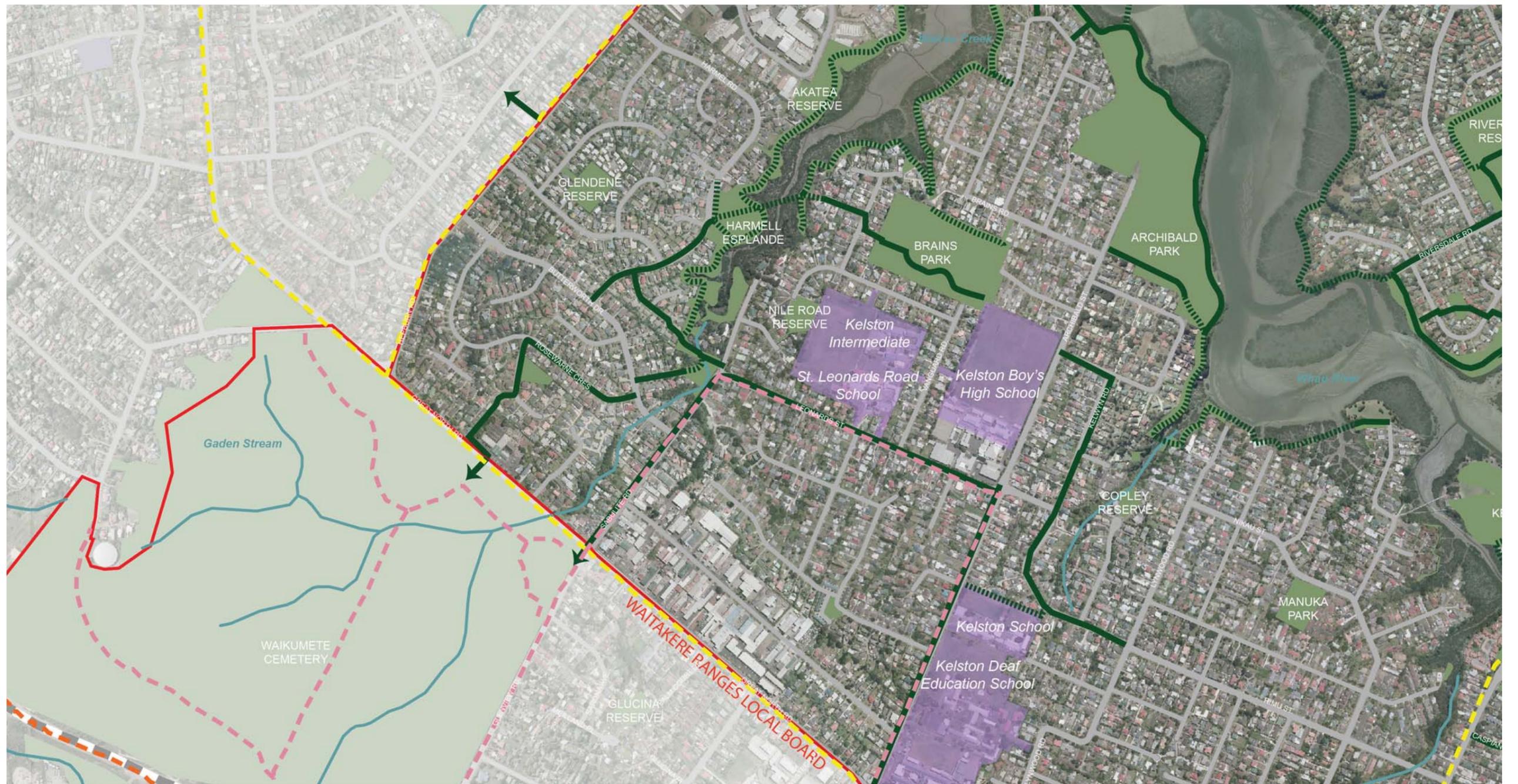
Map 4 - Rosebank / Avondale (connections to Waterview and Mt Albert)



LEGEND:

<ul style="list-style-type: none"> Schools inc. public and private Parks, reserves and open spaces Ecological areas Local board boundary 	<ul style="list-style-type: none"> Roads Streams and rivers Railway and railway stations Other Greenways Networks* 	<p>Community facilities</p> <ul style="list-style-type: none"> L Library C Community centre Ch Community hall † Place of worship 	<p>Draft ACN</p> <ul style="list-style-type: none"> Feeders routes Connector routes Metro routes 	<p>Greenway connections</p> <ul style="list-style-type: none"> Route utilising existing path / road network Proposed new route 	<p>Scale: 1:10,000 @ A3</p> <table border="0"> <tr> <td>map 1</td> <td>map 2</td> </tr> <tr> <td>map 3</td> <td>map 4</td> </tr> <tr> <td>map 5</td> <td>map 6</td> </tr> <tr> <td>map 7</td> <td>map 8</td> </tr> <tr> <td>map 9</td> <td>map 10</td> </tr> </table>	map 1	map 2	map 3	map 4	map 5	map 6	map 7	map 8	map 9	map 10
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Map 5 - Kelston (connections to Glen Eden)



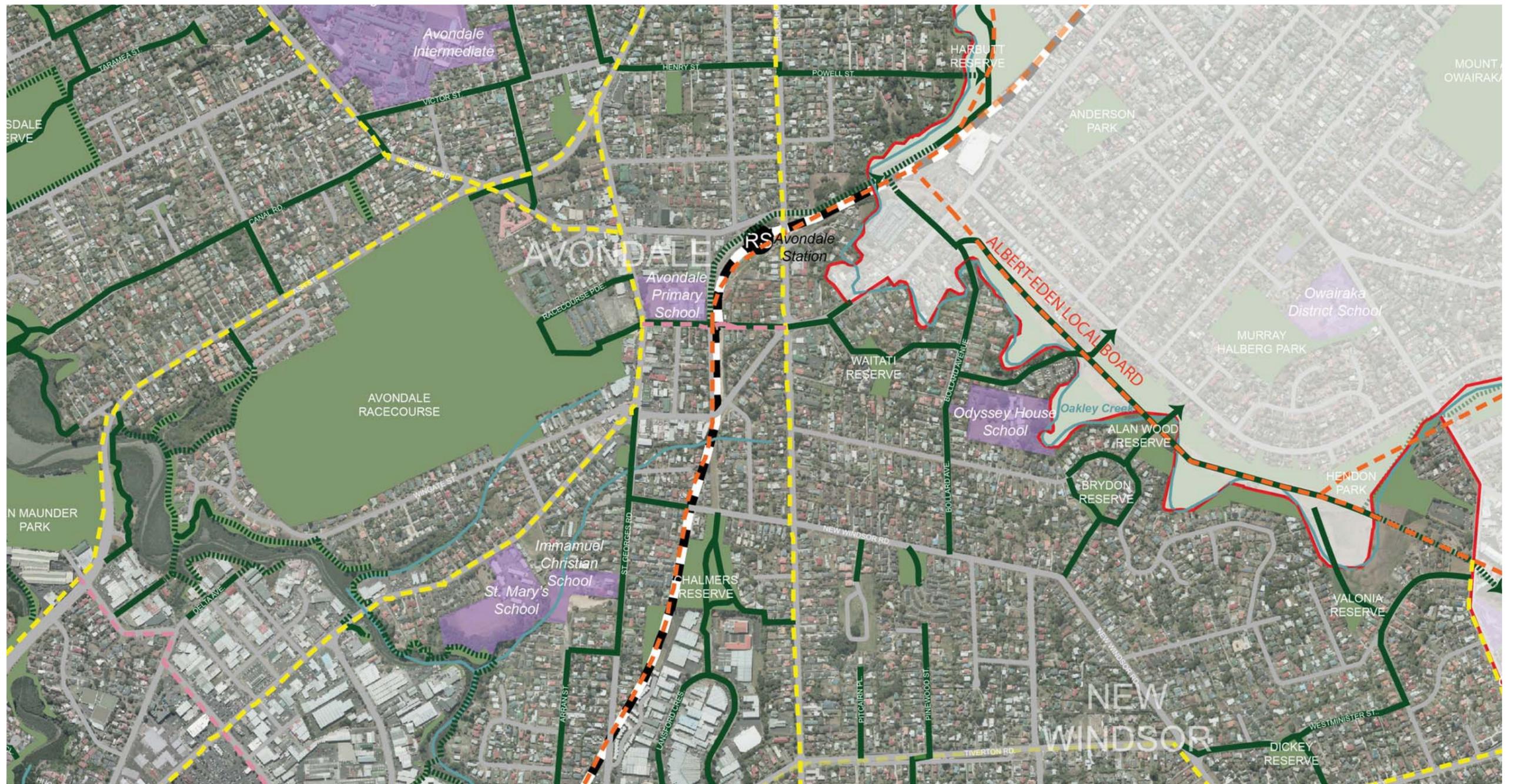
LEGEND:

Schools inc. public and private	Roads	Library	Marae	Feeder routes	Route utilising existing path / road network
Parks, reserves and open spaces	Streams and rivers	Community centre	Boat ramp	Connector routes	Proposed new route
Ecological areas	Railway and railway stations	Community hall	Place of worship	Metro routes	
Local board boundary	Other Greenways Networks*	Existing pathways			

Scale: 1:10,000 @ A3

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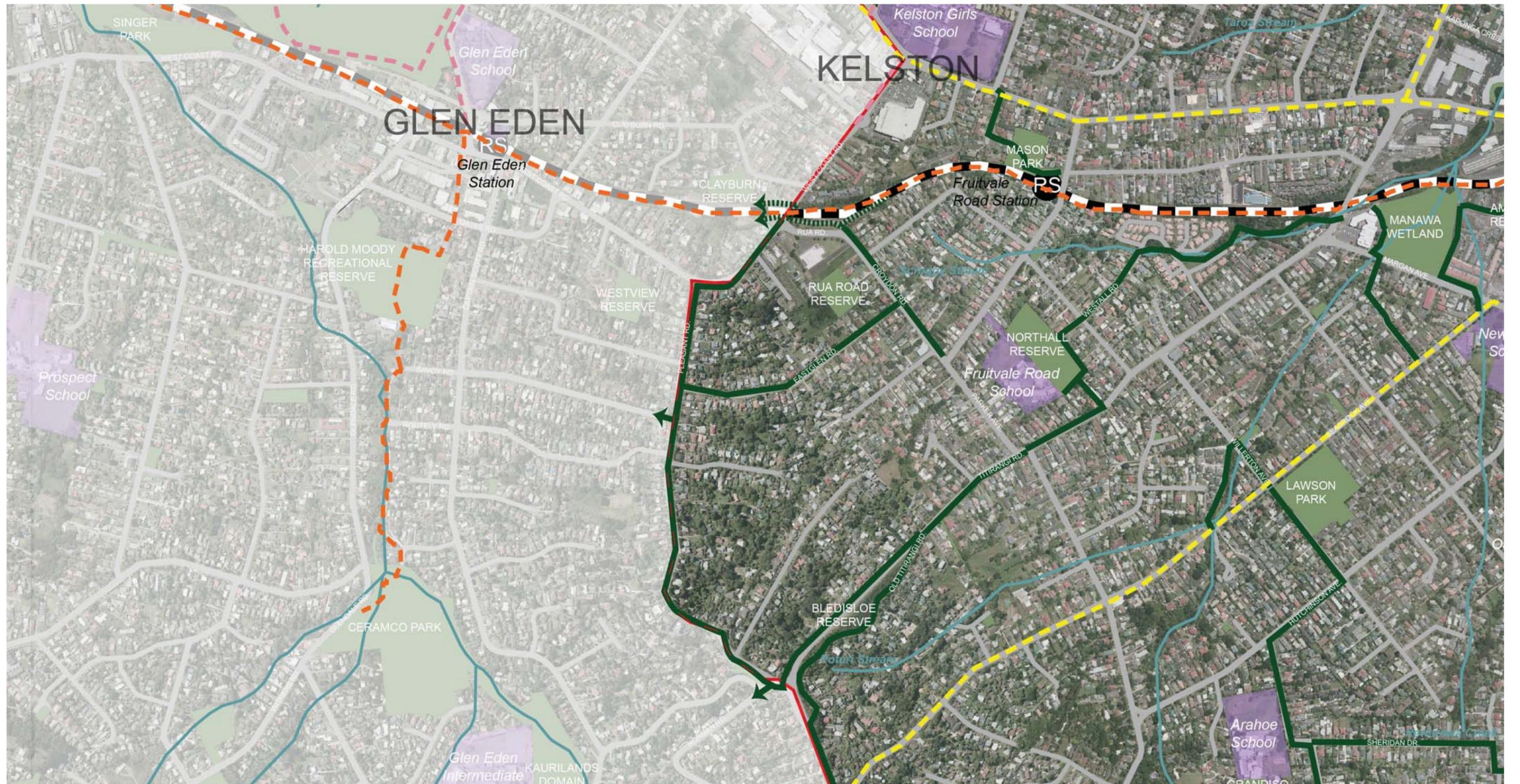
Map 6 - Avondale / New Windsor (connecting to Mt Albert and Owairaka)



LEGEND:

<ul style="list-style-type: none"> Schools inc. public and private Parks, reserves and open spaces Ecological areas Local board boundary 	<ul style="list-style-type: none"> Roads Streams and rivers Railway and railway stations Other Greenways Networks* 	<p>Community facilities</p> <ul style="list-style-type: none"> L Library C Community centre Ch Community hall † Place of worship 	<p>Draft ACN</p> <ul style="list-style-type: none"> M Marae B Boat ramp Existing pathways 	<ul style="list-style-type: none"> Feeders routes Connector routes Metro routes 	<p>Greenway connections</p> <ul style="list-style-type: none"> Route utilising existing path / road network Proposed new route 	<p>Scale: 1:10,000 @ A3</p> <table border="1" style="border-collapse: collapse; text-align: center;"> <tr> <td>map 1</td> <td>map 2</td> </tr> <tr> <td>map 3</td> <td>map 4</td> </tr> <tr> <td>map 5</td> <td style="background-color: #d3d3d3;">map 6</td> </tr> <tr> <td>map 7</td> <td>map 8</td> </tr> <tr> <td>map 9</td> <td>map 10</td> </tr> </table>	map 1	map 2	map 3	map 4	map 5	map 6	map 7	map 8	map 9	map 10
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Map 7 - Kelston / West Lynn (connecting to Glen Eden, Konini and Titirangi)



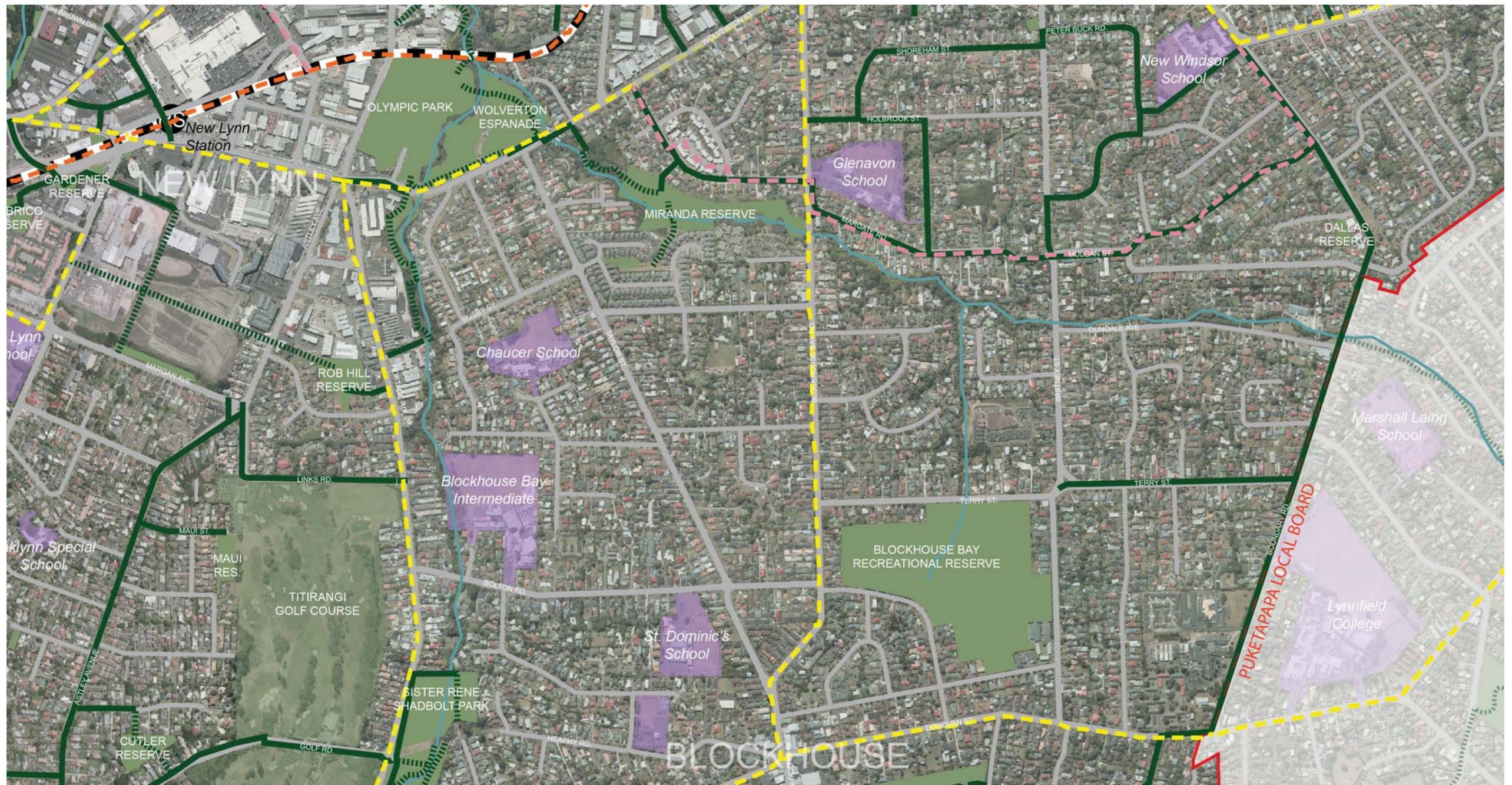
LEGEND:

Schools inc. public and private	Roads	Library	Marae	Feeder routes	Route utilising existing path / road network
Parks, reserves and open spaces	Streams and rivers	Community centre	Boat ramp	Connector routes	Proposed new route
Ecological areas	Railway and railway stations	Community hall	Existing pathways	Metro routes	
Local board boundary	Other Greenways Networks*	Place of worship			

Scale: 1:10,000 @ A3

map 1	map 2
map 3	map 4
map 5	map 6
map 7	map 8
map 9	map 10

Map 8 - New Lynn / Blockhouse Bay (connecting to New Windsor)



LEGEND:

Schools inc. public and private	Roads	Library	Marae
Parks, reserves and open spaces	Streams and rivers	Community centre	Boat ramp
Ecological areas	Railway and railway stations	Community hall	Existing pathways
Local board boundary	Other Greenways Networks*	Place of worship	

Community facilities

Draft ACN

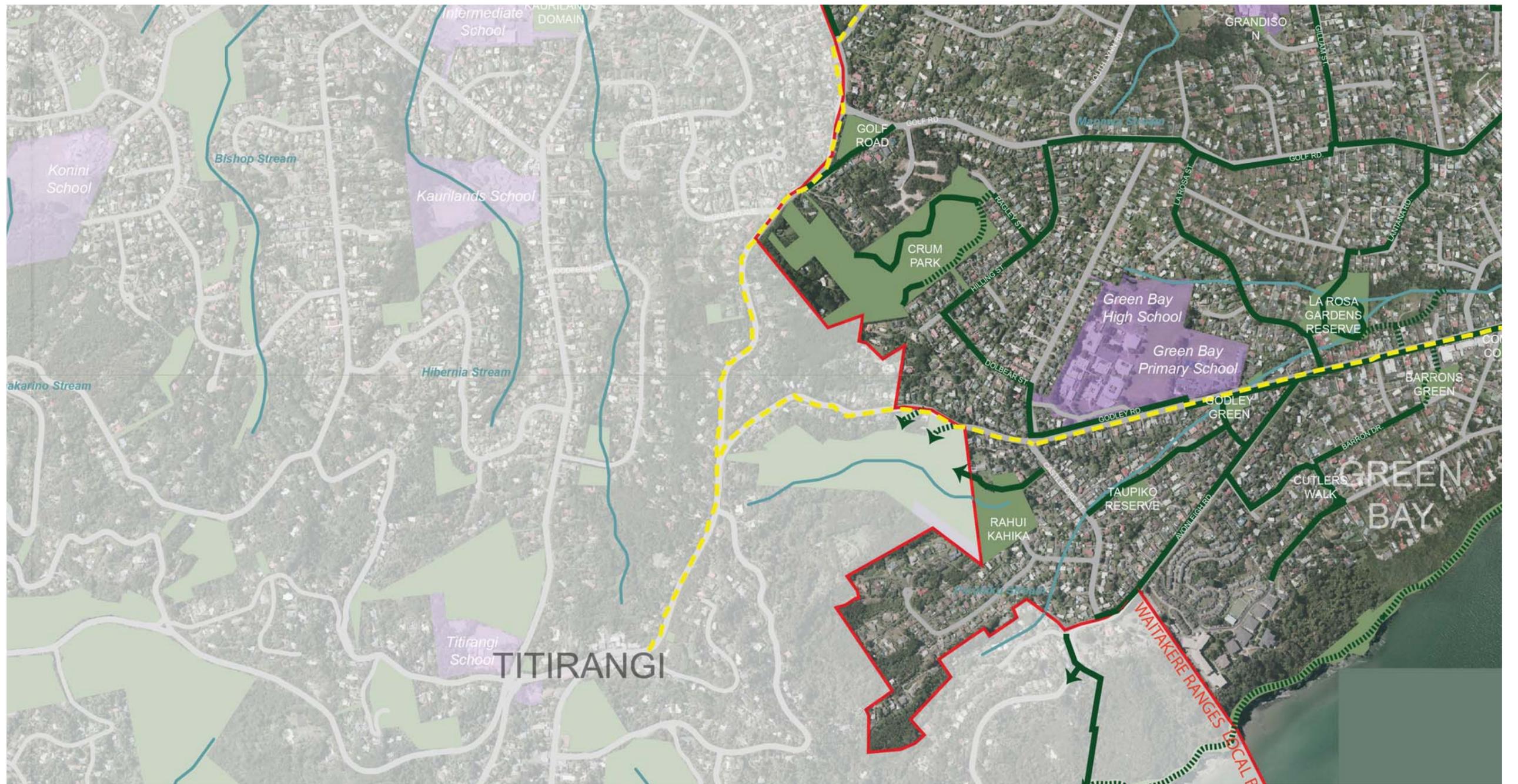
Greenway connections

Feeders routes	Route utilising existing path / road network
Connector routes	Proposed new route
Metro routes	

Scale: 1:10,000 @ A3

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map 5	map 6
map 7	map 8
map 9	map 10

Map 9 - Green Bay (connecting to Konini and Titirangi Village)



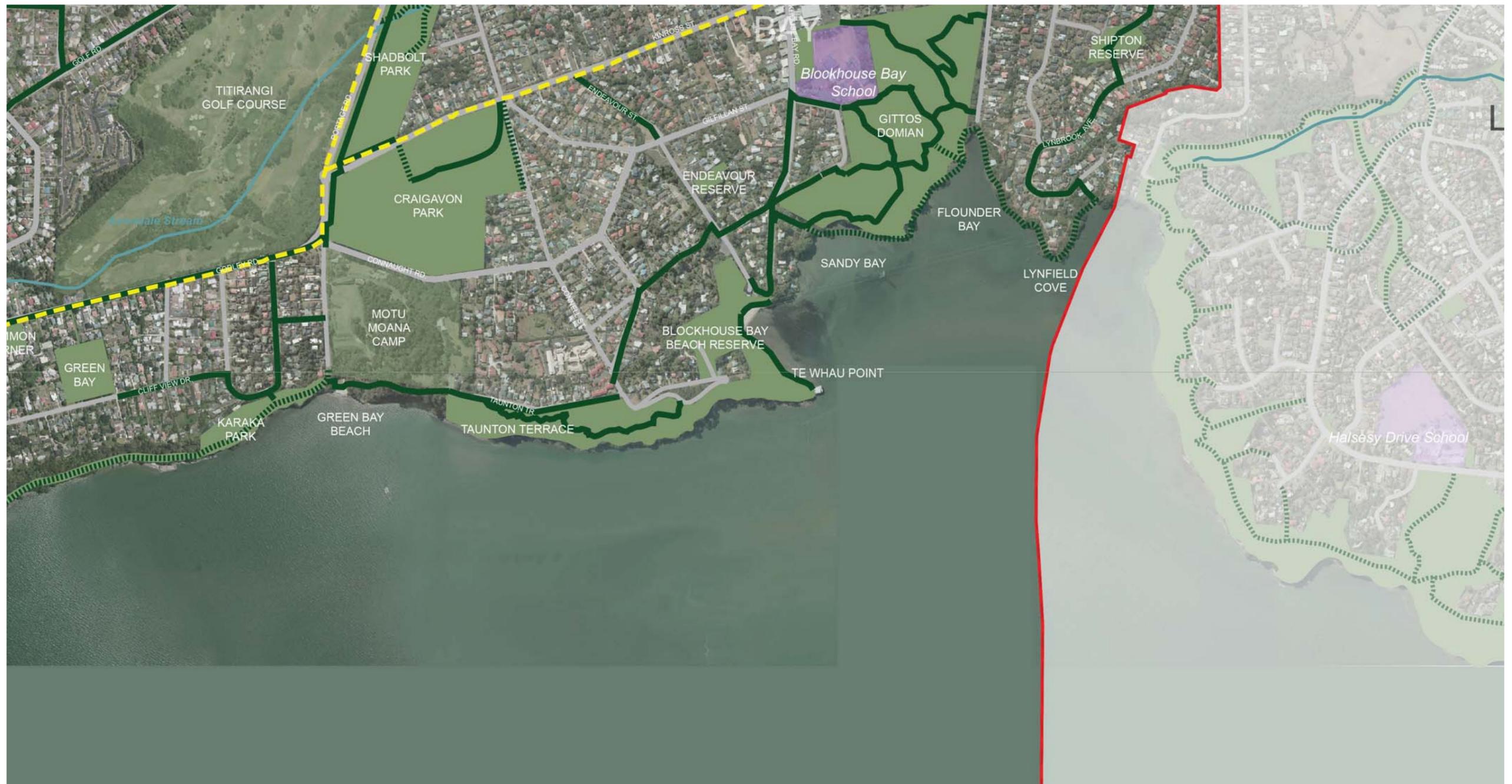
LEGEND:

Schools inc. public and private	Roads	Library	Marae	Feeder routes	Route utilising existing path / road network
Parks, reserves and open spaces	Streams and rivers	Community centre	Boat ramp	Connector routes	Proposed new route
Ecological areas	Railway and railway stations	Community hall	Existing pathways	Metro routes	
Local board boundary	Other Greenways Networks*	Place of worship			

Scale: 1:10,000 @ A3

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map 7	map 8
map 9	map 10

Map 10 - Green Bay (connecting to Lynfield)



LEGEND:

<ul style="list-style-type: none"> Schools inc. public and private Parks, reserves and open spaces Ecological areas Local board boundary 	<ul style="list-style-type: none"> Roads Streams and rivers Railway and railway stations Other Greenways Networks* 	<p>Community facilities</p> <ul style="list-style-type: none"> L Library C Community centre Ch Community hall † Place of worship 	<p>Draft ACN</p> <ul style="list-style-type: none"> Marae Boat ramp 	<p>Greenway connections</p> <ul style="list-style-type: none"> Feeder routes Connector routes Metro routes Route utilising existing path / road network Proposed new route
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Figure 25. View over Great North Road, Avondale. Auckland Council Stock Photo, 2012.

4.0 Future development

Whau Neighbourhood Greenways

4.1 Future development

The Whau Neighbourhood Greenways Plan will be implemented over time to achieve (in part) the outcomes envisaged in the Whau Local Board Plan. Implementation of the Greenways Plan will include the upgrade of existing walking and cycling connections (both on and off-road), as well as the creation of new connections within open space land, through designated areas, and/or via property easements.

Successful implementation of the plan requires co-ordination and commitment from the Whau Local Board, Auckland Council, Auckland Transport, as well as partners such as the Whau Coastal Walkway Environmental Trust and key related public/utility organisations such as the NZ Transport Authority, KiwiRail, Watercare, Transpower and Vector.

The following section gives an overview over the future development and implementation of the Whau Greenways Plan over the next 10 years, including best practice for implementation, stakeholder involvement and funding availability.

Best practice for implementation

Successful implementation of the Greenways Plan relies on a co-ordinated approach between Auckland Council's Parks Sports and Recreation, Stormwater and Community and Social Policy departments, as well as Auckland Transport, external organisations and community groups. Future detailed planning will take into consideration best practice guidelines, which include:

- Walking and Cycling Code of Practice (Auckland Transport, Draft)
- Stormwater Code of Practice (Stormwater Team, Draft)
- Parkland Design Guidelines (Community and Social Policy/Parks Sport and Recreation)

Related 'best practice' documents such as the NZ Transport Authority's 'Bridging the Gap – Urban Design Guidelines (Draft)', DoC's 'Caring for Archaeological Sites' report, and the Ministry of Justice's 'National Guidelines for Crime Prevention through Environmental Design (CPTED) in New Zealand' will also be taken into account as designs develop, in addition to all relevant Unitary Plan controls and area-specific policies.



Figure 26. Clark Street roadside planting, New Lynn. Auckland Council Stock Photo, 2013.



Figure 27. Twin Stream walkway / cycleway in Waitakere Ranges Local Board area. Auckland Council Stock Photo, 2013.

4.2 Stakeholder involvement and funding

Ongoing community engagement, stakeholder collaboration and partnerships, such as the partnership of the Local Board and the Whau Coastal Walkway Environmental Trust, are key to the successful implementation of the Whau Neighbourhood Greenways. Apart from the Trust, other likely stakeholders, include:

- Neighbouring Local Board areas (Waitakere Ranges, Henderson-Massey, Puketapapa and Albert-Eden)
- Iwi, including Ngāti Whātua and Te Kawerau a Maki
- Cycle Action Auckland
- Disability advocate groups, such as YES Disability
- Operators of community facilities, including schools
- Ministry of Education
- Department of Conservation
- Housing New Zealand
- Local residents and business associations
- Forest and Bird
- EcoMatters
- Whau River Catchment Trust
- The Greenways Project Inc.
- Avondale Community Gardeners
- Avondale Walking Group

Grass-roots community involvement is very important to ensure the ongoing success of the Greenways plan. Local knowledge-sharing and volunteering are needed to provide community ownership, care and responsibility. Community involvement could take the form of planting/weed clearance days, 'adopt a stream/street' groups, fund-raising, lobbying and artistic input.

Some funding has already been allocated for Greenways in the Whau Local Board budget. Other funding avenues include Council's sports and local park development capital investment programme greenways fund, Auckland Transport's walk/cycleway funding and external funders such as NZTA's regional cycleways fund.



Figure 28. Community planting at La Rosa Gardens Stream Daylighting, Auckland Council Stock Photo, 2013.



Figure 29. Whau Neighbourhood Greenways consultation. Auckland Council Stock Photo, 2013.

4.3 Priority projects

Of all the potential greenways projects within the Whau Local Board area, those listed below have been identified during 2014 and 2015 as priorities by the Whau Local Board and the Whau Coastal Walkway Environmental Trust. It is noted that these priority projects are in no particular order and priorities may be subject to change, particularly following Local Board elections every three years.

Motu Manawa Greenway

Stage 1:

- Holly Street to Heron Park

Stage 2:

- Holly Street to Eastdale Road

Stage 3:

- East Coast of Rosebank Peninsula

Te Whau Pathway

Te Whau Pathway is a shared walk/cycle path following the west bank of the Whau River from the Waitemata Harbour (in the Henderson/Massey Local Board area) to Olympic Park in New Lynn, and thence overland, loosely following the ancient Maori portage route to Green Bay in the Manukau Harbour. To achieve stages 1 to 4, the Local Board is working in partnership with the Whau Coastal Walkway Environmental Trust.

Stage 1:

- Archibald Park shared path
- Ken Maunder Park shared path
- Olympic Park shared path

Stage 2:

- Archibald Park to Ken Maunder Park

Stages 3 and 4:

- Ken Maunder Park to Olympic Park
- Cobham Reserve to Harmel Reserve

Stage 5:

- Olympic Park/Wolverton Street to McWhirter Place

Stage 6:

- McWhirter Place to Green Bay via Sister Rene Shadbolt Park and Craigavon Park Manukau Foreshore Walkway
- Lynfield Cove to Wood Bay (Note, construction will need to be staged)

Other

- Riversdale Reserve Perimeter
- Miranda Reserve connections
- McWhirter Place to Busby Street shared walk/cycle bridge
- Archibald to Avondale West shared walk/cycle bridge
- Cliff View Drive to Godley Road
- La Rosa Gardens Reserve to Godley Road



Figure 30. Visualisation of the Archibald Park to Avondale West bridge by Isthmus.



Figure 31. Visualisation of Te Whau Pathway - Aronui Terrace to Cobham Reserve, by Isthmus.

5.0 References

Whau Neighbourhood Greenways

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Image References

Cover page

Auckland Council Stock Photo (2012). *Aerial photo looking over Avondale Racecourse towards Rosebank Peninsula, Auckland.*

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Extent of the Whau Local Board area.

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Auckland Council Design Team (2012). *View looking up the Whau River.*

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Auckland wide context.

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Visualisation of Te Whau Pathway, Archibald Park to Lynwood Road.

Figure 8.

Visualisation of Te Whau Pathway, Harmel Reserve to Aronui Terrace.

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Whau Coastal Walkway Project (2015). *Whau Coastal Walkway Project.*

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Auckland Council Design Team (2012). *Twin Streams Walk / Cycleway, West Auckland.*

Figure 11.

Auckland Council Design Team (2012). *Twin Streams Walk / Cycleway, West Auckland.*

Figure 12.

Auckland Council Design Team (2012). *Swales alongside road network, Totara Avenue, New Lynn, West Auckland.*

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Auckland Council Design Team (2012). *Cyclelanes, Sydney, Australia.*

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Auckland Council Design Team (2012). *On road cycling on a minor road, Sydney, Australia.*

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- Figure 26. Auckland Council Stock Photo (2013). *Clark Street roadside planting, New Lynn.* Figure 43. Environmental Services. City of Portland. Green Streets in Portland. (n.d) *Planted verges, swales, Portland.* Retrieved deom URL: <http://www.portlandonline.com/bes/index.cfm?a=209685&c=45379>
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- Figure 28. Auckland Council Stock Photo (2013). *Community planting at La Rosa Gardens Stream Daylighting.*
- Figure 29. Auckland Council Stock Photo (2013). *Whau Neighbourhood Greenways consultation.*

- Figure 45. Environmental Services. City of Portland. Green Streets in Portland. (n.d) *Swales and footbridges, Portland.*
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- Figure 50. Tram in shared space streetscape. (Artists Impression) Auckland. (n.d) *Waterfront Auckland.*
- Page 75
- Figure 51. Waterfront Auckland. (Artists Impression) Auckland. (n.d) *Waterfront Auckland. Green Park, Reading.*
- Figure 52. *Green Park Reading.* (n.d)
Green Park Reading. Green Park. Retrieved from URL
http://www.greenpark.co.uk/pdf/pdf/GP_OVERVIEW_BROCHURE.pdf



Figure 32. Looking towards New Lynn from Green Bay. Auckland Council Stock Photo, 2012.



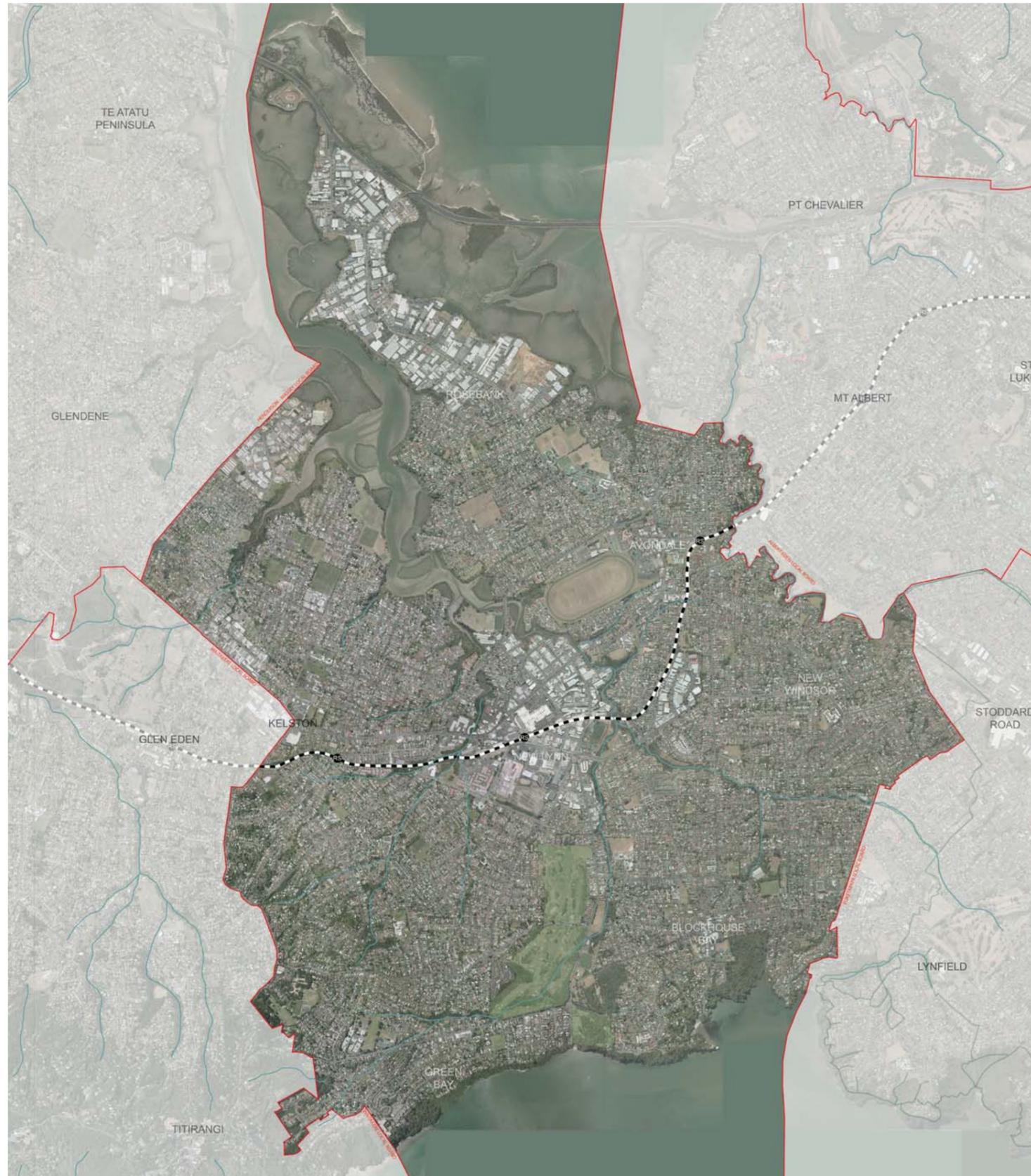
Figure 33. View over Avondale Racecourse towards the south east. Auckland Council Stock Photo, 2012.

6.0 Appendices

Whau Neighbourhood Greenways

A1. Analysis maps

Whau Neighbourhood Greenways



Aerial

This aerial photograph shows the broad landscape patterns of the Whau Local Board area within its surrounding context. The area is nestled between two harbours - the Waitemata to the north and the Manukau to the south, which were historically connected by the Portage route that largely followed the Whau river. To the east, the Whau Local Board area is partly bound by Te Auaunga/Oakley Creek. The Rosebank Peninsula extends like an arm reaching north into the Waitemata Harbour. At the northern tip of this peninsula are two islands - Pollen and Traherne, which lie within the Department of Conservation managed Motu Manawa Marine Reserve.

There are a number of significant open space areas visible on this aerial including the Waikumete Cemetery to the west (in the Waitakere Ranges Local Board area), and the privately owned Avondale Racecourse and the Titirangi Golf Course. A number of centres are included in this area, including New Lynn, Avondale, Blockhouse Bay, Glen Eden and Kelston. The area also includes large industrial spaces on the Rosebank peninsula, around New Lynn and in the vicinity of Kelston along Great North Road and Hepburn Road.

To summarise, the Whau and Glen Eden landscape can be categorised by four distinct patterns showing the landuse:

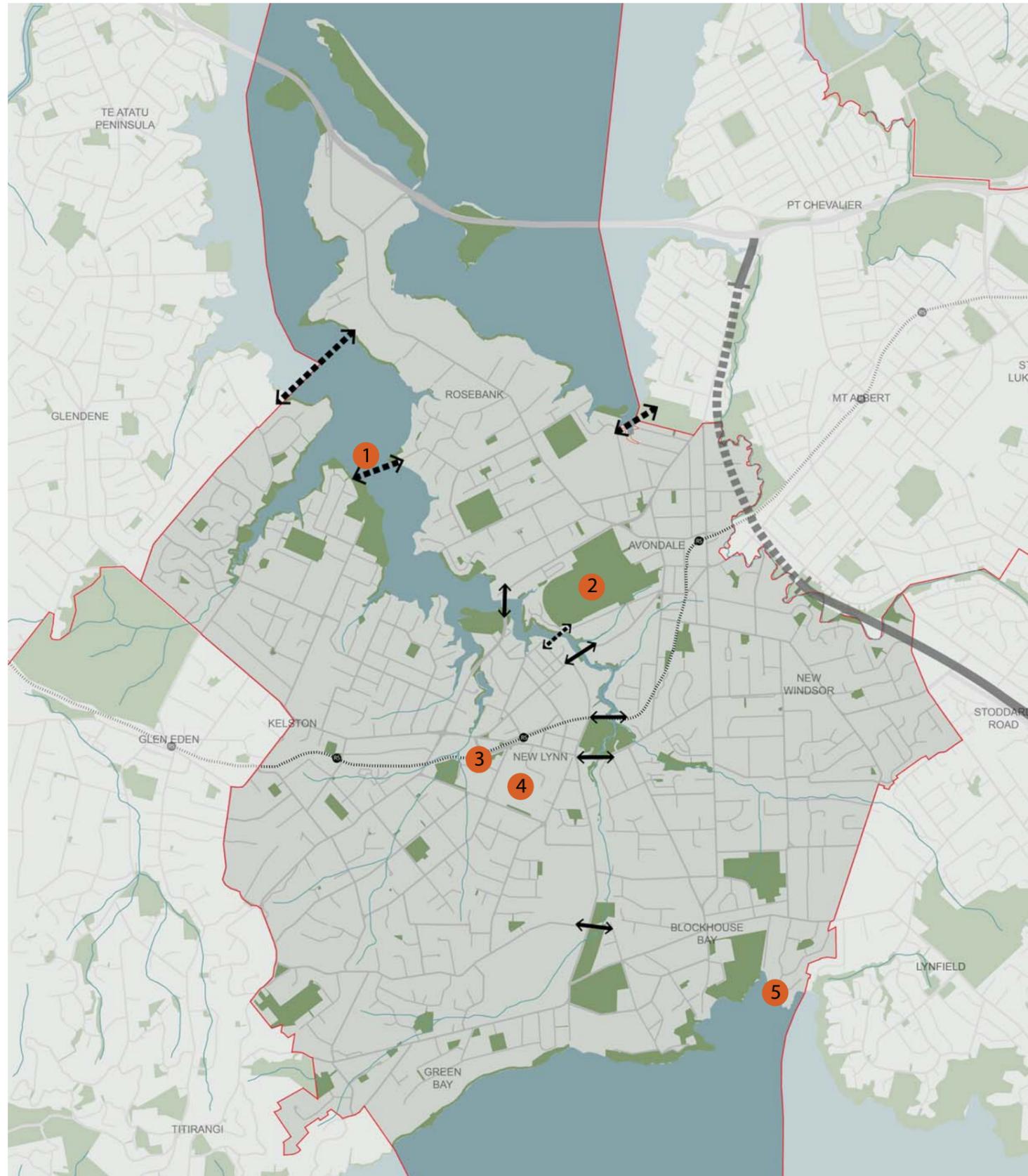
- Industrial commercial
- Residential neighbourhoods
- Parks, reserves and public open spaces
- Transport corridors; including motorways and railways

The Whau connects to four other local board areas by land:

- Albert - Eden Local Board (to the east)
- Puketapapa (to the east)
- Waitakere Ranges (to the west)
- Henderson - Massey (to the west)

LEGEND:

- Whau Local Board Boundary
- Streams / rivers
- Railway and railway stations



Future projects

This map was created using the New Lynn Plan 2010 - 2030 and the draft Avondale Town Centre Action Plan.

The map shows a number of key future and existing connections for the Whau Local Board area, ranging from pedestrian/cycle only connections through to potential vehicle connections (the upper Whau crossing) and the motorway project underway (the State Highway 20 Waterview Connection). Infrastructure projects of this latter scale, in particular, are hinged on transport and rely on Auckland Transport (AT) and New Zealand Transport Authority (NZTA) for input or delivery. The SH20 Waterview Connection will include an extension of the SH20 Regional Cycleway, that will connect Waterview to Mount Roskill.

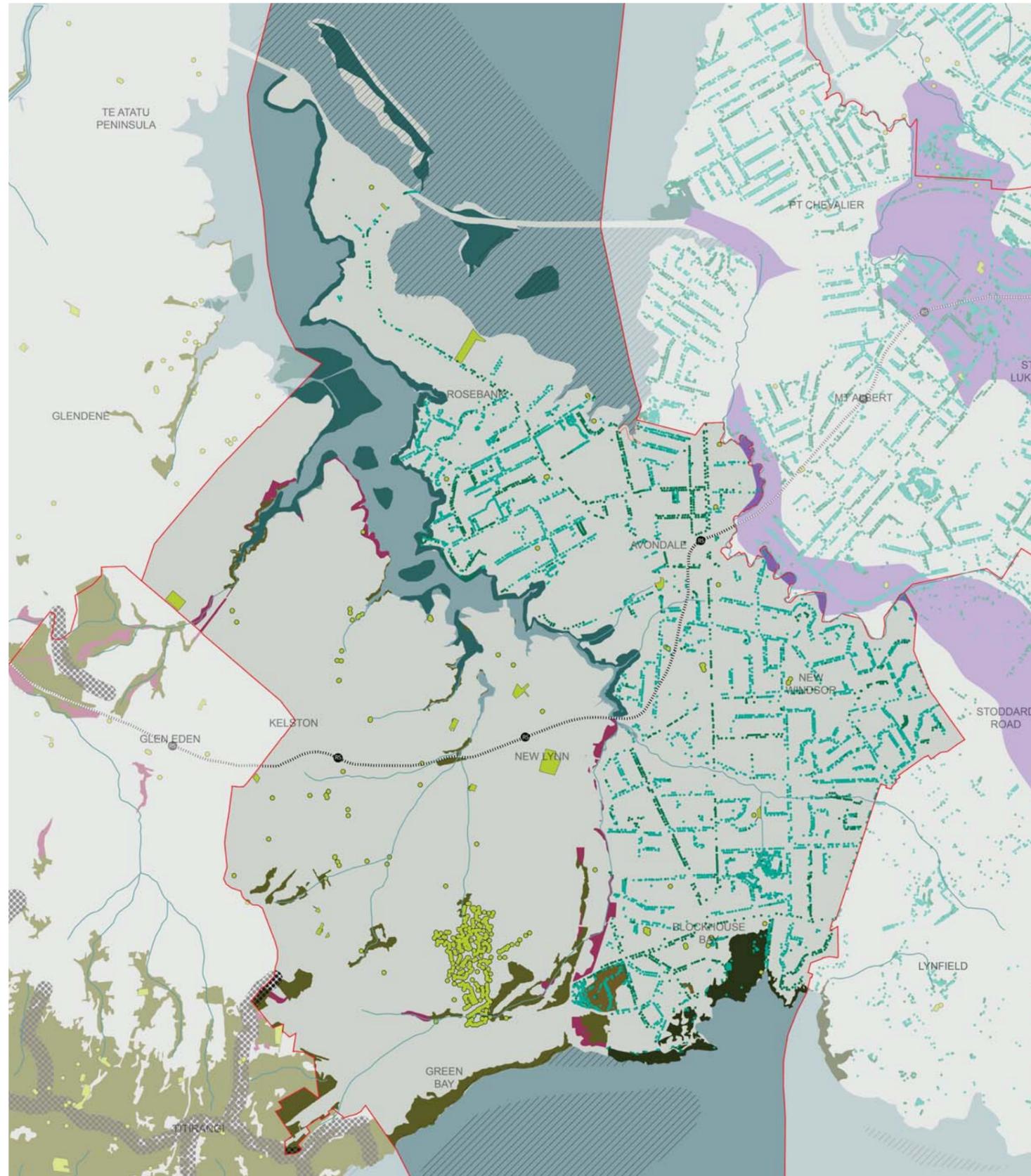
There are other initiatives driven by the New Lynn Urban Plan, such as the future Crown Lynn development, that will include opportunities for new connections that could offer a safe and enjoyable experience for the pedestrian and cyclist. The draft Avondale Town Centre Action Plan also seeks to improve pedestrian and cycling infrastructure to ensure that future development in this centre is done in a way that supports walking and cycling.

LEGEND:

- Whau Local Board Boundary
- Streams / rivers
- Railway and railway stations
- Parks and reserve land
- Road network
- Current key connection (NLP)
- Future connection (NLP)
- SH20 Waterview Connection

- 1 Archibald Park to Avondale West (Te Whau Pathway)
- 2 Avondale Town Centre Action Plan
- 3 New Lynn Urban Plan
- 4 Crown Lynn Development
- 5 Extension of the Manukau Foreshore walkway

* NLP - New Lynn Plan



Natural environment

This map was produced using information from the Land Cover Database (LCDB3, 2001/2), the Natural Heritage Fund mapping (NHF) and the Tree Location layer from the Auckland Council Asset Management Information System (AMIS, 2008).

In general terms, tree cover predominantly flanks the road corridor, and intensifies within the parks and reserves. The AMIS database provides information about specific locations of street trees and their origin (native vs exotic). It is noted that street tree information is only available from the former Auckland City Council database. Most of street tree planting in this area is exotic, while some more recent native street tree planting also exists. Waikumete Cemetery, Titirangi Golf Course, Craigavon Park and the Manukau Foreshore offer the largest areas of existing tree cover.

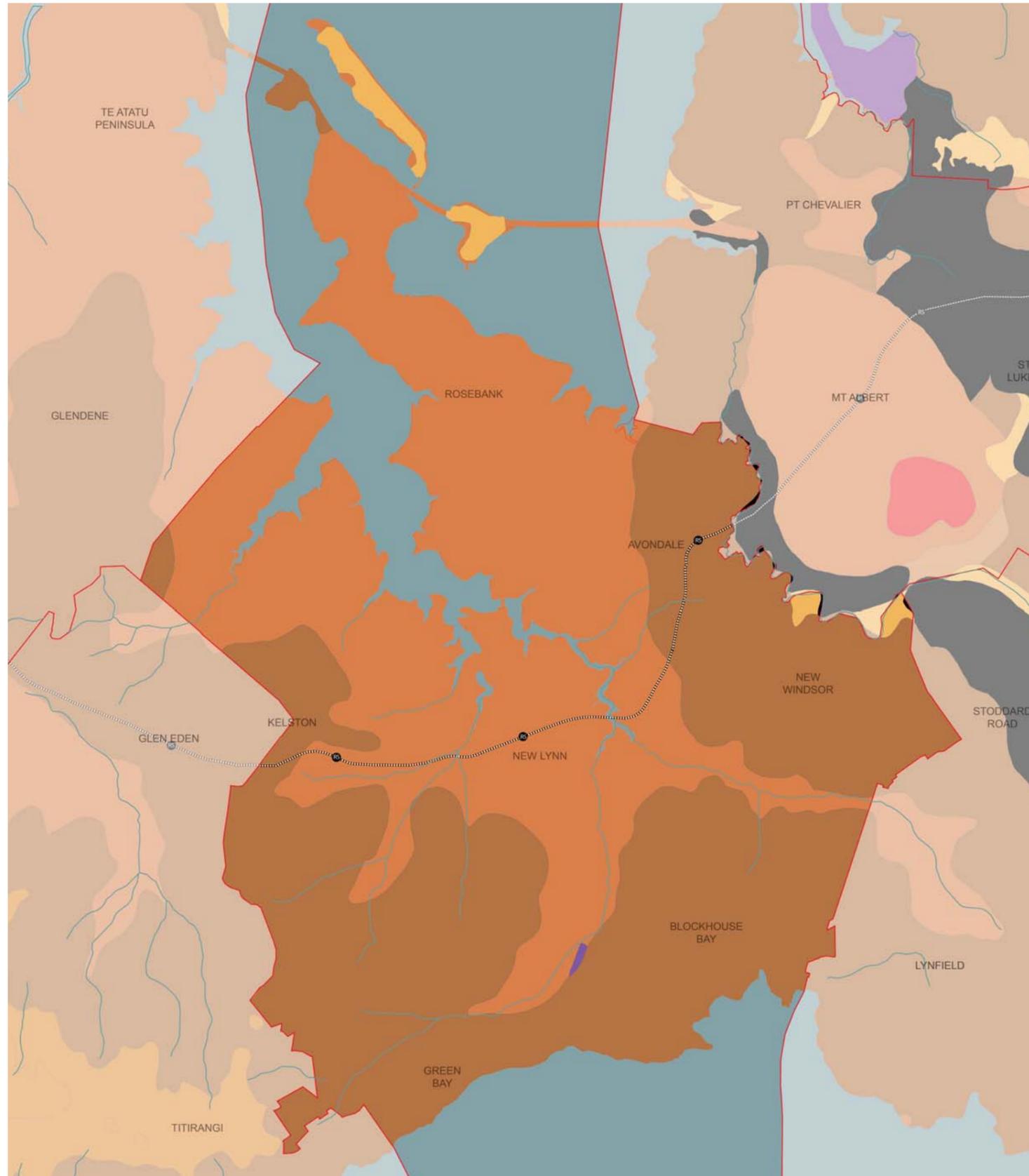
The Motu Manawa Marine Reserve protects approximately 500 hectares of the inner reaches of the Waitemata Harbour. It includes the intertidal mudflats, tidal channels, mangrove swamp, saltmarsh, and shellbanks surrounding Pollen and Traherne Islands. Having Greenways around the perimeter of the marine reserve, along the west edge of the Rosebank Peninsula, would provide the public with views of this unique natural environment and its inhabitants, allowing opportunity for educational initiatives. The marine reserve is a sensitive environment managed by the Department of Conservation (DoC). Engagement with DoC and other organisations, such as Forest and Bird, is advocated to ensure that Greenways are designed to be as minimally disruptive of the reserve's ecology and biodiversity as possible, while promoting mutual benefits.

For amenity, pedestrian/cyclist safety and ecological purposes, the proposed Greenways running through areas with little vegetation cover would benefit from a significant investment in planting.

LEGEND:

- | | |
|----------------------------------|---------------------------------|
| Whau Local Board Boundary | Native street trees (AC) |
| Streams / rivers | Exotic street trees (AC) |
| Railway and railway stations | Subterranean basalt fields (AC) |
| Parks and reserve land | Brackish wetland (AC) |
| Conservation areas | Scrubland (AC) |
| Sensitive ridge buffer | Forest coastal (AC) |
| Ecological areas | |
| Ecological linkage opportunities | |
| Natural areas | |

*AC - Auckland Council



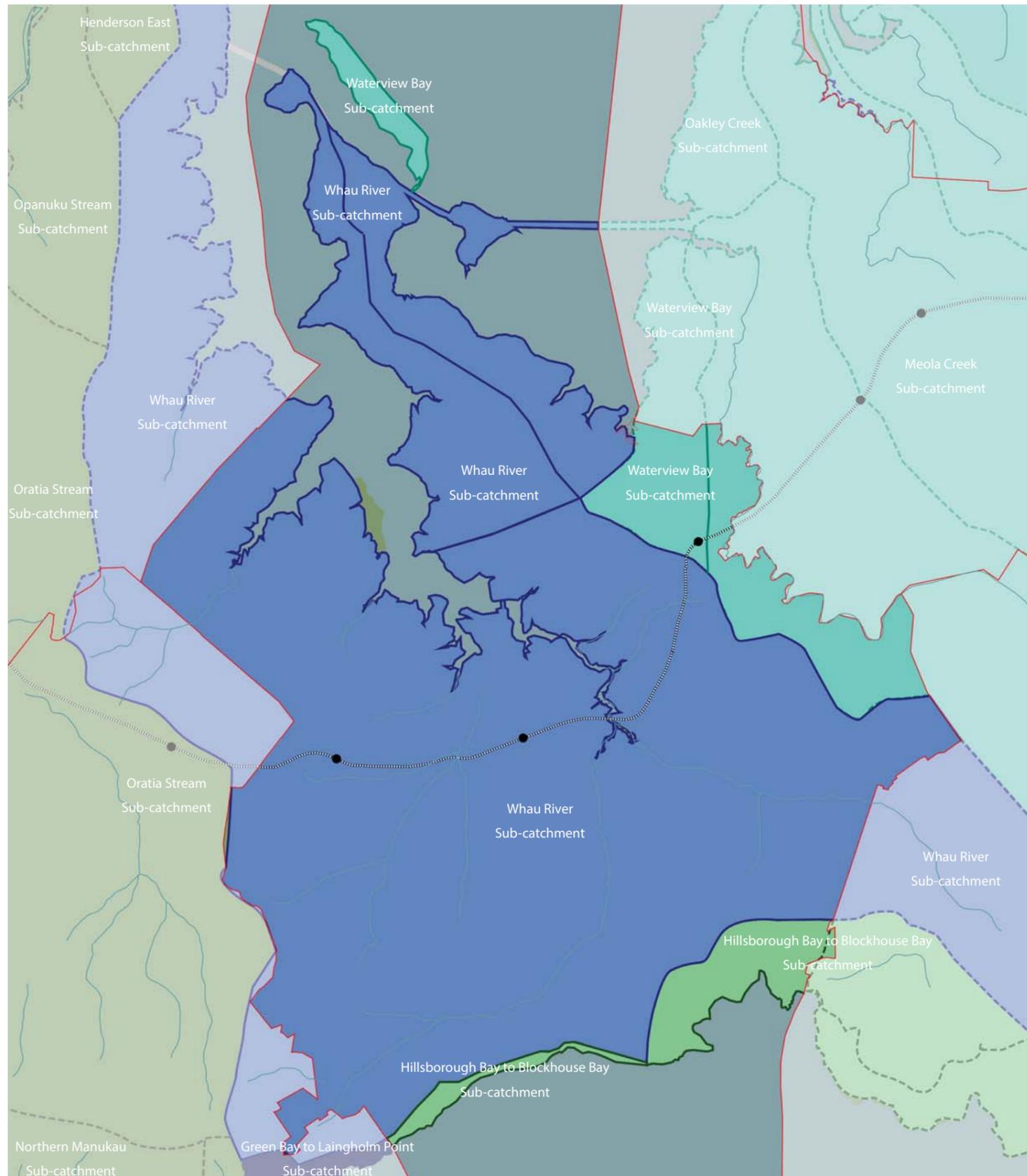
Geomorphology

The Whau Local Board area is situated in a relatively narrow land mass between the twin harbours of Manukau and Waitemata. The Manukau and Waitemata harbours are drowned valley systems that were inundated by the post-glacial rise in sea level between c. 14 000 and 6500 years BP, and have since been largely infilled with mud, sand and shell deposits. The Manukau Harbour shores in the area include the prominent coastal cliffs of the East Coast Bays Formation that are up to 30m high in places, and are interrupted by small embayments, including Blockhouse Bay and Green Bay.

This map has been created with reference to 'Geology of the Auckland Urban Area' (1992, Kermode, L.) and the Auckland Council GIS Database.

LEGEND:

- Whau Local Board Boundary
- Streams / rivers
- Railway and railway stations
- Pumiceous mud, sand and gravel
- Sandstone mudstone grit
- Sand silt clay peat
- Basanite
- Scoria basanite
- Land fill material



Hydrology

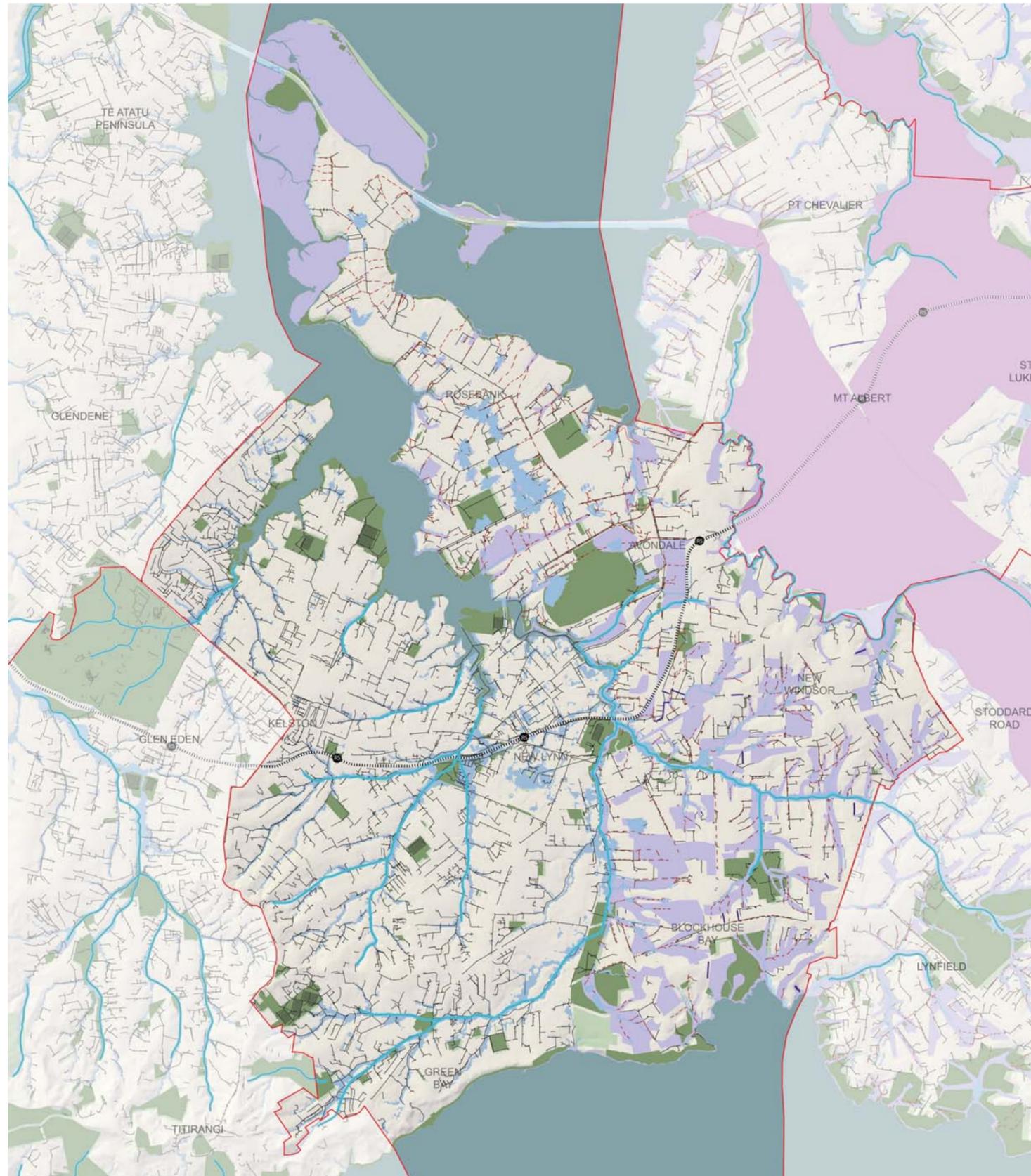
This map shows stormwater sub-catchments in the Whau Local Board area. Many of the streams and tributaries of Whau sub-catchments have been significantly modified - either straightened, lined or piped. The Whau Local Board and organisations such as EcoMatters are working towards rehabilitating streams through "daylighting", and part of the Avondale stream in La Rosa Gardens was recently daylighted.

Improving the water quality and biodiversity of streams, and the sustainable management of rainwater and water-cycles, are important goals for the Whau Local Board. These goals can be achieved through the implementation of Low Impact Design (LID) stormwater management, to detain peak flows and reduce contaminant runoff into local water bodies.

Stormwater Catchment Management Plans (SWCMPs) have also identified opportunities for stream restoration and enhanced public access. SWCMPs should be referred to when delivering each individual portion of the Greenways plan, and where possible, projects should be integrated. Other opportunities for integration with the stormwater team exist where LID measures can be used to reduce known flooding hazards. Greenways running through areas with little vegetation cover would benefit from a significant investment in planting.

LEGEND:

- Whau Local Board Boundary
- Streams / rivers
- Railway and railway stations
- Whau River Catchment
- Hillsborough Bay to Blockhouse Bay Sub-catchment
- Henderson Catchment and Northern Manukau Catchment
- Auckland Catchment. Including Oakley Creek and Waterview Bay Sub-catchments
- Green Bay to Laingholm Point Sub-catchment



Hydrology

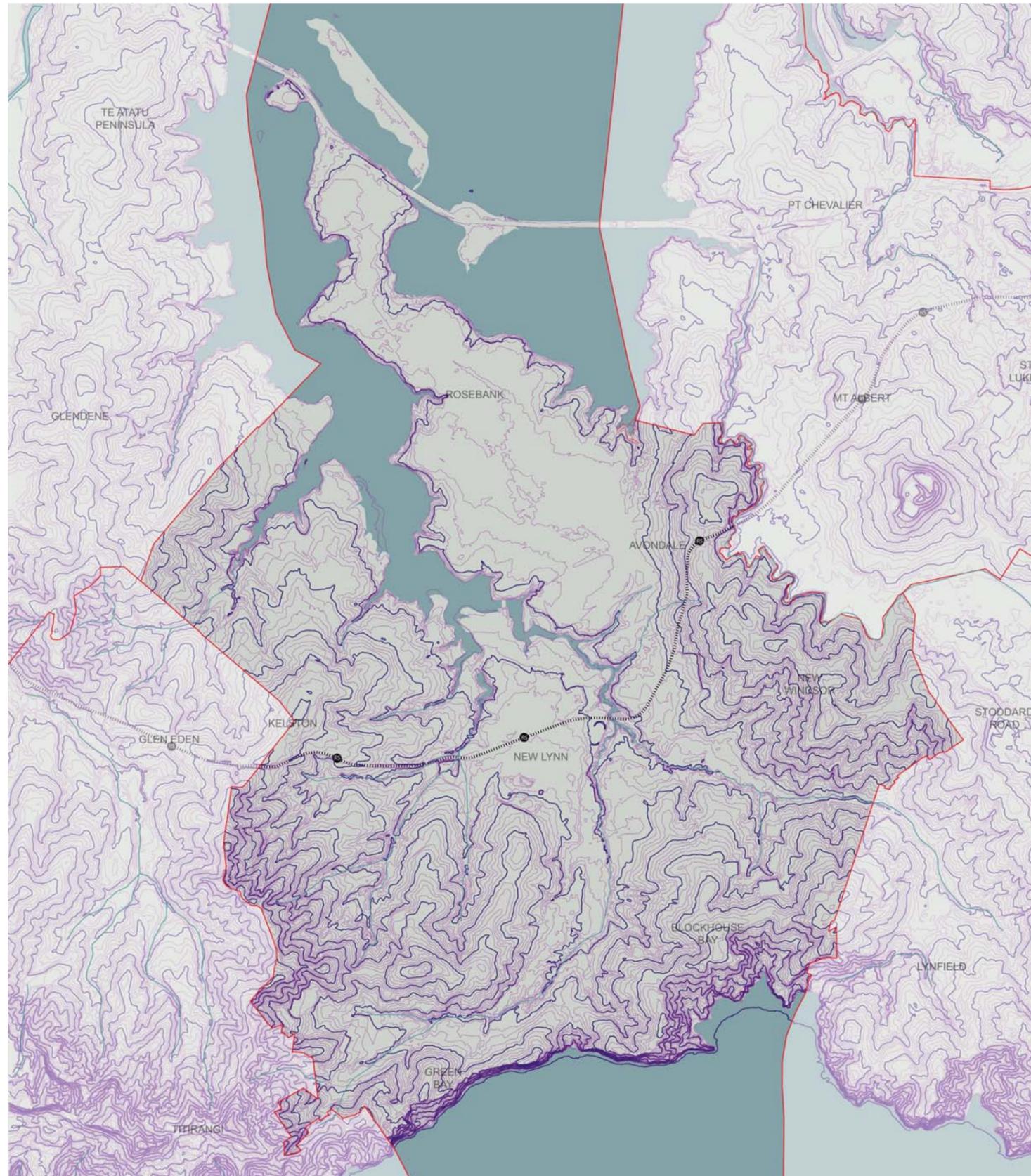
This map shows the 100 year flood plain and overland flow paths. The overland flow paths are indicative of streams and their tributaries before they were modified. Many of the Greenways in the Whau Local Board area follow streams and their tributaries. There are many benefits in having Greenways follow waterways, including:

- riparian planting provides more absorption of rainwater, which reduces pressure on peak flows and therefore reduces incidents of flooding
- riparian planting acts as a filtration system, improving water quality as pollutants from overland flow-paths are removed
- Greenways along waterways offer opportunities to enhance biodiversity enabling a network of ecological corridors to become established
- the linear nature of waterways ensure that they are good “connectors”, offering reasonably direct pedestrian and cycle routes to travel between places
- well-established planting and good pedestrian and cycle facilities will ensure that Greenways along waterways will be of high amenity, which will attract users. In turn, users are more likely to provide stewardship by alerting authorities to incidents of pollution and dumping, and assisting in planting, weed or pest control monitoring.

There are many volunteer organisations in the Whau Local Board and Glen Eden area who are committed to improving the natural environment along the currently degraded and polluted waterways. It is advocated that Council and Council Controlled Organisations (CCOs) continue to work together with these volunteer organisations towards helping to restore the waterways. The establishment of Greenways will bring a multitude of benefits to waterways, as exemplified by the Twin Streams project.

LEGEND:

- Whau Local Board Boundary
- Streams / rivers
- Railway and railway stations
- Parks and reserve land (AC)
- Flood plains
- Aquifers (AC)
- - - Flood path (AC)
- Surface water channel
- Stormwater
- 100yr flood plains
- *AC - Auckland Council



Topography

The adjacent map shows the topography of the Whau Local Board area. Contours run from sea level along the Waitemata Harbour coastline to the highest points at the top of the cliffs along the Manukau Foreshore.

From a Greenways perspective, the topography of the Whau Local Board area presents challenges, as some gradients may not be suitable for all ages and physical abilities. In particular, the vertical nature of the coastal cliffs on the Manukau Foreshore make it difficult to create an all-tide access around this coastline and a low-tide or boardwalk access may be more feasible. The steepness of this coastline also limits accessibility and ability to cycle the Greenways proposed there.

Busy vehicle routes such as Portage Road, Rosebank Road, Rata Street, Ash Street and parts of Great North Road present a challenge in greenway route planning as they offer ideal connections with flatter gradients, and therefore provide a physically 'easier' route, however they conflict with the Greenways criteria of selecting calmer streets for safety and amenity reasons.

In terms of the proposed greenway routes, further investigation is required in places, at the detailed stage of the project to determine the feasibility of providing cycle access. There will be walking-only tracks where cycling is deemed to be unachievable.



Road hierarchy

The existing road hierarchy has been considered when determining the Greenways routes, in order to create safe, desirable and high-amenity environments, encouraging use by as many Aucklanders and visitors as possible.

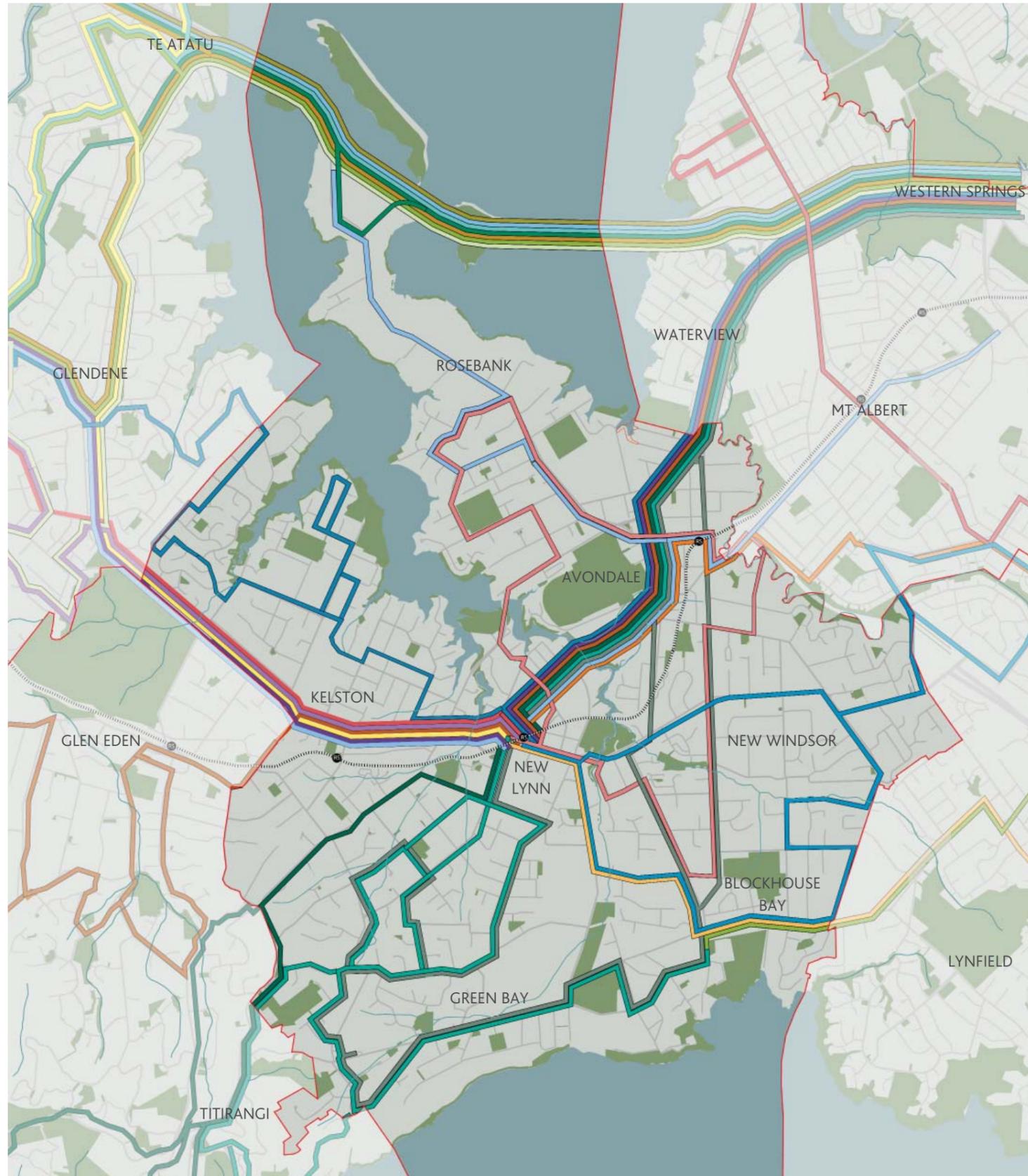
Major and arterial roads are typically busy roads that provide for a range of transport types, including cars, buses and trucks. Careful consideration needs to be taken where the greenways network intersects or runs along these roads, to ensure desirable/safe routes are formed, and Greenways generally avoid these routes.

Minor or local roads are slower speed environments with lower traffic flows and typically provide more desirable Greenway connections. While these tend to be prioritised when planning Greenway routes, careful consideration at the design stage will still be required in order to ensure adequate passive surveillance and motorist awareness of pedestrians, cyclists and recreational users.

The road hierarchy also affects potential for street 'greening' initiatives to support the greenways network. Methods for providing safe crossing points will also be affected by the road hierarchy - for instance, un-signalised crossings are unlikely to be permitted on arterial roads.

LEGEND:

- Whau Local Board Boundary
- Streams / rivers
-  Railway and railway stations
- Parks and reserve land (AC)
- Motorway
- Major, medium and arterial
- Minor roads
- *AC - Auckland Council



Public transport

Existing public transport routes are illustrated on the adjacent map, showing that the Whau Local Board area is relatively well served by bus and train services.

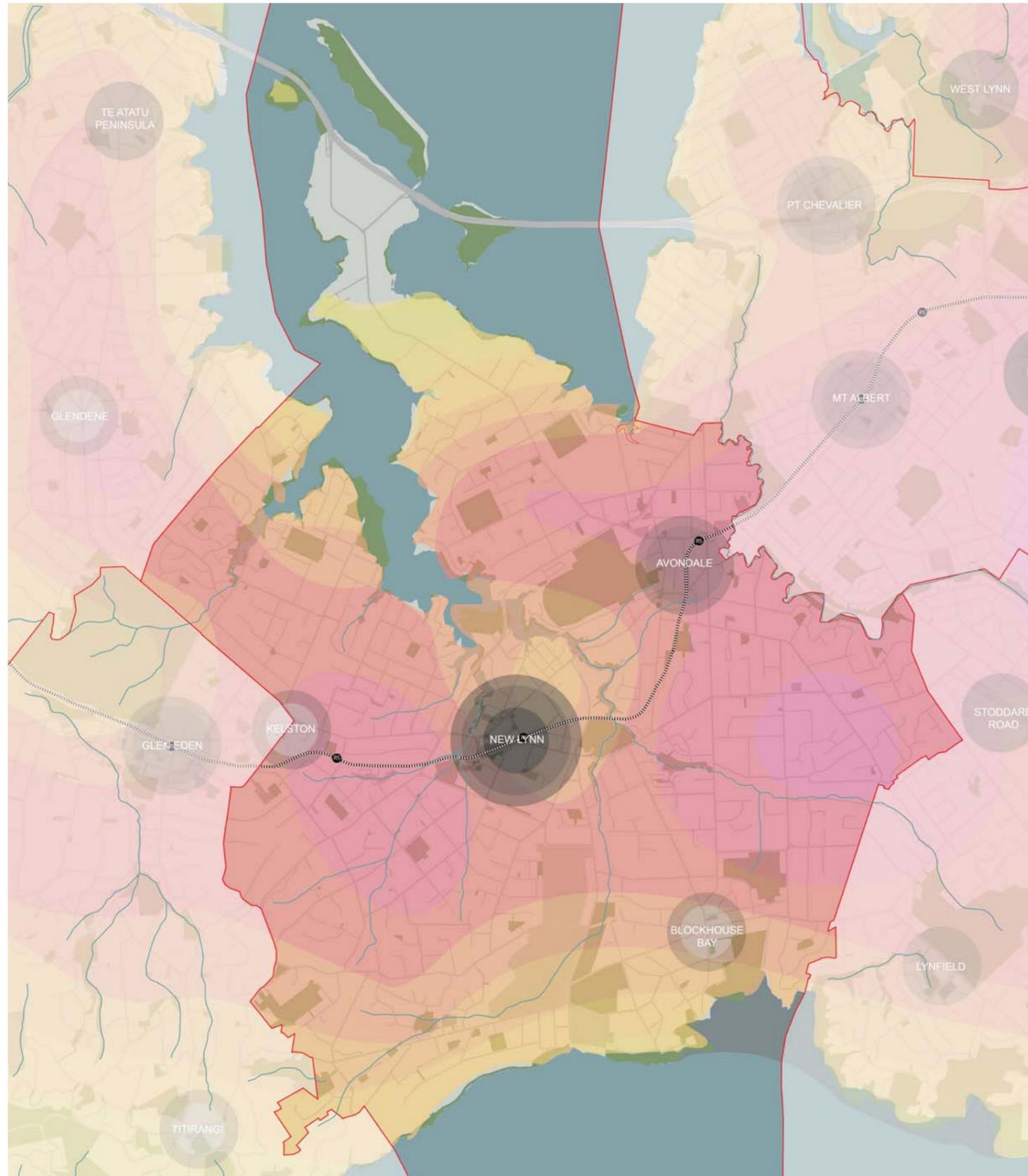
The development of a new transport interchange was the first step in New Lynn's recent transformation. The project involved putting Auckland's western rail line into a trench measuring about one kilometre long and up to eight metres deep, building a two-level rail and bus interchange above it, integrating a new roading network around it and encouraging new land development to complement it.

Over the past five years, patronage on Auckland's trains has more than doubled, rising to over 7.5 million passenger journeys per annum. This number is forecast to continue to grow strongly. Significant investment has been made by both regional and central government in redeveloping Auckland's rail network. This includes track works, upgrading stations and the building of carriage trains to meet the increased demand for rail travel.

In planning the greenways routes, train stations were taken into account as these have potential to bring visitors into the area on 'day trips', to walk or cycle the greenways network - particularly the more scenic coastal or riparian routes. They also connect local residents to key destinations, such as their places of employment, education or regional facilities. Bus routes were also taken into consideration, as these offer less potential for creating 'slow speed' Greenways street environments, as there is more risk to cyclists. Roads that are bus routes were therefore avoided wherever possible as greenways links. However, bus stops on frequent routes in high density areas, and particularly the New Lynn interchange, were considered as key destinations for the Greenways to connect to.

LEGEND:

- Whau Local Board Boundary
- Streams / rivers
- Railway and railway stations
- Parks and reserve land
- Road network
- Bus routes from Henderson / Glen Eden to New Lynn
- Bus routes from Henderson / Te Atatu to Auckland CBD
- Bus routes from New Lynn to Auckland CBD
- *AC -Auckland Council

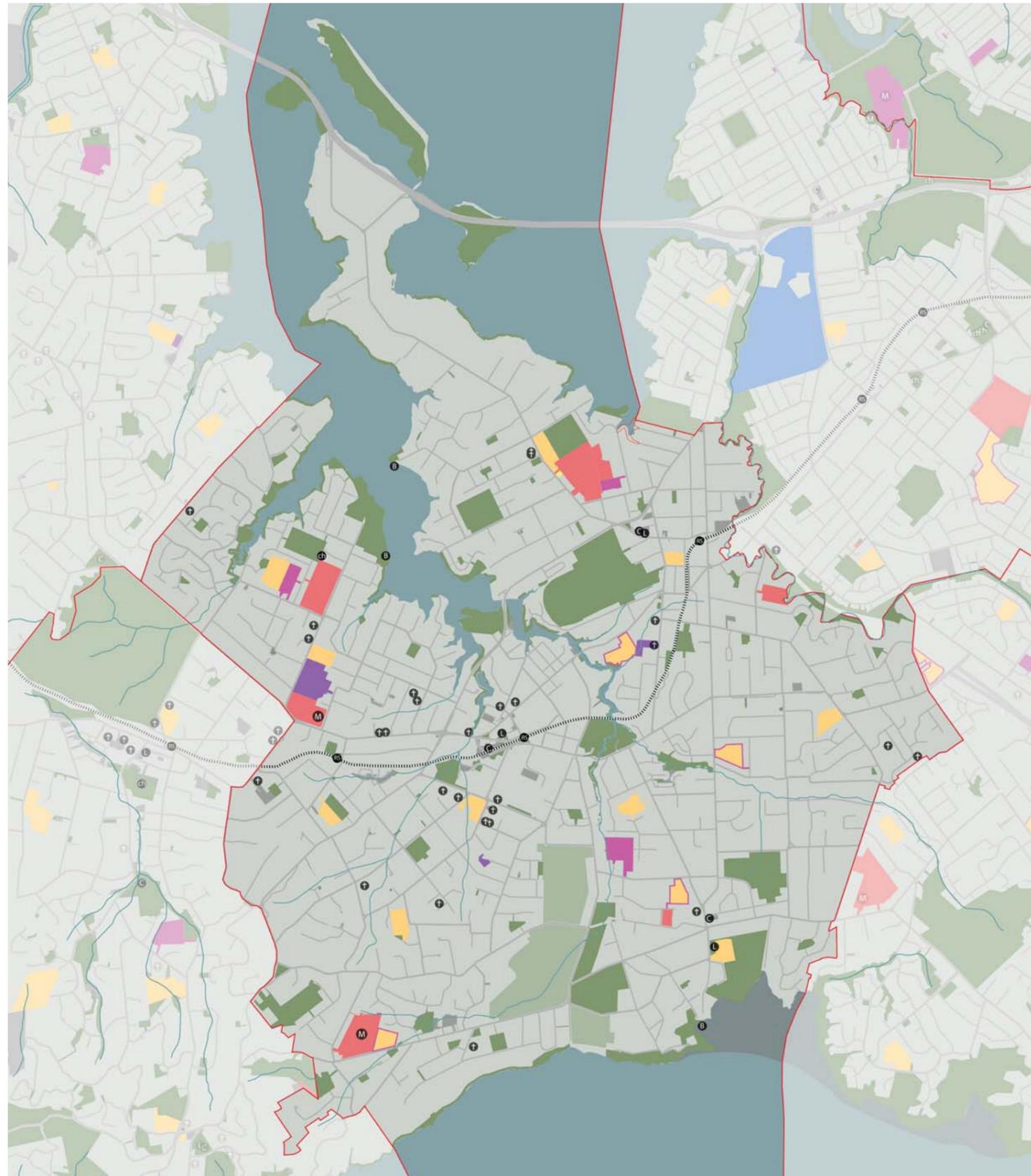


Population density and growth centres

This map, sourced from the Auckland Plan 2012, shows the classification of town centres in the area, along with population densities based on the 2006 Census meshblock data. Population density is important in Greenways planning as it shows where potential users will be coming from, and it is logical to focus efforts in these areas (in addition to providing strategic regional connections, which are not as influenced by proximity to housing).

In general, as a city intensifies, residential section sizes become smaller, and residents require recreation facilities beyond their backyard. While this can be perceived as a negative impact of intensification, if well planned, these public open spaces can actually build communities by providing locations and facilities where people from different communities can come together and meet.

This map also illustrates the network of urban centres within the Whau Local Board area as illustrated in the Auckland Plan 2012. In the Auckland Plan, New Lynn is identified as a metropolitan centre, Avondale is a town centre and Kelston and Blockhouse Bay are local centres.



Schools and community services

This map shows schools and community facilities in the Whau Local Board area, including community halls, places of worship, community centres, libraries, swimming pools, recreation facilities and Marae.

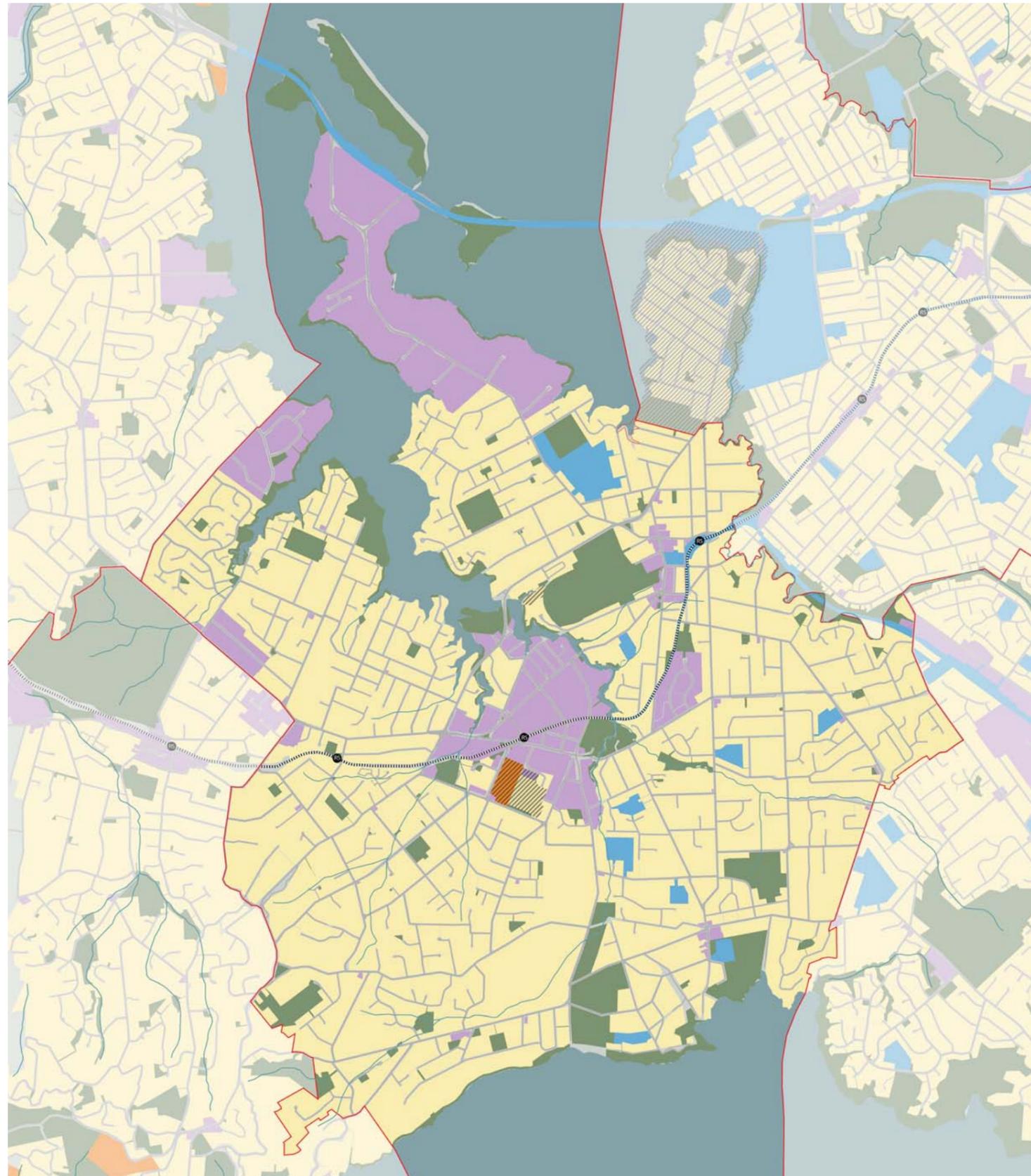
Schools and community facilities are critical points in the Greenways plan, providing both an opportunity to create connections via easements, while also providing destinations in their own right. These facilities are visited on a frequent basis, and providing safer, higher amenity and more accessible connections has great potential to reduce reliance on private vehicles.

Proposed connections to schools may be influenced by existing 'walking school bus' routes. Auckland Transport makes funding available for walking school bus routes, and it is possible that some connections could be supplemented by this funding stream.

Any easement proposal within the boundaries of a community facility would need to be firstly consulted with the landowner and leaseholder, and needs to be carefully considered to ensure the safety of students/facility users, and minimise any risk of property damage. Some accesses may need to be limited to certain times of day for these reasons.

LEGEND:

- Whau Local Board Boundary
- Streams / rivers
- Railway and railway stations
- Parks, reserves and open space
- Road network
- Library
- Community centre
- Community hall
- Place of worship
- Marae
- Boat ramp
- Primary schools (years 1-6)
- Full Primary (years 1-8)
- Intermediate schools (years 7-8)
- Secondary schools (years 9-15)
- Composite schools (years 1-15)
- Tertiary Institutions



Zoning

This map shows currently operative District Plan Zoning, which will be superseded by the Unitary Plan in the future. The areas are summarised as:

Business Zone: Relates to commercial and industrial activities, including retailing, servicing, offices, warehousing, manufacturing and research orientated activities.

Residential Zone: Is the largest land use, and relates to areas that are predominately but not exclusively used for residential activity.

Open Space Zone: Relates to a range of open space used for recreation activities, and conservation and visual purposes, and applies to both public and privately-owned land.

Special Purpose Zone: Relates to sites or areas that require special treatment and are of particular consequence to the community's well-being, health and safety but do not conform to the provisions of the standard zones.

LEGEND:

- Whau Local Board Boundary
- Streams / rivers
- Railway and railway stations
- Road network
- Open space
- Residential zoning
- Business zoning
- Special purpose zoning (ACC)
- Zoned as 'Other' (WCC)
- Future planning

*ACC - Auckland City Council
*WCC - Waitakere City Council

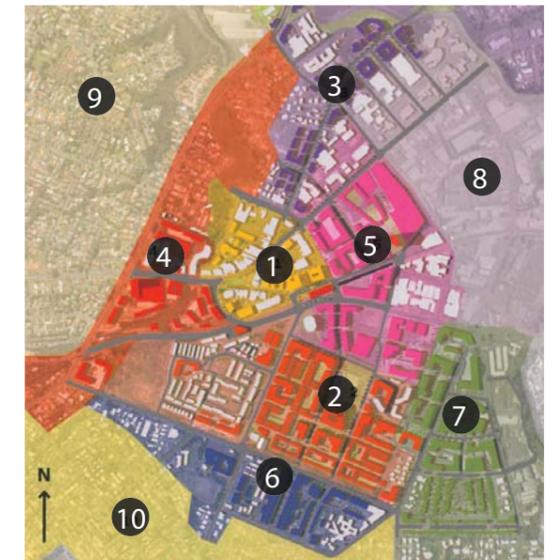


Figure 34. Precinct Plan, New Lynn Urban Plan, 2010.

- | | |
|---------------------|----------------------|
| 01 Merchant Quarter | 07 Bob Hill |
| 02 Crown Lynn | 08 Industrial |
| 03 Delta Avenue | 09 Residential West |
| 04 Western Gateway | 10 Residential South |
| 05 The Mall | |
| 06 The Avenue | |



Land ownership

This map provides details of land within the Whau Local Board area that is in some form in public ownership. This information is of key importance, as connections on publicly-owned land are more readily achieved than those on privately-owned property.

Five different public ownership types exist within the study area:

Auckland Council Land, Zoned Open Space: No access arrangements required to improve connections, although resource consent may be required, dependent on the proposal.

Auckland Council and CCO owned properties: This land may be available for Greenway connections, dependent on the current or proposed usage of the site.

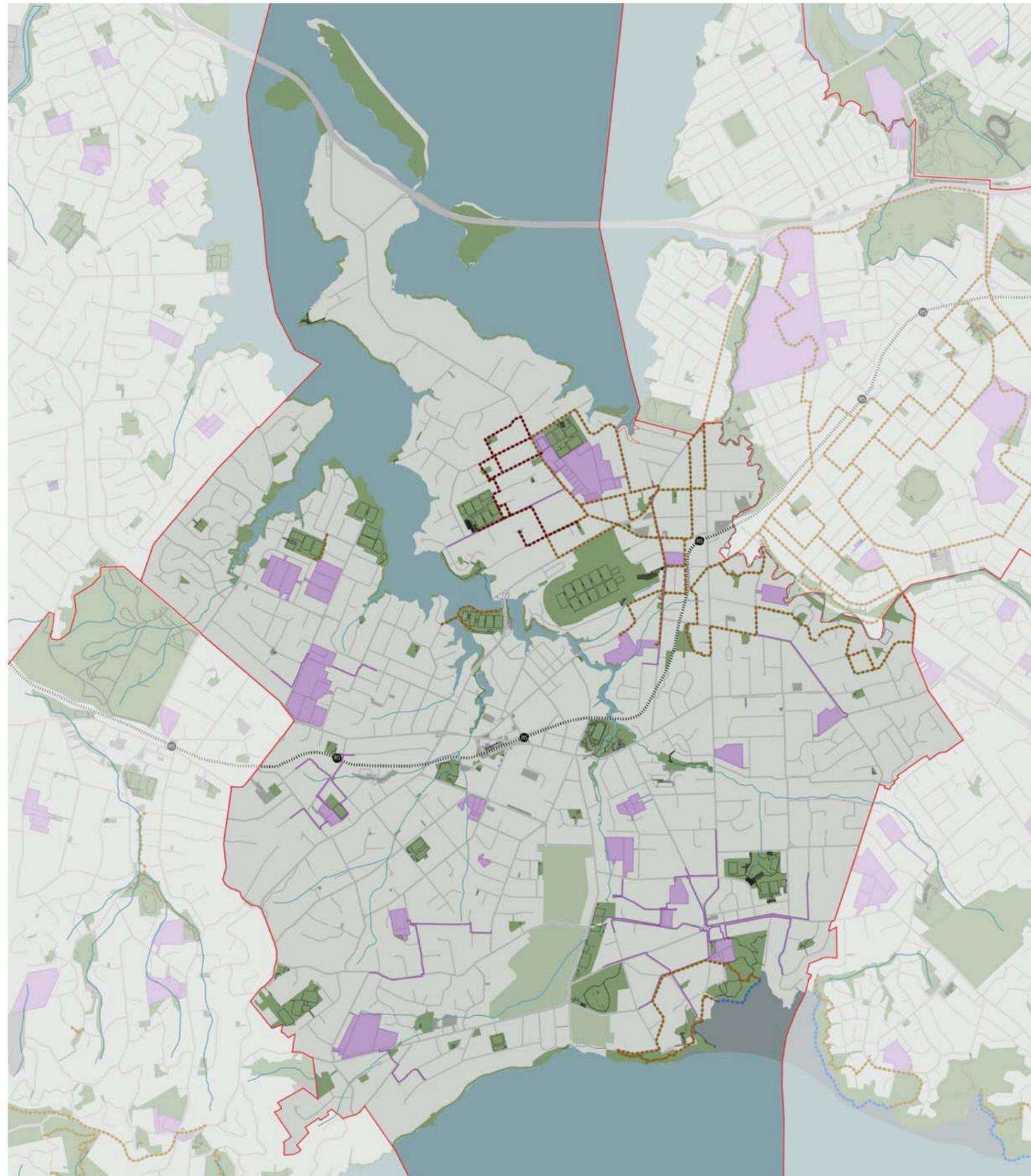
Ministry of Education land: Educational institutions generally feature large areas of open space, and discussions may be held regarding public use and/or connection easements over this land.

New Zealand Transport Authority land (NZTA): NZTA holds land adjacent to the motorways. Connection such as the SH16 and SH20 have come from NZTA land designations, and these are being extended through the current SH16 and SH20 works.

Additionally, there is Housing New Zealand (HNZ) land. In areas where there is a cluster of HNZ properties, discussions may be held regarding redevelopment of housing stock, and the redistribution of public open space to a layout which suits both housing and recreational purposes better.

LEGEND:

- Whau Local Board Boundary
- Streams / rivers
- Railway and railway stations
- Road network
- Auckland Council (inc.. parks and reserves)
- Housing New Zealand Land (HNZ)
- Ministry of Education land
- New Zealand Transport Authority (NZTA)
- Her Majesty the Queen (other designation)
- KiwiRail
- Watercare
- Land Information New Zealand / Department of Conservation (DoC)



Walking routes

This map shows existing walking routes within the Whau Local Board and Glen Eden area. The intent of the Greenways plans in this area will be to overlap with (or connect to) these established walking routes wherever possible.

Walking School Bus (WSB) routes have been developed by Auckland Transport, to provide a safe and healthy environment for children to walk to and from school along quiet streets, under the supervision of an adult.

Other map information has been compiled from Auckland Council and Auckland Transport GIS, and also transcribed from a number of former Auckland City Council 'Be Active' and 'Heritage' walking maps.

In addition, the map also shows 'community garden connections' that was the result of collaboration between Unitec and the Avondale Community Gardeners to build a community map of the residential area on Rosebank Peninsula that can be used to discuss sense of place, one that combines GIS information with narratives (historical and contemporary) and intuitive responses to landscape created by the local residents.

LEGEND:

- Whau Local Board Boundary
 - Streams / rivers
 - Railway and railway stations
 - Parks, reserves and open space
 - Road network
 - Schools
 - Walking School Bus routes
 - - - Heritage Walks (ACC)
 - - - Low tide route (ACC)
 - . . Community garden connections
 - Existing pathways / impervious surfaces
- *ACC - Auckland City Council



Cycle routes

This map combines the draft Auckland Cycle Network (ACN). The draft ACN is based on the Regional Cycle Network (RCN), developed by the former Auckland Regional Transport Authority in conjunction with former legacy Auckland councils and the NZ Transport Authority. The draft ACN is driven by the Auckland Plan growth projections and the Auckland Integrated Transport Plan 'One Network' approach, both of which share an estimated completion date of 2040.

The draft ACN (shown on the adjoining map) is broken into three types of cycleways:

- Cycle highways
- Connectors
- Feeders

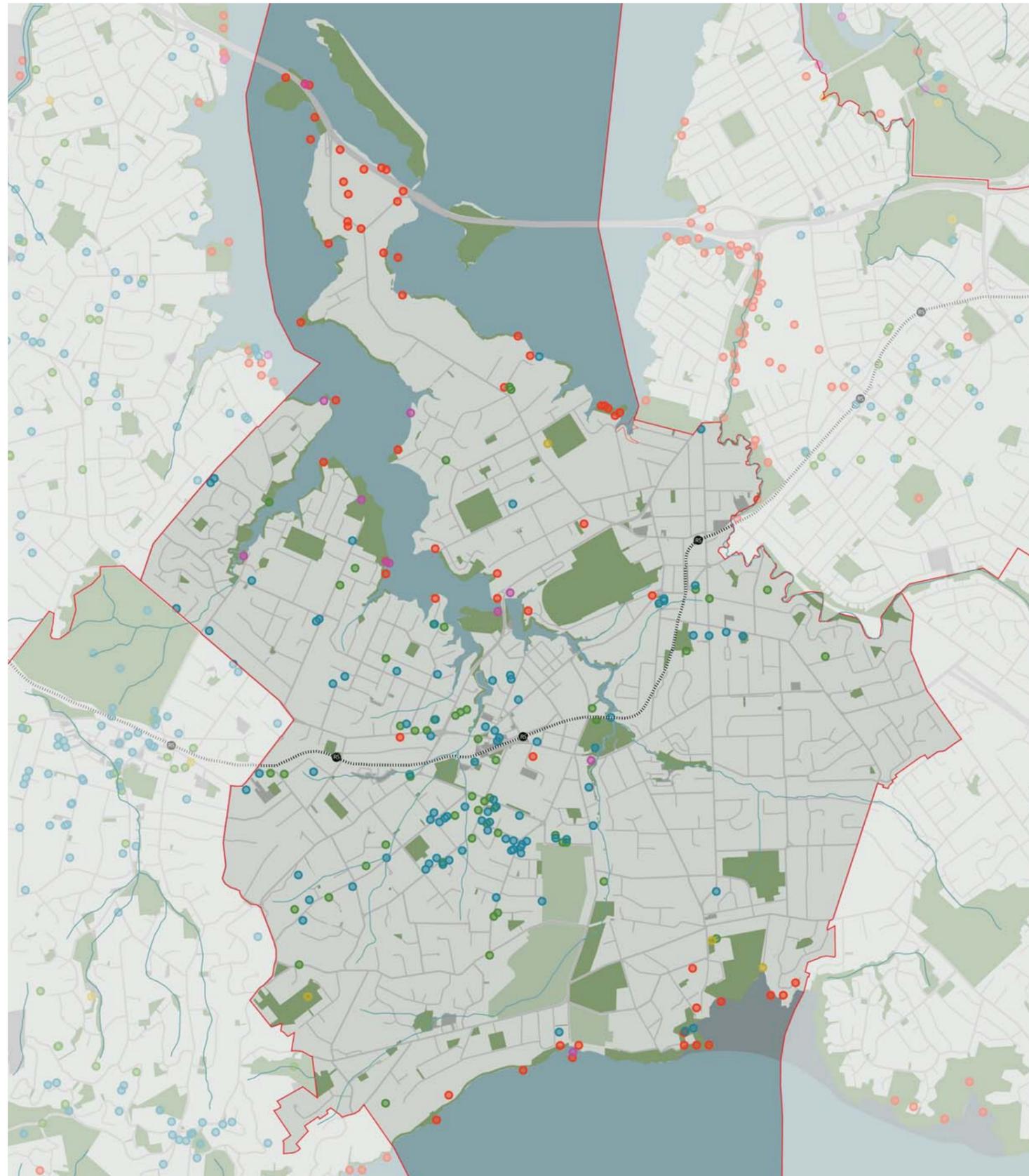
'Cycle highways' offer the highest level of service to the cyclist, in that they are dedicated connections, continuous, direct and traffic free. They would exist along motorway or railway corridors. 'Connectors' follow arterial routes, and are designed to connect people quickly and directly to key destinations and public transport nodes. They are 'on road' connections. A number of these exist already, many in shared bus lanes, such as those along Great North Road.

'Feeders' are local neighbourhood connections. These may include and/or double up with Greenways routes. 'Feeder routes' are intended to connect open spaces /parks, and like Greenways, are likely to follow quieter streets.

Within internal officer workshops for the development of the Greenways, Auckland Transport has expressed an interest in adjusting their current 'feeder' routes and adding further 'feeder' routes to align with those routes chosen in the Greenways plans.

LEGEND:

- Whau Local Board Boundary
- Streams / rivers
- Railway and railway stations
- Parks, reserves and open space
- Road network
- Feeder routes
- Connector routes
- Highway routes



Cultural Heritage Inventory

This map shows sites that have been identified for their cultural heritage value. The Auckland Council GIS database has a Cultural Heritage Inventory (CHI) layer, that was created by the former Auckland Regional Council. The CHI was established to promote sustainable management of cultural heritage by providing easy access to cultural heritage information and should be used as a resource when developing the network.

CHI sites are classified as follows:

- Archaeological Sites recorded under the New Zealand Archaeological Site Recording Scheme (e.g. midden, pa sites)
- Historic Botanical Sites (e.g. specimen trees in parks)
- Built Heritage Sites (typically early European buildings)
- Maritime Sites (e.g. shipwrecks, wharfs, boatsheds)
- Reported Historic Sites (e.g. known locations of battles)

LEGEND:

- Whau Local Board Boundary
- Streams / rivers
- - - Railway and railway stations
- Parks, reserves and open space
- Road network
- Archaeological site
- Historical botanical site
- Historical structure
- Maritime site
- Reported historic site

A2. Feedback from Te Kawerau Iwi Tribal Authority

Whau Neighbourhood Greenways



Te Kawerau Iwi Tribal Authority

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Auckland 2151
2/3 Airpark Dr
Airport Oaks
09 973 0898
www.tekawerau.iwi.nz
admin@tekawerau.iwi.nz

22 January 2014

Jenny Macdonald
Principal Policy Analyst
Community and Social Policy DEPARTMENT
Parks and Recreation
Auckland Council

Dear Jenny,

Re: Whau Neighbourhood Greenways Plan

This letter is intended to offer feedback on the Whau Neighbourhood Greenways Plan on behalf of Te Kawerau a Maki. The Draft Whau Neighbourhood Greenways Plan builds on the existing walking, cycling and ecological networks across the Whau area that includes Avondale, Blockhouse Bay, Green Bay, Kelston, New Lynn, New Windsor and Rosebank by identifying other local routes for improvement. The purpose of the Whau Greenways Plan is to introduce 'neighbourhood greenways' that will encourage people to get active and participate in their communities and environments by choosing alternative forms of transport. The Plan also aims to encourage opportunities for ecological restoration. The aims of the Plan are therefore:

- Improve walking connections
- Improve cycle connections
- Improve recreation opportunities
- Improve ecological opportunities
- Improve community connections
- Improve access to streams, rivers, and the coast

There are a number of benefits which are thought to come out of the Plan, including recreation, environmental, health, social, educational, and economic. The draft consultation plans (August 2013) depict various retrofit options (minor, partial, complete, cycleways and road median, and adjacent properties) for local and arterial streets ranging from improved 'green' stormwater treatment and tree planting, to increasing footpath widths to allow for shared path(s), to pedestrian crossings, to planter beds in the median strip. Each retrofit option has different combinations of benefits and costs.

Statement of Support

Te Kawerau Iwi Tribal Authority support the policies, aims, and concepts provided in the Whau Neighbourhood Greenways Plan and see these as aligning well with the values and aspirations of the iwi. Te Kawerau a Maki are the mana whenua of Hikorangi/West Auckland including the Whau region. Our history in the area goes back some 800 years to the Turehu and the later peoples who Kawerau claim descent from. While our rohe is much larger than Hikorangi alone, the Whau is considered part of the heartland of Te Kawerau a Maki and holds special significance.

Te Kawerau aspirations for the Whau area are based upon the concepts of kaitiakitanga and tino rangatiratanga. Our kaitiaki responsibilities hinge on ensuring the maintenance of the natural environment, our wahi tapu and cultural sites, and providing for the future of the iwi. Tino Rangatiratanga ensures Te Kawerau's cultural rights and autonomy and governance of the rohe.

The Greenways Plan supports our aspirations through a focus on ecological, environmental, and community enhancement. The health and wellbeing of the natural environment as well as the people

who reside within the rohe are important aspects to this. The Greenways project has the potential to further support Te Kawerau through the recognition of kaitiakitanga, our special relationship to the area, and by providing opportunities for cultural visibility and enhancement through physical interpretation, art, and design.

As mana whenua we see our involvement in the Greenways Plan as that of a on-going partnership with Council.

Importance of the Whau region

The area that encompasses the Whau Local Board area and the lands included in the Greenways Plan are of very high significance to Te Kawerau a Maki. Our history in the area stems back over 800 years, the Whau being a part of Hikorangi which is considered the heartland of the iwi. Te Kawerau a Maki have maintained kaitiakitanga responsibilities, ahi kaa, and ancestral and cultural rights over the land to the present day. The importance of the area to Te Kawerau is reflected through the place names, songs, traditions, and history of the people. The area contained one of the two most important portages from the East Coast to the West, the Whau Portage, as well as numerous pa, kainga, wahi tapu, urupa, and natural resources which belong to Kawerau. The Whau Portage played a significant role throughout history for the movement of people around Tamaki, and marks the southeastern boundary of Hikorangi. It is considered an important taonga and cultural landscape by Te Kawerau a Maki.

A full history and list of the sites and areas of significance to Te Kawerau a Maki are not offered here. There is simply too much to detail and many are of a sensitive nature which we do not wish to share. On a case by case basis, as the need for interpretation is addressed through the Greenways Plan, these stories can be told and celebrated. What is however offered below is a short list of some of the important sites and features which we seek to be included at this stage of the Greenways Plan.

- Te Whau (Whau River)
- Whau Portage/ Te Toanga Waka (along Portage Road and also Endeavour Street)
- Te Whau (kainga and pa at Blockhouse Bay)
- Motu Karaka (kainga at Green Bay)
- Onewherowhero and Wairau (kainga at Kelston)
- Rangimatariki (fortified kainga at the end of Rosebank Peninsula)
- Te Kou (Travern Island - the fish hook)
- Motu Manawa (Pollen Island)
- Whau tree (*Entelea arborescens*). The wood was utilised as poito (floats) for fishing nets
- Waitahurangi stream (associated with the Turehu and Patupaiarehe, it flows from the Titirangi ridge in a north-easterly direction to the head of the Whau river at New Lynn)
- Te Wao nui a Tiriwa (Waitakere City - the great forest of Tiriwa)
- Ureia and Taramainuku (taniwha of the Manukau)
- Mokai o Kahu (taniwha of the Waitemata)
- Te Kotuitanga (the place where the canoes were tied up or prepared inland of the portage)
- Titirangi
- Te Rewarewa (New Lynn)
- Waikumete Cemetery

The above sites and features can be interpreted and celebrated in a wide number of ways, from official use of the traditional names to art works to marking the route or area such as with the Whau Portage.

Attached to this letter is a plan with some of the above indicated on it. It is intended that both the cultural elements and environmental and engineering components will be subject to further consultation and collaboration with us as the project develops.

Kind Regards,



Edward Ashby (MA, PGDipScience)
Heritage and Environment Manager
Heritage and Environment Unit
Te Kawerau Iwi Tribal Authority

TE KAWERAU A MAKI SITES - WHAU

Some of the major cultural sites and places within the Te Whau area. Approximate locations only. Sites marked with black squares, creeks and rivers in italics, general areas in capitals. Other sites and korero is held within the iwi.

Orangihina

A settlement on the east side of Te Atatu Peninsula (also one of the names for Te Atatu Peninsula generally). Named after the princess Rangihina of Ngati Poataniwha (hapu of Te Kawerau) who married Te Au o Te Whenua of Te Kawerau a Maki.

Rangimatariki

The name for the lands at the northern tip of Rosebank Peninsula and the location of a major kainga. This area was known for gardening as it is one of the few locations in the Whau area with suitable productive soils for growing crops. The name relates to the viewshaft from Rangimatariki through the Waitemata Harbour and out to the eastern horizon in the outer Hauraki Gulf where the matariki constellation could be seen.

Motu Karaka (Rangimatariki)

The location of an ancient kainga at the end of Rosebank Peninsula. The site was marked by an ancient karaka grove. Some of the trees may still exist. The site is also associated with a nearby waka landing.

Te Kou

The small island on the northeast of Rosebank Peninsula known today as Traherne Island. The name derives from the fishing which took place here, and references a fish hook.

Motu Manawa

The extensive shell banks and mangroves to the north of Rosebank Peninsula known today as Pollen Island.

Te Pae Kawau

A settlement on a small headland on the western side of the Wai Te Whau mouth. There were many archaeological features which are now destroyed, and the settlement was possibly defended. Kawerau people still camped here occasionally in the mid 20th century when the land was still rural. The name roughly means 'shags perch'.

Te Wahapu

An ancient Kawerau name for the Whau River. Specifically spoken of in relation to the mouth of the river.

Te Rere

A waterfall site.

Kai araara

A small inlet on the western side of Wai Te Whau. The shoreline of the area was a seasonal camp site where travelli were caught.

Wairau

The large inlet near Kelston. Associated with fishing and netting.

Haukawa

A settlement located on the eastern side of Wai Te Whau (western side of Rosebank Peninsula) around the small headland at the end of Saunders Place where the West End Rowing Club is situated. The name refers to the blowing south-westerly winds which would have struck the exposed location during winter. The site may have been fortified in the past.

Onewherowhero

An old Kawerau name for the general area encompassing Kelston and Waikumete. Referring to the reddish clays that could be found in the area.

Te Rewarewa

The location of a kainga at the head of Wai Te Whau, roughly in the location of New Lynn. The name references the access to the river for fishing and transport by waka.

Waimarumarū

The sheltered inlet at the head of Wai Te Whau.

Te Kotuitanga

A place at the head of the Whau tidal creek where waka were built and prepared. One tradition tells of the building of a dove-tailed waka here (Kawenga-roimata) and the death of the man for whom it was being built as a result of a taua. The subsequent mourning offerings (roimata) prior to launch were incorporated into the name.





Figure 35. New North Road and Blockhouse Bay Road intersection. Auckland Council Stock Photo, 2012.

A3. Case studies

Whau Neighbourhood Greenways

A3. Case studies

Lloyds Crossing, Portland (USA)

Lloyds Crossing in Portland is a brownfields redevelopment site in the central city area, with the aim of:

"Developing a conceptual design for a sustainable, financially feasible, mixed-use development project that will catalyse future private development in the district.. Following conceptual master planning, a stakeholder engagement process is now underway, to create the 'Lloyd Green District'

Co-conveners of the stakeholder group are the Mayor of Portland, Council President Metro and Multnomah County Commissioner. Forming the "Lloyd Green District," the group includes sponsors (Portland Development Commission, METRO, City of Portland and Lloyd TMA/BID), invited property owners, employers and developers in the proposed district area and other local and state agencies and civic organizations.

Their goal is to:

"create a premier sustainable multi-use development district within an urban center." The District "will become a lifestyle community of choice for residents, workers, and visitors, and a showcase demonstrating Portland's leadership in creating economically viable earth-friendly development."



This will become one of the first redevelopments under Washington State's developing programme of Climate Benefit Districts - a programme which aims to:

- Support the creation of "green jobs".
- Support livable, diverse and affordable urban neighbourhoods.
- Reduce the impact of urban development on the environment
- Capture the innovations and life cycle cost savings for district level energy and infrastructure solutions.
- Rebuild and reinvest in communities in ways that reduce the demand for driving.
- Help public and private interests to work together in developing healthy, vibrant urban communities aimed at achieving carbon reduction goals.
- Send a clear policy signal to attract desirable private investment and coordinate public action from multiple levels of government.
- Give communities the means to meet major environmental and economic challenges while remaining responsive to local conditions and opportunities.

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FIGURE LEGEND:

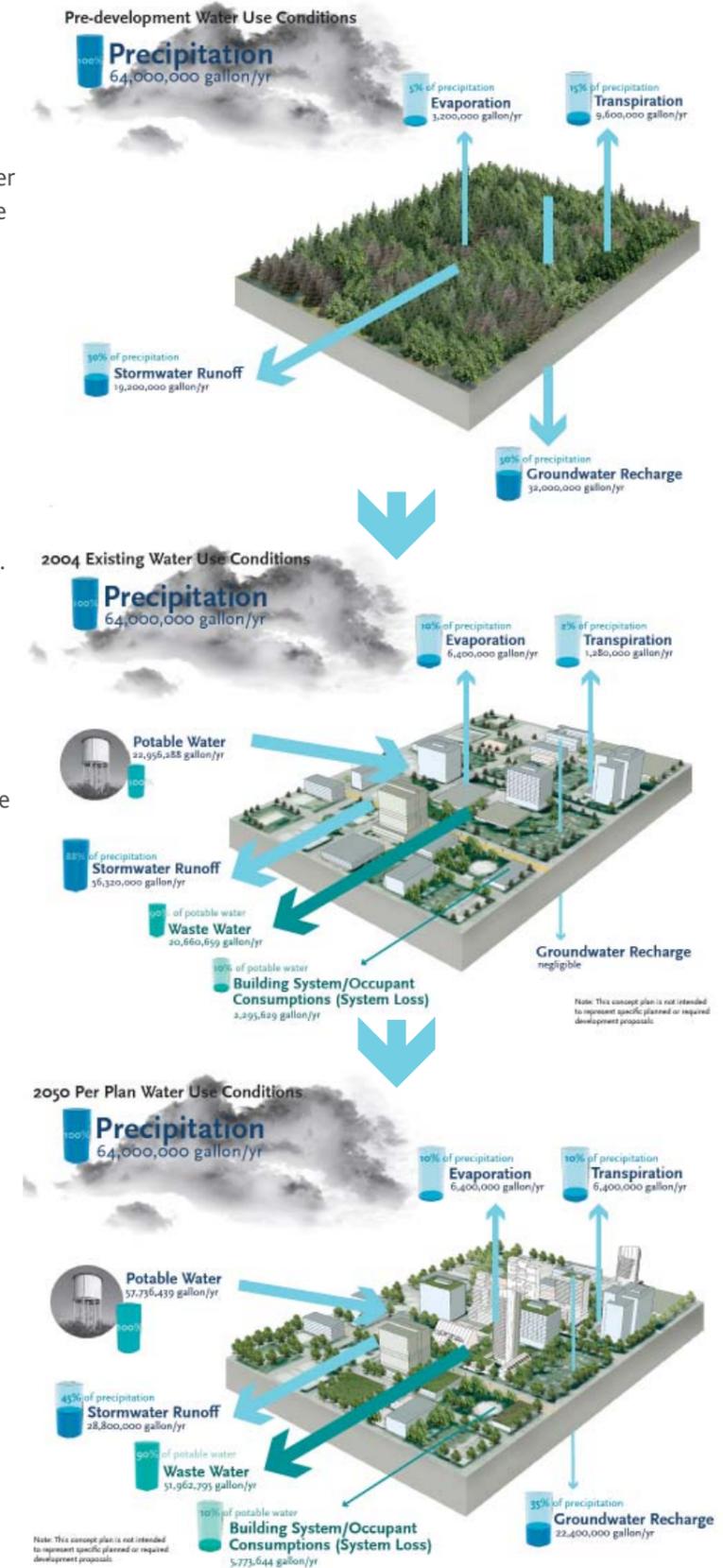
Figure 36. Habitat corridor.

Figure 37. Pre-development water conditions.

Figure 38. 2004 existing water use conditions.

Figure 39. 2050 Per plan water use conditions

The above images are sourced from: Portland Development Commission, Lloyd Crossing Project.



Portland Green Streets (USA)

Portland has been designing and building Green Streets for many years. Their consistent monitoring has proven that they successfully reduced peak stormwater flows and runoff volumes. The images to the right show a variety of Green Streets in Portland that have been successfully implemented.

Green Streets convert impervious street surfaces into green spaces that capture stormwater runoff and allow the water to permeate through the ground as plants and soil remove pollutants. Green Streets help to create attractive open spaces, streetscapes, provide ecological urban habitats, and help to connect neighbourhoods, open spaces, schools and other areas within the city.

The city of Portland is:

"Committed to green development practices and sustainable stormwater management. Green Streets are an innovative, effective way to restore watershed health. They protect water quality in rivers and streams, manage stormwater from impervious surfaces, and can be more cost efficient than new sewer pipes. Green Streets offer many benefits that sewer pipes can't."

Greenstreets offer the following benefits:

- Convert stormwater from a waste diverted into a pipe, to a resource that replenishes groundwater supplies
- 80%+ of storm water volume to be infiltrated on site.
- Add urban green space and wildlife habitat
- Reduce stormwater in the sewer system
- Save money on wastewater pumping and treatment costs
- Use plants and soil to slow, filter, cleanse, and infiltrate runoff
- Design facilities that aesthetically enhance the neighbourhood livability and property values



40	43	47
	44	
41	45	
42	46	

FIGURE LEGEND:

- Figure 40. Stormwater runoff treatment, Portland.
 Figure 41. Permeable paving setout, Portland.
 Figure 42. 'Green Streets' Portland.
 Figure 43. Stormwater runoff treatment, Portland.
 Figure 44. Planted verges, swales. Portland.
 Figure 45. Swales and footbridges, Portland.
 Figure 46. 'Green Streets' Portland.
 Figure 47. Greenway junction.

The above images are sourced from: Environmental Services. City of Portland. Green Streets in Portland. Retrieved deom URL: <http://www.portlandonline.com/bes/index.cfm?a=209685&c=45379>

Jellicoe Street, Auckland (NZ)

Jellicoe street features over 600m² of purpose built rain gardens. Rain from over 9000m² of the surrounding roads and surfaces flows into the rain gardens.

- integrate Best Practice Stormwater Design and the efficient use of water resources
- re-use existing structures and infrastructure where possible
- generate renewable energy on site
- preserve coastal water quality and protect waterfront ecologies
- protect air quality and reduce traffic congestion
- improve permeability and establish pedestrian priority and safety
- facilitate better access and circulation between transport modes
- enable visual connections through the precinct to the water
- promote pedestrian and cycle activity

This new initiative in a high-use area has proven to be a great way to educate visitors and residents about the merits of low traffic speed, shared space environments and 'green' infrastructure approaches.

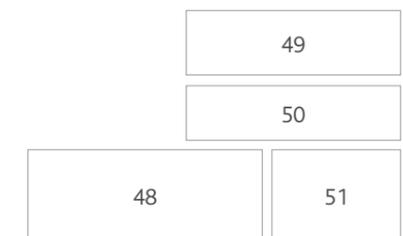


FIGURE LEGEND:

- Figure 48. Waterfront Auckland. (Artists Impression) Auckland.
- Figure 49. Waterfront Auckland. (Artists Impression) Auckland.
- Figure 50. Waterfront Auckland. (Artists Impression) Auckland.
- Figure 51. Tram in shared space streetscape. (Artists Impression) Auckland.

Greenpark, Thames Valley (UK)

This new industrial development is an exemplary model of best-practice industrial/commercial development. It is acknowledged that retrofitting an existing industrial zone (such as that found in Maungakiekie-Tamaki) is a significantly more difficult task than greenfield development, but this case study shows a range of solutions which can be employed to improve conditions for workers, visitors and the environment. Solutions employed at Greenpark include:

Landscaped parkland including:

- a network of cycleways
- nature trails
- paths running around the banks of the stormwater treatment wetlands

Community life:

- frequent, comfortable buses to bring people into Green Park from Reading station or nearby town centres.
- well-maintained, well-lit walkways make it easy to get around the Park.
- cafés and restaurants
- health club
- a day nursery
- acres of natural parkland

Event hosting:

- Events throughout the year, attract workers and nearby residents alike, and these include a range of organised annual events and one off events, including the Reading half-marathon and the Corus Triathlon. Longwater Lake also hosts regular angling competitions.

Green energy (wind and solar):

- The development generates 2.3 megawatts of clean energy, enough to power around 1200 homes.



Green Park fast track:

- A fleet of low emission eco-friendly buses. These are among the first in the UK to meet the stringent 'Euro 4' European emission standards and produce significantly lower levels of carbon dioxide and nitrogen oxide than regular fleets.
- Buses include full wireless access and a real time information system for maximum passenger comfort and security.



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FIGURE LEGEND:

Figure 52. Green Park, Reading.

Figure 53. Green Park, Reading.

Retrieved from URL:

http://www.greenpark.co.uk/pdf/pdf/GP_OVERVIEW_BROCHURE.pdf