

S E C T I O N T H R E E

C O N T E X T & A N A L Y S I S

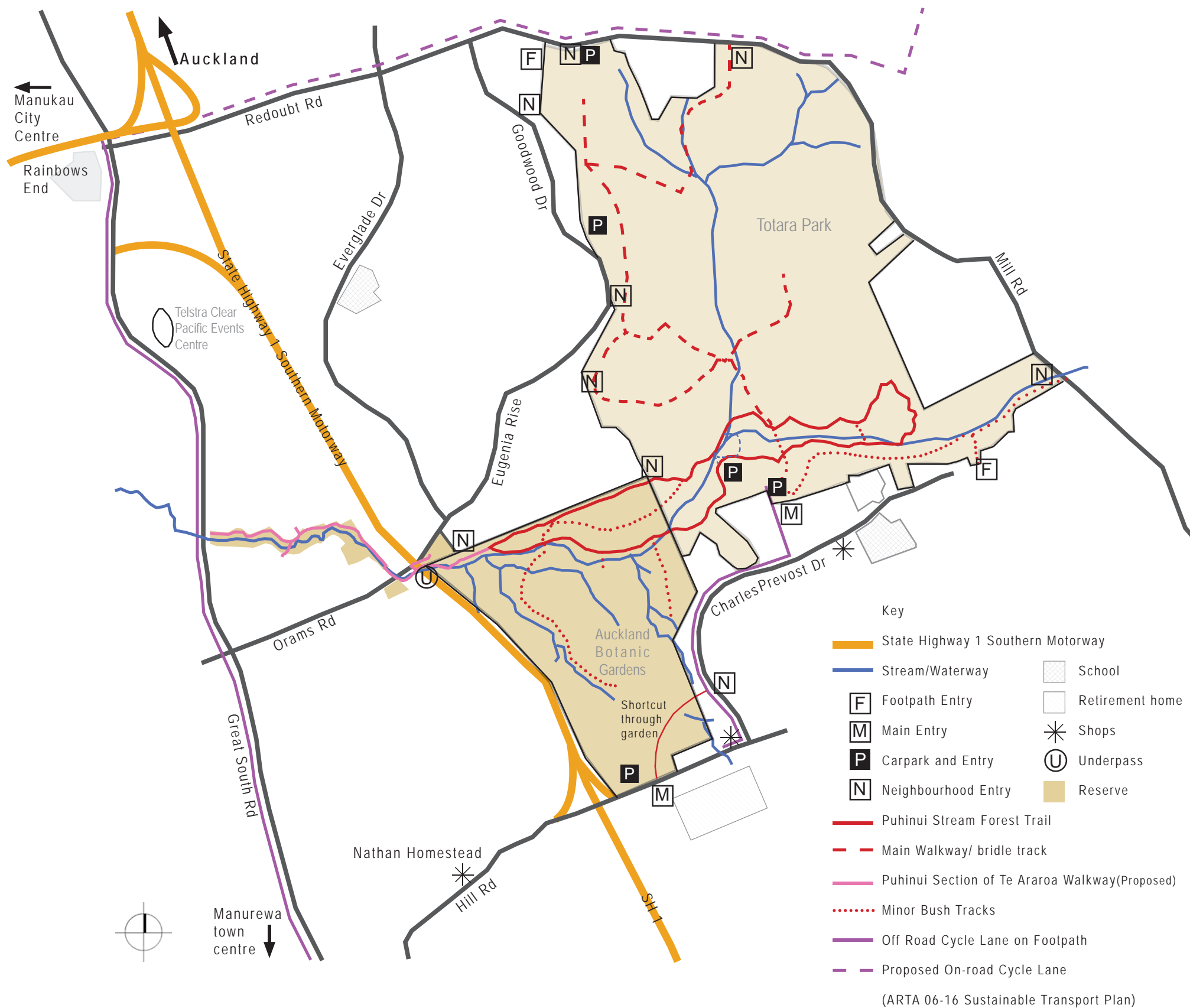
3.01 Context

3.02 Public transport connections

3.03 Constraints and opportunities

3.04 Analysis layers

3.05 Topography (landform)



3.01 Context

Vehicle access

The proximity of the Botanic Gardens to State Highway 1 creates an opportunity to improve its public profile as a significant visitor destination to passing motorists. However this must be balanced with the need to screen and buffer the Gardens from traffic noise. Vehicle access to the Botanic Gardens from the south-bound lane of the motorway is clear and legible. However there is no north-bound motorway exit at Hill road, making it far more complicated to find the Gardens from the Manukau exit, particularly given the northern entrance to the Gardens is currently only open for major events.

Vehicle access to the Botanic Gardens is primarily at the main entrance on Hill Road. The traffic volumes and speeds on Hill Road currently create significant delays for vehicles queuing to exit from the Botanic Gardens at peak hours and on weekends. A traffic management plan is required to resolve these issues, ensuring good pedestrian movement within the vicinity of the entrance at the same time.

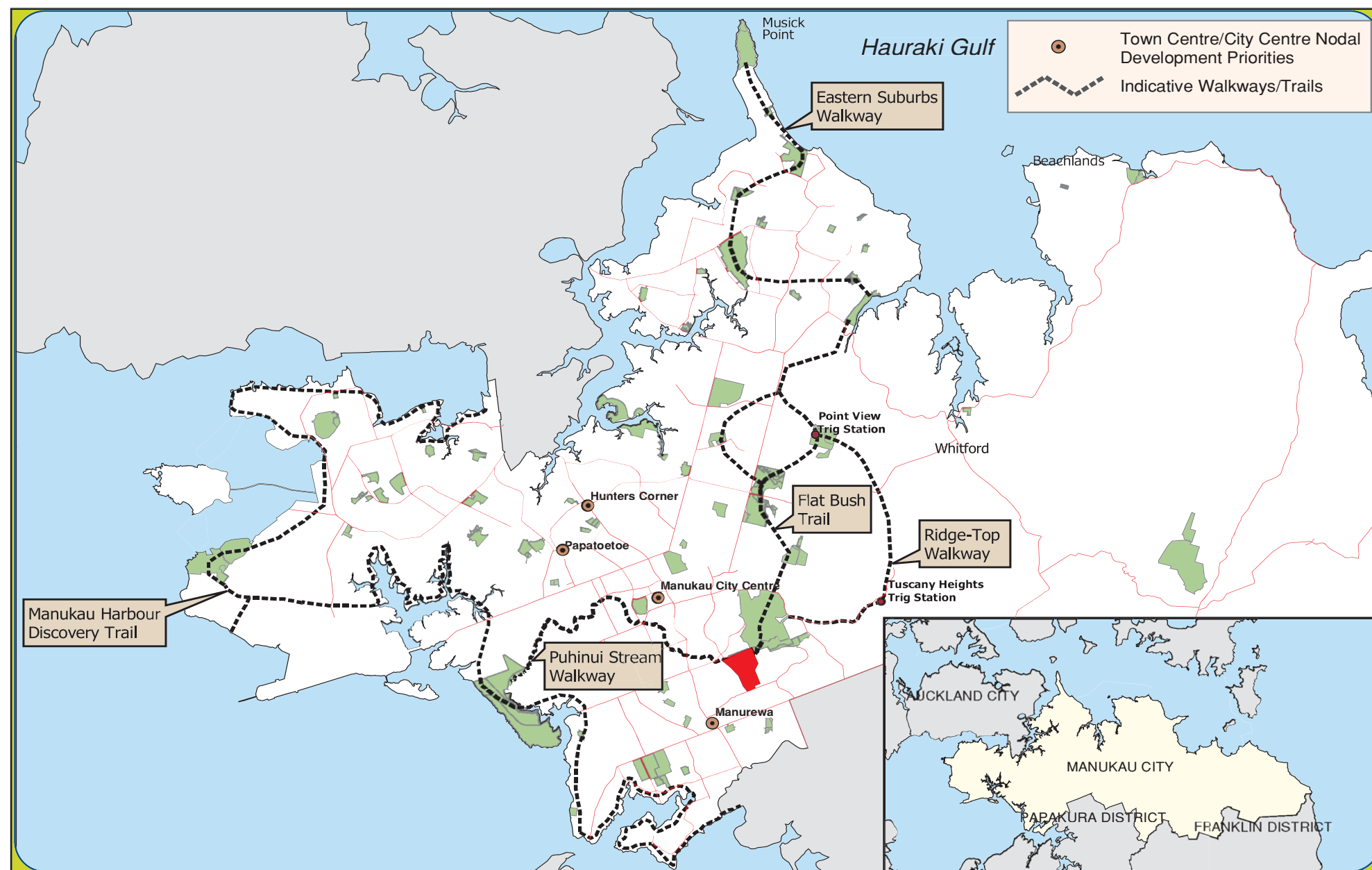
Overflow parking is currently provided in an open grassed area for events, depending on the size and duration of the event. It is also made available most busy weekends when the ground is sufficiently dry. Some visitors to the Gardens may opt for parking in Totara Park to have a full day experience encompassing the Botanic Gardens. There is further opportunity to promote these options.

Cycle access

Cycle access to the Botanic Gardens is likely to become more popular in future, and provides a sustainable transport option for the wider community. Although cycling is not currently permitted within the Botanic Gardens, there is the opportunity to utilise secure bike racks at the main or northern entrance.

The provision of mountain bike facilities within Totara Park may attract more cyclists. However, the Puhinui Stream walkway and the bush trails connecting to Totara Park do not currently provide for cyclists.

An off-road cycle lane has been provided between the Gardens Shopping Centre on Hill Road, and along Charles Prevost Drive to the Totara Park entrance on Wairere Ave. This will provide safe cycling opportunities for school children cycling to the primary school on Charles Prevost Drive. In addition, an on-road cycle lane proposed along Redoubt Road in the ARTA 06-16 Sustainable Transport Plan may encourage more cyclists to use the Everglade entrance to the Botanic Gardens.



Source: 'Making Connections', Manukau City Council's park strategy document

Parks and reserves

The Auckland Botanic Gardens has a regional identity and significance, but also provides an important connection to a citywide system of open spaces and walkways within Manukau. The enhancement of native bush corridors along the waterways, and the protection of significant stands of remnant podocarp forest also increases the ecological value of these connections.

'Making Connections' is Manukau City Council's park strategy document. This document identifies Totara Park as the largest premier park in Manukau (equal in size to Puhinui Reserve). 'Te Araroa walkway' is a citywide walking trail that will eventually connect Puhinui Reserve to Totara Park along the Puhinui Stream. The proposal to extend the arboretum in Totara Park is one initiative that could strengthen its relationship to the Gardens.

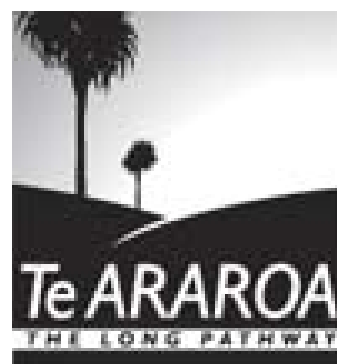
Pedestrian access

Pedestrian access to the Botanic Gardens is facilitated by bush walking trails connected to Totara Park, and neighbourhood street entrances to the north and east of the Botanic Gardens. However, pedestrian access from the south and west is severed by the motorway and the traffic dominated environment of Hill Road. This is compounded by the typically cul-de-sac dominated street layout of the surrounding neighbourhood.

In future, continuation of the Te Araroa walkway under the motorway to connect to the northern entry of the Botanic Gardens, and traffic calming to facilitate pedestrian movement along and across Hill Road would help to improve pedestrian access to the Botanic Gardens. In addition, Manukau City Council are working in partnership with the Auckland Botanic Gardens to establish a clearly signposted network of bush trails connected to Totara Park.

Destinations

There are a number of visitor attractions in the Manukau area that complement the Botanic Gardens as a regional destination. Auckland Botanic Gardens staff are investigating the development of a travel plan for the Botanic Gardens, which could potentially include developing an event and tourism circuit with other key destinations in the Manukau area. Local attractions include Rainbows End, Telstra Clear Pacific Events Centre, Nathan Homestead and Totara Park (equestrian centre, mountain bike facilities and function centre), as well as Butterfly Creek and Aylries Garden in Whitford. A tourism circuit encompassing wider Auckland attractions may include the zoo, Auckland museum, Kelly Tarltons and Motat.



3.02 Public transport connections

The Botanic Gardens is a regional facility catering for the community and the people of Auckland, as well as visitors to Auckland from New Zealand and overseas. There is considerable demand for carparking within the Botanic Gardens, as the majority of visitors arrive by car. Parking demand tends to peak around weekends and during organised events. Fluctuations in parking requirements are managed operationally with overflow parking to avoid unnecessary expanses of asphalt. However, the master plan process has identified the need to strive toward more sustainable transport options in the future, to minimize reliance on private transport.

Buses

Bus stops are located at the main entrance to the Botanic Gardens, and in close proximity to the northern entrance. The bus route (466) travels between Manukau City Centre and Manurewa town centre, taking 20 mins to reach the Botanic Gardens in either direction. From outside of this area, a two stage journey (or more) is required, with the first stage originating from Downtown, Howick or South Auckland. An overly complicated and time consuming journey is likely to be a deterrent to most visitors. Direct bus routes to the Gardens from a wider area may encourage more visitors to come by bus.

Train

The nearest train station is the Manurewa Interchange, a 20 minute walk from the Botanic Gardens. This is further than most people would generally be prepared to walk, and may be a deterrent to visitors. A 10 minute walk is approximately 800m and according to urban design best practice is the maximum distance that most people will walk to nearby facilities. A regular shuttle from the train station to the Botanic Gardens and other visitor attractions in the area would encourage more visitors to travel by train and bus. A well sign-posted and safe walking route with multiple crossing points would cater for those visitors prepared to walk. Proposed initiatives such as the 2012 rail extension to Manukau City Centre are likely to have some influence on future integrated transport opportunities.

- Key
- 1 Manukau City Centre
From Downtown, Howick and the South
 - 2 Closest Bus Stop to Gardens: 100 Hill Road
 - Howick and Eastern Bus route 466
 - Walking route from Train station approx 20mins.
 - 2 Manurewa Interchange
 - Secondary Bus stops
 - Train Line

Public Transport Linkages to Auckland Botanic Gardens

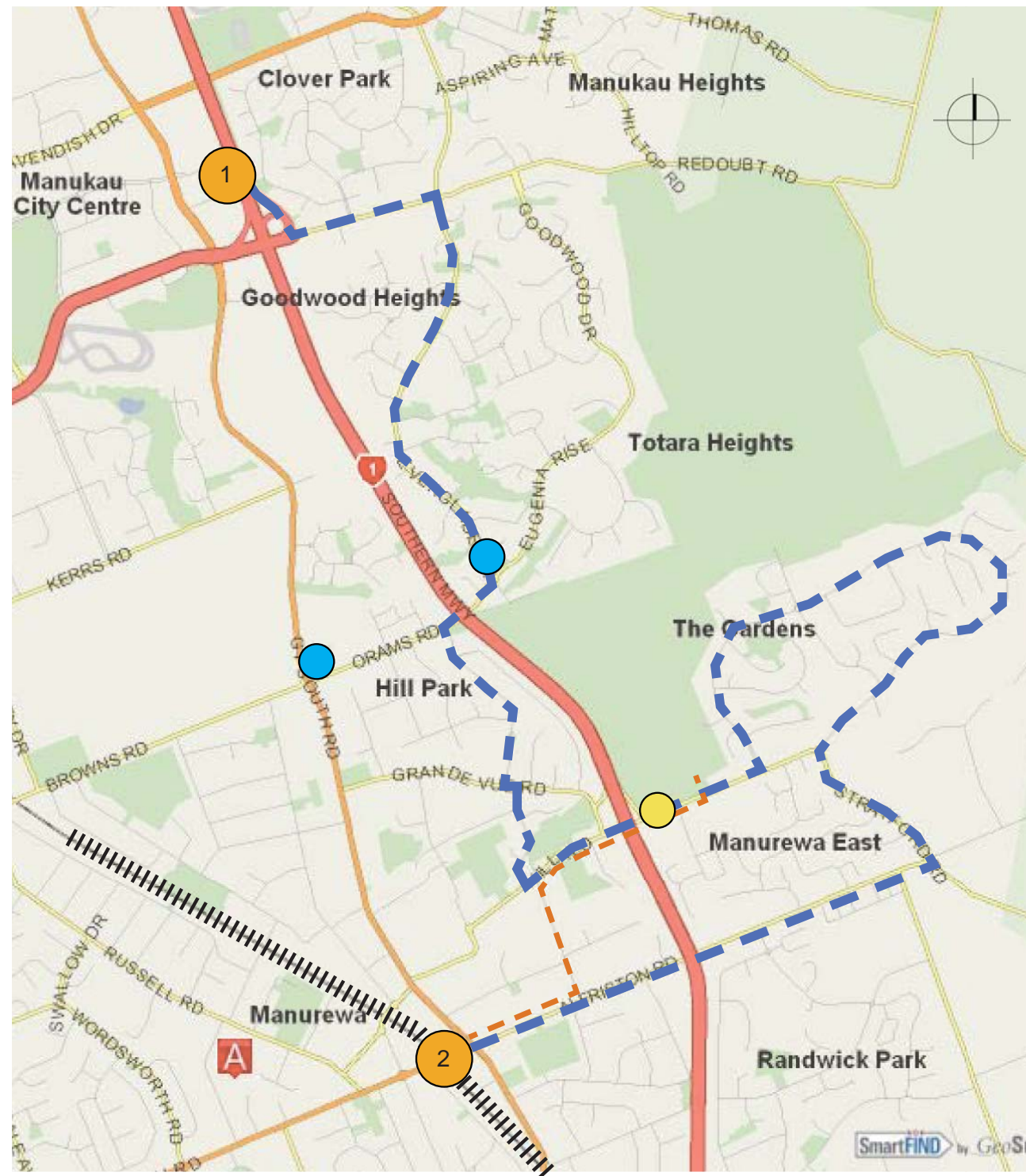
Train

From Britomart Train Station to Manurewa Interchange, journey is approx 45mins:
 Weekdays: trains depart approx every 15 mins from 5:40am
 Weekends: trains depart half hourly from 7:10am

Bus: Route 466

From Manukau City Centre to 100 Hill Road, journey is approx 20mins:
 Weekdays: buses depart approx every half hour between 6:30am and 6:30pm.
 Saturdays: buses depart hourly between 8am and 6pm
 Sundays: buses depart hourly between 9am and 6pm

From Manurewa Interchange to 100 Hill Road, journey is approx 20mins:
 Weekdays: buses depart half hourly between 7:30am and 6:30pm
 Saturdays: buses depart hourly between 7:30am and 6:30pm
 Sundays: buses depart hourly between 8:30am and 6:30pm



3.03 Constraints and opportunities

KEY to existing features

- 01 Public Toilets in Discovery Centre
- 02 Powerlines
- 03 Prevailing wind
- 04 First original mill in this area
- 05 Public Toilets and food in visitors centre (Huakaiwaka)
- 06 Car park
- 07 Historic WWII army camp site
- 08 Gravel carpark for events only
- 09 Loop road
- 10 Open lawn and overflow parking
- 11 Plant nursery
- 12 Ellerslie Flower Show infrastructure
- 13 Significant remnant native podocarp forest
- 14 Service depot





Disconnected experience

The gardens and collections have been concentrated in the southern part of the site, while the northern part of the site remains largely undiscovered by visitors. This appears to be for a number of reasons:

- a) there is a lack of framed views enticing visitors further into the site and providing a hint of what lies beyond
- b) walking routes are unclear, and visitors are reluctant to venture too far if they don't know where they will end up
- c) the northern part of the site has remained largely undeveloped because it has been reserved for the Ellerslie Flower Show and associated infrastructure
- d) there are no orientation devices, facilities or activity anchors drawing visitors further into the site
- e) walking distances may be perceived as too far for some visitors who start their journey at the Visitors Centre.
- f) The journey through the gardens is disconnected in parts by servicing and operational functions, such as the nursery, overflow parking area and the central depot.

The existing remnant podocarp forest provides a strong indigenous character for the site. However connections to the bush are fragmented by discontinuous planting themes along waterways.

Loop road circulation

The loop road is a wide asphalt driveway with a concrete kerb and channel. It works particularly well for service vehicle access, but discourages visitors from interacting and engaging with the gardens. Typically visitors will walk around the loop road circuit because it is the most logical and intuitive way to get around site. Often, mothers with prams will take this direct route to the Potter Children's Garden.

The loop road is disconnected from the paths within the northern part of the site associated with infrastructure established for the Ellerslie Flower Show.

Sensitive edges

The location of the Botanic Gardens adjacent to the southern motorway is an advantage for publicity and promotion, however the motorway noise may discourage visitors from spending much time in these parts of the Gardens. Powerlines along the western site boundary also create undesirable edge conditions and place restrictions on tree planting.

Typically the gardens and collections have been organised around the outside of the loop road, meaning that they have been pushed closer to the motorway edge and residential housing boundaries.

Passive surveillance is an important consideration for safety and security, but this often conflicts with the need for enclosure, shelter and screening when gardens are placed too close to boundaries.

Carparking

The demand for parking within the Botanic Gardens fluctuates depending on the time of day, day of the week, between seasons, and during events. For this reason, overflow parking areas provide the most flexibility for managing parking provision. Overflow parking areas used during events and busy weekends currently encroach into the Gardens and disrupt the potential for a connected and logical sequence of gardens.

Car parks also need to be balanced with adequate areas of planting and in some cases screening. However continuous dense planting along the road frontage creates an anonymous edge to the Gardens, with no views in.

There is an opportunity to improve visitor access to the northern entrance, and to improve the safety and surveillance for parking areas and pathways.



Public transport opportunities

Where practicable the Auckland Botanic Gardens will support the investigation of travel demand management techniques. This is to minimise reliance on private transport and the impacts of vehicle parking areas, which can adversely impact on the amenity of the Gardens and the natural environment by increasing run-off from impervious surfaces.

Although most options to improve public transport services are beyond the scope or influence of the Botanic Gardens, opportunities have been identified through the master plan process that could be investigated further. Opportunities that have been identified to discourage private vehicle use and minimize parking requirements include:

- Alignment with other Auckland Regional Council scoping studies looking at travel demand management options for the regional parks network, including a specific travel plan for Auckland Botanic Gardens if required.
- Promotion on the Auckland Botanic Gardens website for alternatives to private transport such as car pooling, public transport options, and walkways/ cycleways in the area.
- Managing the size, type and duration of events to stagger start and leaving times
- Utilising remote parking venues with organized shuttles during events (e.g. Totara Park)
- Spreading visitation away from peak periods, and increasing evening visitation by promoting attractions and marketing to specific audiences
- Encouraging school groups and other organized groups to consider sustainable transport options
- Marketing to tourism organizations for package tour visits to the Botanic Gardens by bus
- Develop shared public transport initiatives with the Telstra Clear Pacific Events Centre and Rainbows End, including joint marketing, programming for events and co-ordinated public transport routes.
- Provide more bike racks in the gardens to encourage cyclists
- Improve pedestrian entrances and access to the Gardens
- Manage overflow parking on site as multi-purpose spaces utilising Low Impact Design (LID) techniques

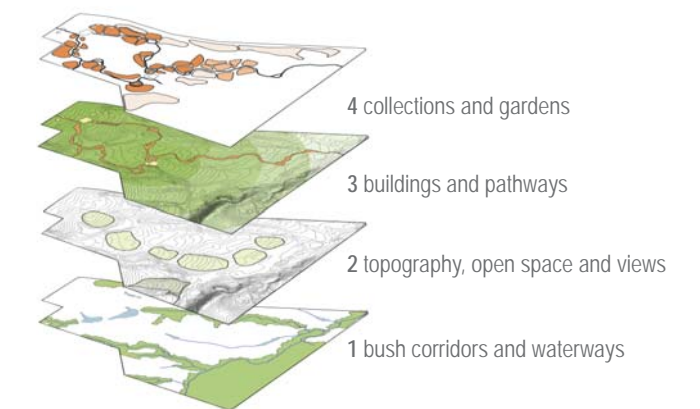
Ellerslie Flower Show site

The northern section of the Gardens has been reserved for the Ellerslie Flower Show for some time, but is currently under-utilised. Existing infrastructure including roads, paths, power and water services remain in this location. There is an opportunity to better utilise this site, and improve its relationship to the gardens as a whole.

In general, events held at the Botanic Gardens should relate specifically to the Gardens and encourage greater interaction and engagement with the plant collections. The scale, type, duration and frequency of events should also be appropriate for the Gardens, and attract visitors at times where visitation numbers may be typically low. An opportunity for the Ellerslie Flower Show site is to utilise existing infrastructure for night lighting events, and showcase the interplay between light, water and plants as a point of difference for the Botanic Gardens. This could also be combined with temporary sculpture in the Gardens.

These opportunities are reflected in the Event Research carried out in 2008, which reveals that a Flower and Garden Show holds little appeal for this site and provides limited interaction of visitors with the Botanic Gardens. Conversely, night lighting was one of the top 5 attractions that is likely to increase visitation. (Refer to Appendices for Event Research Summary).

3.04 Analysis Layers



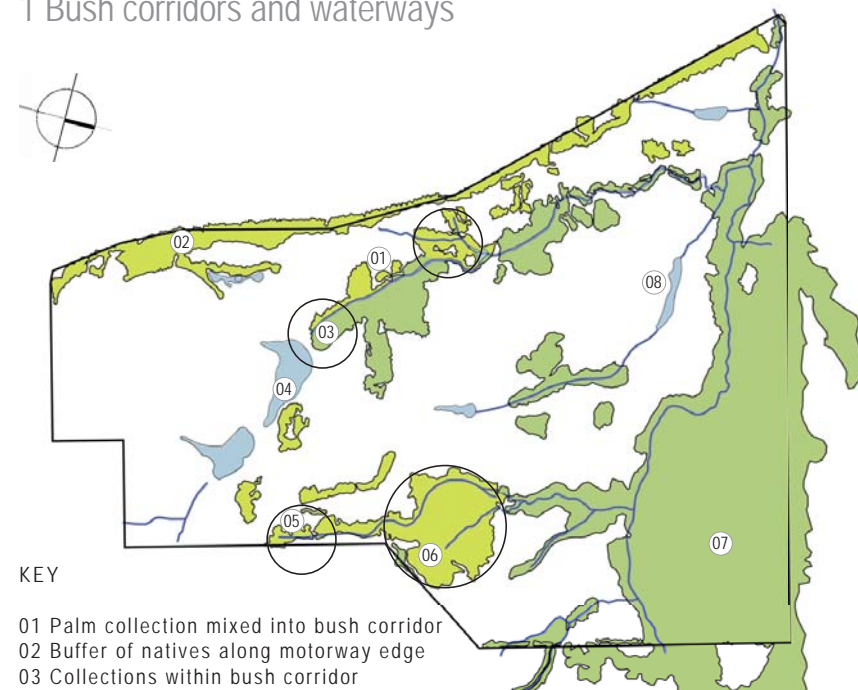
The diagrams on this page illustrate 4 layers of analysis relating to current issues and constraints within the Botanic Gardens.

On the following page, these diagrams have been paired with a matching layer diagram illustrating the opportunities for improvement.

Each of these layers relate to the overall spatial framework of the Botanic Gardens, and highlight the need for:

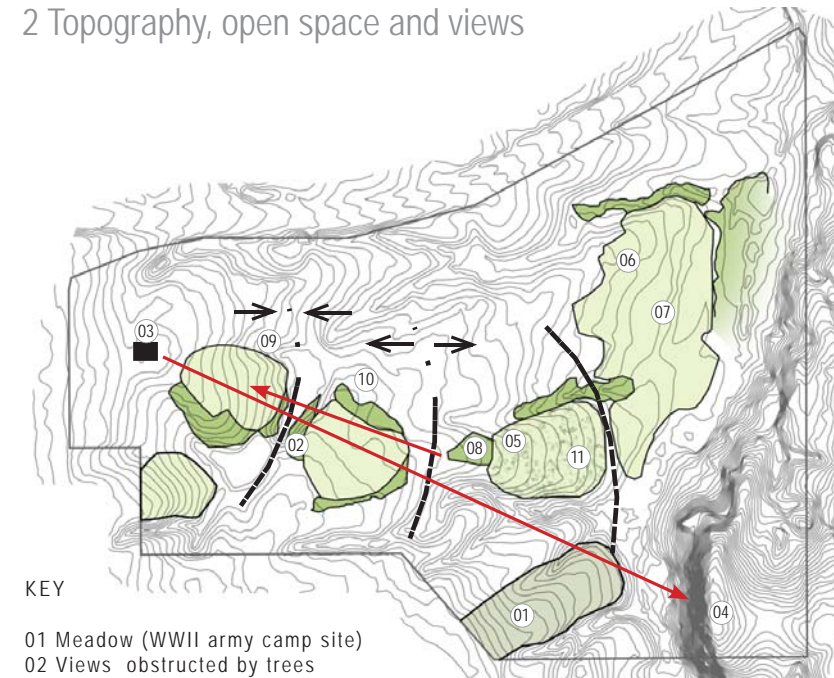
1. a coherent identity and character derived from a legible vegetative framework which enhances the ecological value of the stream corridors,
2. defined areas of open space proportionate to use, landform and scale of adjoining gardens, allowing for visual connections throughout the site,
3. a legible network of connected pathways to engage with the gardens and experience the whole site, and
4. space to incorporate new gardens and collections, and intensify or 'fill the gaps' to create a seamless journey through the gardens away from motorway and residential edges

1 Bush corridors and waterways



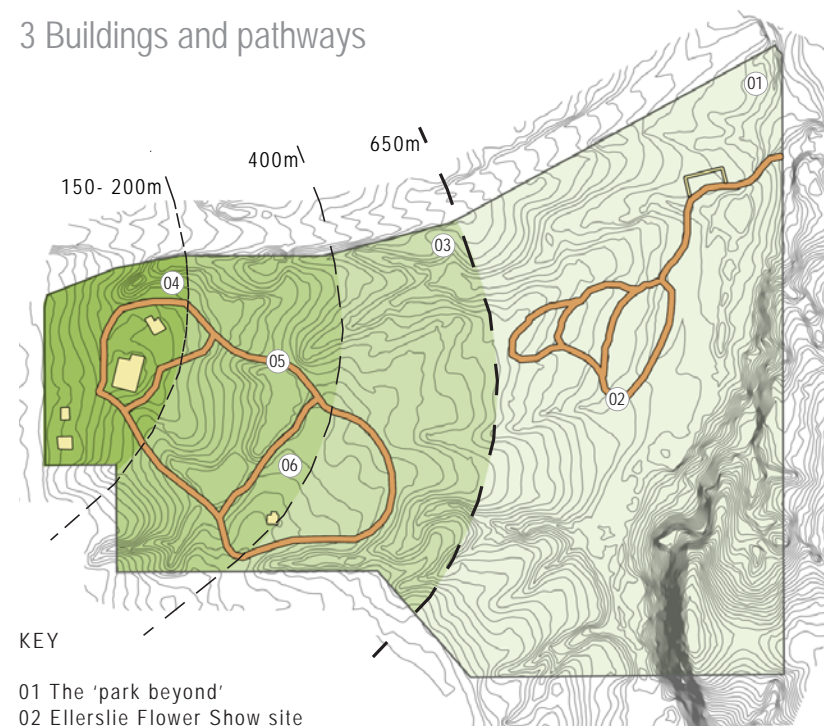
- KEY
- 01 Palm collection mixed into bush corridor
 - 02 Buffer of natives along motorway edge
 - 03 Collections within bush corridor
 - 04 'online' ponds
 - 05 Spring blossom collection mixed into bush corridor
 - 06 Camellia and Magnolia collection mixed with bush corridor
 - 07 Backdrop of significant remnant native Podocarp bush
 - 08 Low point/ gully pond fed by bore

2 Topography, open space and views



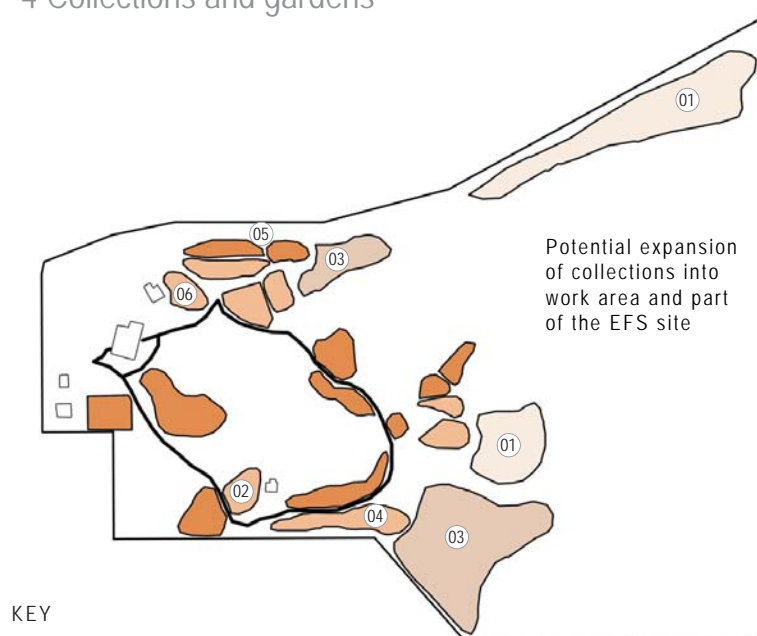
- KEY
- 01 Meadow (WWII army camp site)
 - 02 Views obstructed by trees
 - 03 Visitors centre on high point- "approach and reveal"
 - 04 View to highest point of bush clad hill
 - 05 Open space dotted with trees (Gondwana arboretum)
 - 06 Ellerslie flower show site
 - 07 Events Lawn flat
 - 08 NZ rose garden block
 - 09 Front Lawn sloping
 - 10 Central Lawn flat
 - 11 Sloping

3 Buildings and pathways

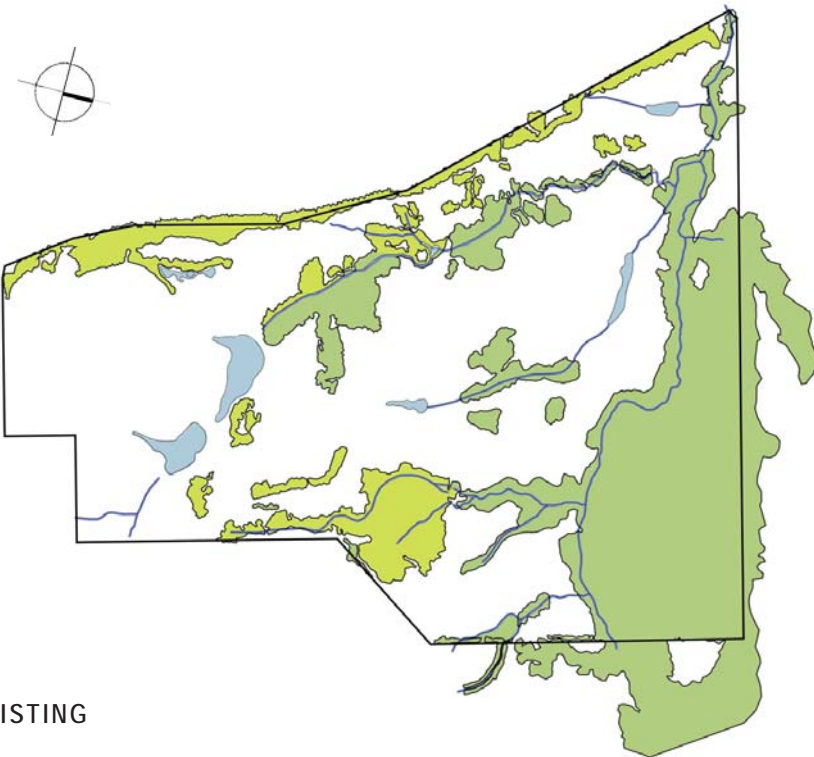


- KEY
- 01 The 'park beyond'
 - 02 Ellerslie Flower Show site
 - 03 The Botanic Gardens appear to end here
 - 04 Most visitors visit the cafe or information centre
 - 05 Asphalt Loop road with kerb upstand - looks like a road and most visitors follow it
 - 06 Cant see beyond this point from the visitors centre, but many people head down to the water

4 Collections and gardens

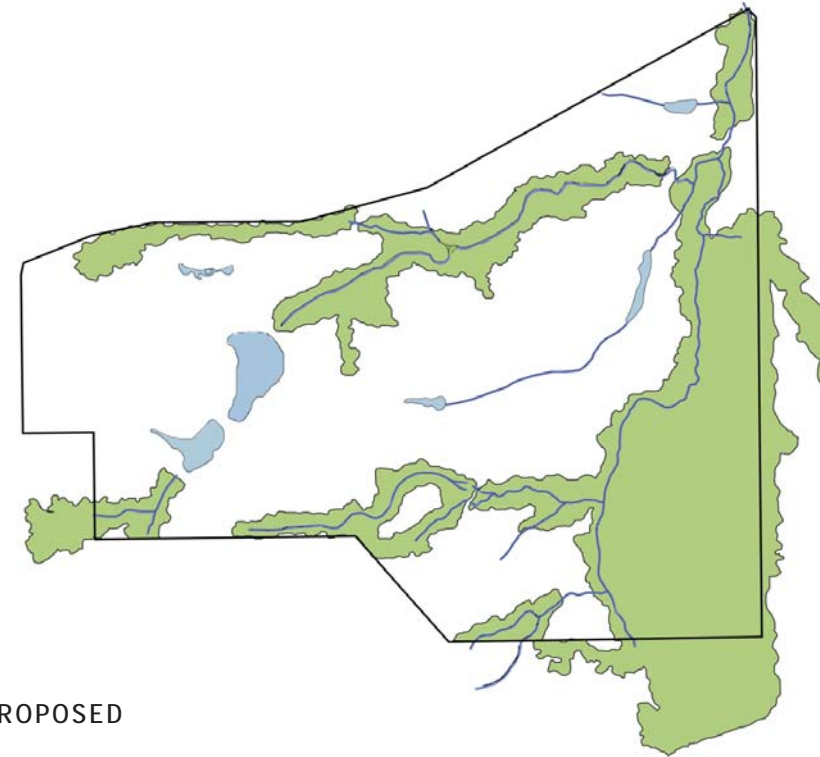


- KEY
- 01 Arboretum
 - 02 Themed gardens
 - 03 Small trees and shrubs
 - 04 The collections are pushed up against residential boundary
 - 05 The collections are forced to the edges where there are noise issues with the motorway
 - 06 Most of the gardens/ collections hang off the loop road but this does not encourage people to engage with the collections.



EXISTING

Existing fragmented bush corridors and waterways (mixed in with collections and other amenity planting)



PROPOSED

Strengthen the waterways and bush corridors as a structuring device

Bush corridors and waterways

Strengthening corridors of indigenous vegetation associated with waterways will create a unique setting for the gardens and collections, positioning the Auckland Botanic Gardens in its South Pacific context. Continuous bush corridors of Totara, tree fern and other native species sourced from on-site seed stock will connect the whole site to its bush backdrop and to Totara Park. The ecological and environmental value of these corridors will be magnified by future work planned along the Puhinui stream corridor.

The bush corridors naturally divide spaces to enclose and frame the gardens and collections, and provide noise and visual screening to the motorway edge.

It is acknowledged that the waterways provide an ideal microclimate and setting for some established collections that do not necessarily belong to the native bush corridors. However, every effort should be made to focus new plantings and garden developments around indigenous species sourced from local seed stock.

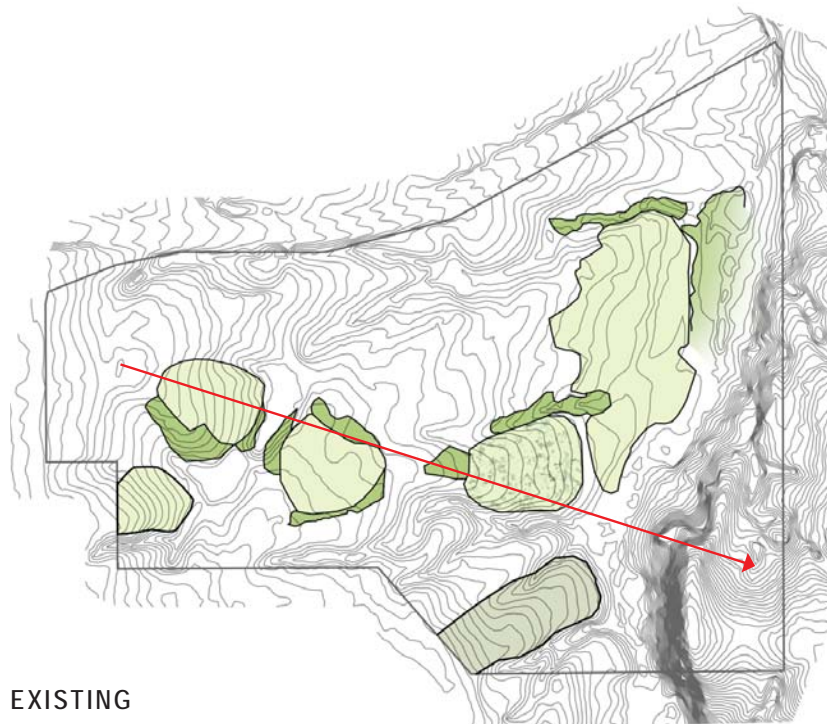
Topography, open space and views

Areas of open space fulfill a demand for events such as music or sculpture, and informal recreational activities such as picnics and games of kilikiti that support the use of the Botanic Gardens as a regional destination.

Existing areas of open space reinforce the underlying topography and sweep in a curve that connects the northern and southern parts of the site. A sequence of 'pacific lawns' is proposed for events that encourage interaction with the gardens and collections and an awareness of the overall setting.

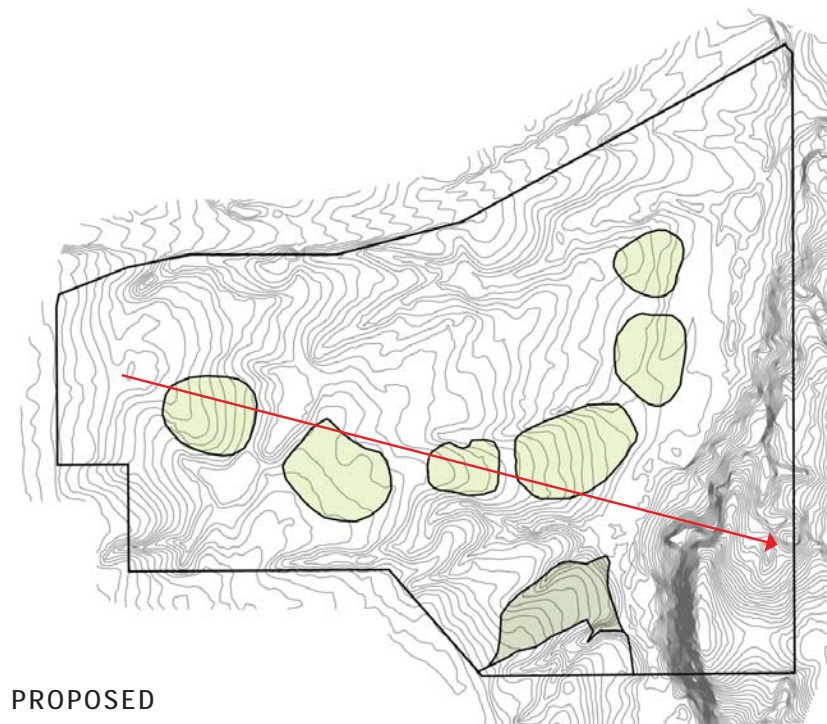
Areas of open space also protect important views and visual connections that unify the visitor experience and entice visitors through the site by revealing 'what lies beyond'. Planting around lawns should frame views rather than obstruct them.

In combination with the bush corridors and waterways, the idea of 'pacific lawns' is one that draws on a South Pacific theme.



EXISTING

Open spaces follow the 'lie of the land' but views and connections between them are obstructed.



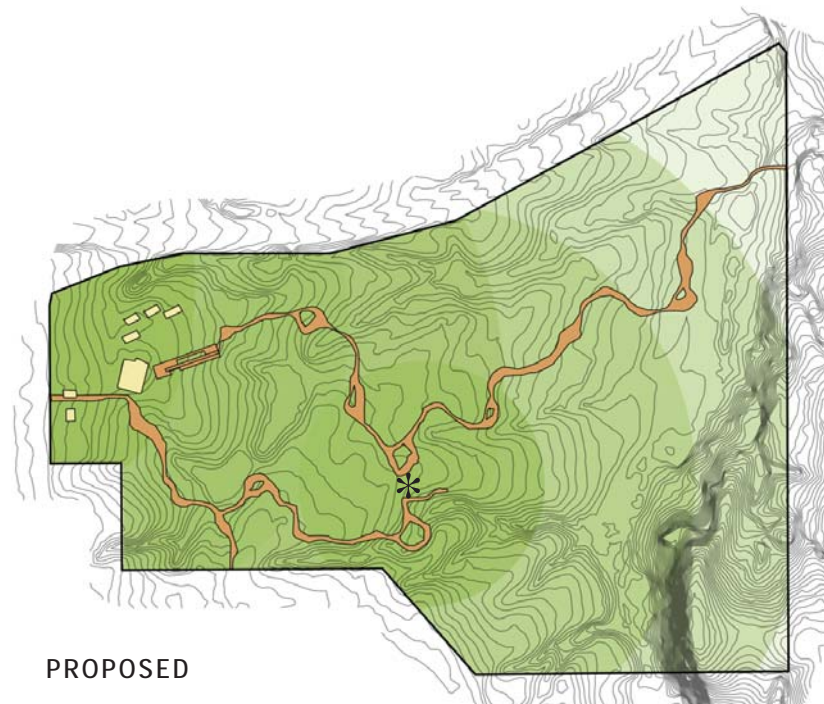
PROPOSED

Strengthen the sequence of open spaces and break up into smaller 'event lawns'.



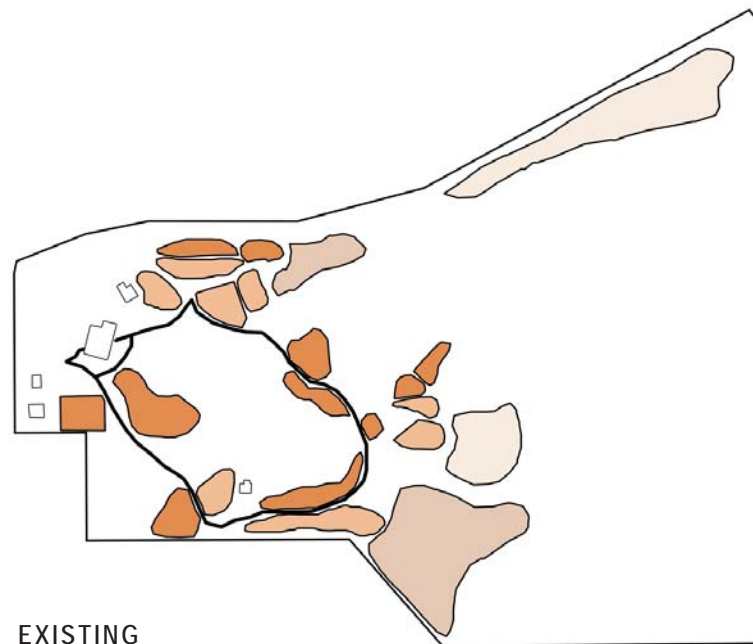
EXISTING

The Gardens are disconnected from the park beyond, and visitors 'stick to the loop road'.



PROPOSED

The Gardens are connected throughout, and the path network and a new built structure invite visitors to explore the whole area.



EXISTING

Collections hang off the edge of the loop road and drift into the park beyond



PROPOSED

The collections are stitched together by the primary path network (the 'pacific strip') and have potential to expand into part of the former Ellerslie Flower Show site and away from the motorway edge

Buildings and pathways

Connecting the northern and southern parts of the site with a main path route, i.e. the 'pacific strip', will ensure greater visitor utilisation of the whole site. A connection to the northern entry also caters for the local community and visitors who may enter the Botanic Gardens from this direction, particularly during events and peak periods (e.g. 'summer entry').

The circuit around the core area is strengthened by a second strip connected by a building or structure at either end. The visitors centre is the start and finish of this circuit, mirrored by a built structure (shown as an asterisk on the diagram) creating both a linking element in the circuit, and a gateway to the northern half of the Gardens.

By weaving the pacific strip through the gardens and collections, rather than defining the inner edge as the loop road does now, more opportunities are created for direct interaction and engagement with the Gardens.

Gardens and collections

Intensifying the gardens along the pacific strip will create a logical pattern of development meeting future demand for expansion of gardens and collections. This involves 'filling the gaps' to create a seamless journey, and considering the theming of adjacent gardens to create a logical sequence from one garden to the next. This may require relocation or replacement of some existing gardens in future.

The alignment of the pacific strip through to the northern entry allows for future gardens to be developed away from the motorway edge.

The focus on colour and floral displays around the core circuit should be maintained. Other shrub and tree collections, including the Gondwana arboretum are most appropriately located in the peripheral areas.

3.05 Topography (landform)

The topography of the Botanic Gardens site is generally undulating, with tributaries of the Puhinui Stream contributing to the character of the landform and natural division of space. Some of the waterways have been turned into ponds and lakes, becoming focal features within the Gardens.

The visitors centre 'Huakaiwaka' occupies an elevated and commanding position, offering expansive views of the Gardens toward the backdrop of podocarp forest. The highest point on the site is the bush-clad hill in the northern corner, on the boundary shared with Totara Park.

The most important viewshaft is between the two highest points on site: the visitors centre and the hill covered in bush. The height of any structures within this viewshaft would be relative to elevation.

Elevation (meters)

