

## S E C T I O N   F O U R

### M A S T E R   P L A N   L A Y E R S

---

4.01 Master plan

4.02 Path hierarchy

4.03 View shafts and open space

4.04 Garden cluster themes

4.05 Garden theming scale and colour

4.06 New garden development

4.07 Buildings and structures

4.08 Detailed area: node 1

4.09 Detailed area: entrance

KEY

- 01 Nathan lawn potential for garden development
- 02 overflow parking approx. 130
- 03 planted swale connecting to pond fore bay
- 04 pohutukawa around edge of lawn
- 05 reconfigured buildings, including conference/ function facility, conservatory and possible research centre.
- 06 Pohutukawa Walk & duplicate path for access to edible garden
- 07 front lawn
- 08 pond enlarged with floating island
- 09 Ethnobotanic Garden and Pacific Garden
- 10 secondary entry to palm garden through nature bush corridor
- 11 relocated selection of palms from palm avenue
- 12 low planting in view shaft
- 13 reduced service area
- 14 main entry to palm garden
- 15 historic flour mill location
- 16 relocated nursery
- 17 northern carpark summer entry approx 48 parks
- 18 northern summer entry with visitor shelter, kiosk and toilets
- 19 pacific strip (main route)
- 20 service vehicle access
- 21 extended Gondwana Arboretum, swathes across lower lawns
- 22 event lawn & overflow parking for events
- 23 meadow old WW2 army campsite
- 24 main entry to Gondwana Arboretum
- 25 loop tracks and incidents
- 26 sequence of lawns
- 27 bush tracks

- 28 new visitor shelter
- 29 new Epiphytum
- 30 recreational lawn and overflow parking for events
- 31 Heritage Orchard
- 32 access for service vehicles and overflow parking during events
- 33 new toilet (8.6mx6m) adjacent to playground entry, 2m from fence with path access



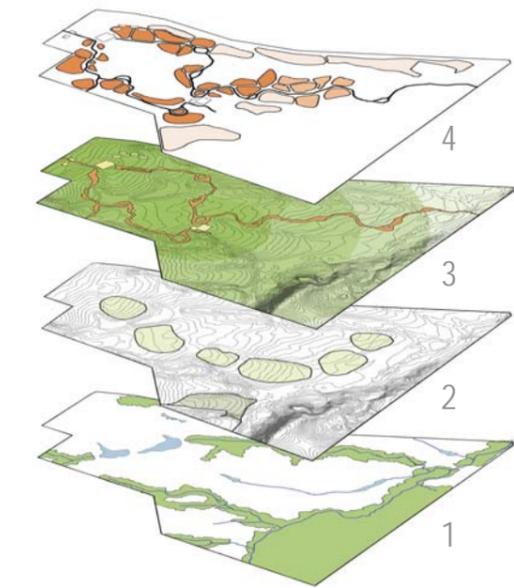
arboretum areas



site boundary

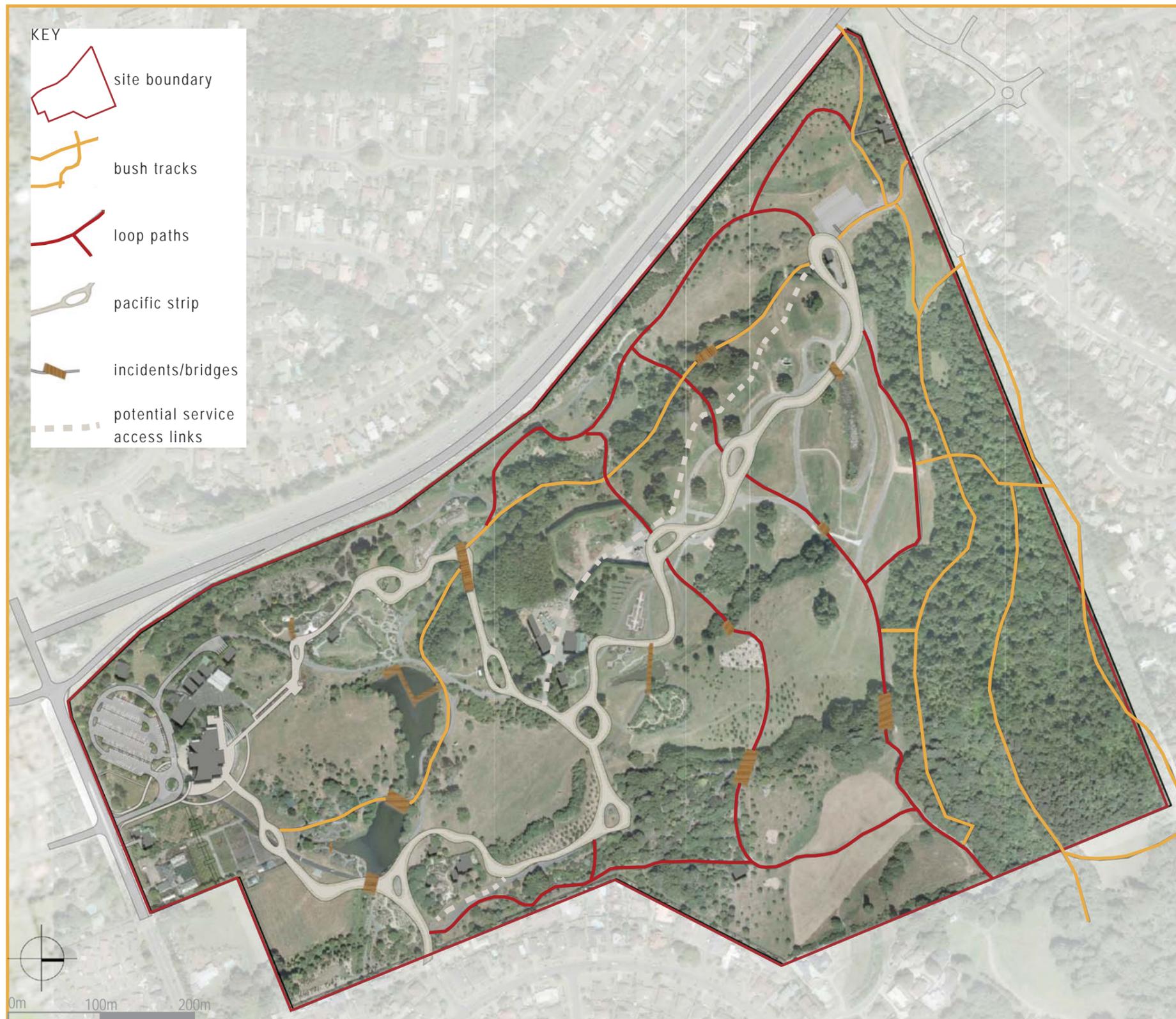


4.01 Master plan



The final master plan provides a framework for future development, based on the organising elements and structuring devices illustrated in the layering diagram:

- 1 Native corridors  
continuous ribbons of native podocarp bush defining waterways
- 2 Pacific lawns  
a sequence of open spaces based on the concept of 'pacific lawns'
- 3 Pacific strip  
a connected primary path network for wayfinding and interaction with the gardens
- 4 Garden clusters  
intensified and themed garden clusters around nodes for a seamless journey



## 4.02 Path hierarchy

A network of paths providing access throughout the site is important, but without a distinctive hierarchy the path network becomes confused and disorientating for visitors.

The plan on this page shows the proposed path hierarchy overlaid with the aerial photo showing existing paths.

### Primary path- pacific strip

The primary path is described as the 'pacific strip', and its alignment deviates from the existing loop road to encourage greater visitor interaction and engagement with the gardens and plant collections. The pacific strip should have a consistent surface treatment so that it is easily recognisable as the main route through the Botanic Gardens.

The pacific strip is also the widest and most accessible path, with gentle grades for pushchairs, wheelchairs, mobility scooters and the like. Where the pacific strip crosses a waterway, an elevated bridge with a long span will help to reduce the grade change.

The width of the pacific strip will vary because it is intended to have a fluid character. However the width of the hard surface is generally expected to be an average of 3m to 3.5m, with an overall corridor width of 10m. The corridor may incorporate representative border planting for adjoining gardens or a permeable edge transitioning to grass or an adjacent hard surface. (Refer to indicative cross sections). The width of the nodes will vary.

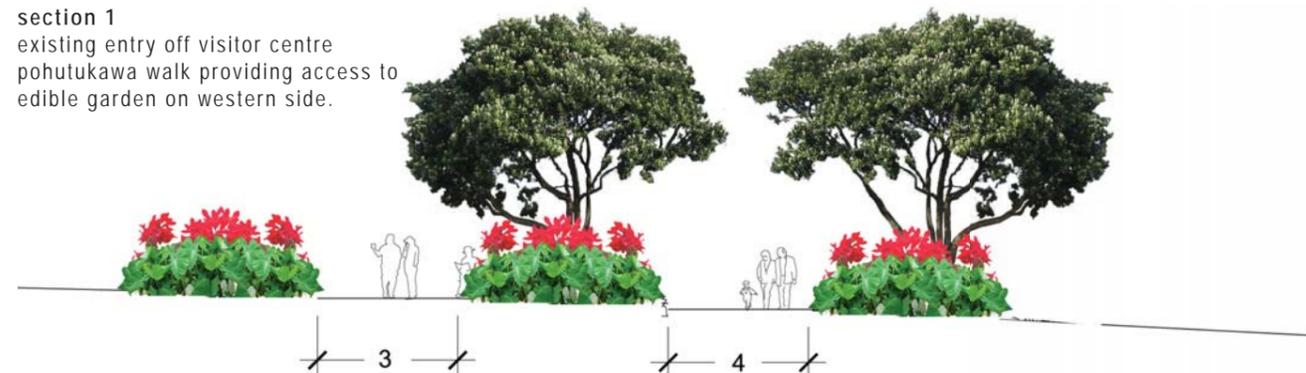
Where possible the main route through the gardens should maximise light and openness to create a pleasant walking experience. However this must be balanced with the priority for interaction and engagement with the gardens, which may necessitate a route through established areas of taller planting.

### Secondary loop paths

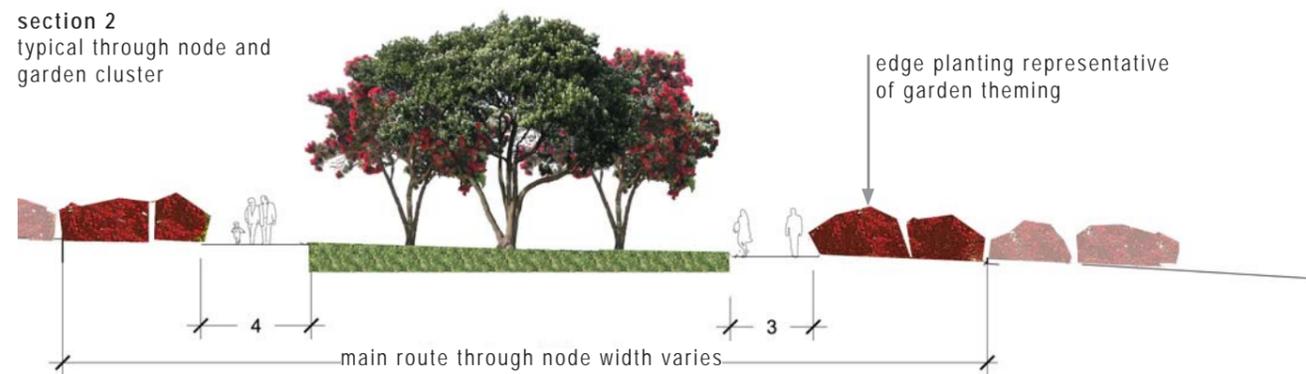
Secondary paths provide access to peripheral areas, in particular the Gondwana Arboretum areas in the northern part of the site. Secondary path loops connect to a node and provide a choice of smaller or larger walking circuits. The gateway to Gondwawa will be positioned on a node.

Secondary loop paths are the second widest type of

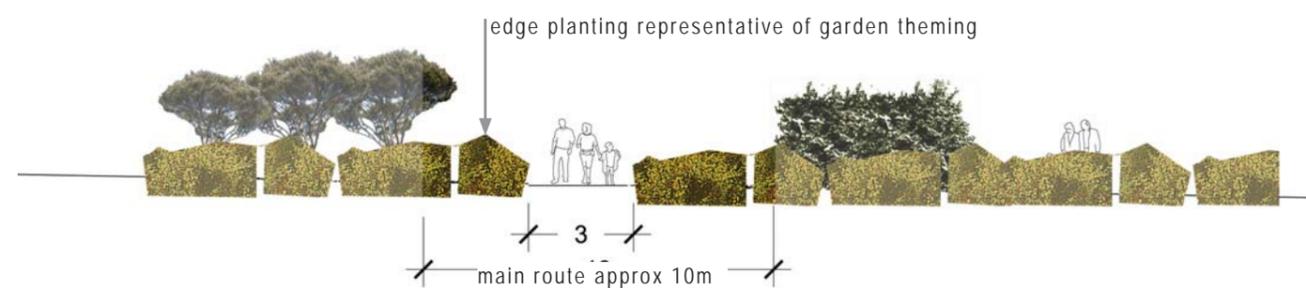
section 1  
existing entry off visitor centre  
pohutukawa walk providing access to  
edible garden on western side.



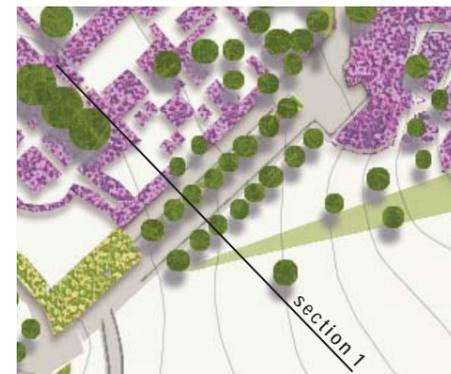
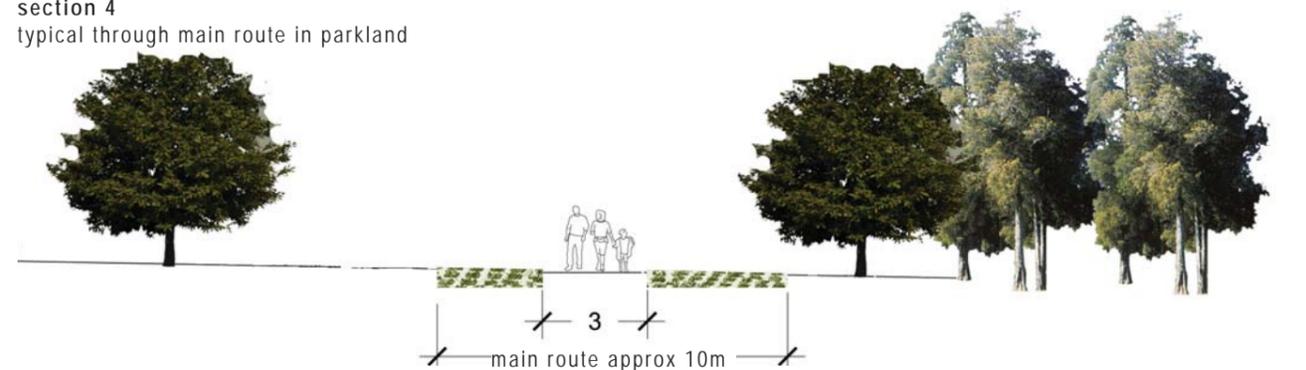
section 2  
typical through node and  
garden cluster



section 3  
typical through main route between gardens



section 4  
typical through main route in parkland



path, and would be in a different material/ surface treatment to differentiate from the main route (pacific strip). Secondary loop paths would be an average of 2.0m to 2.5m wide.

### Bush trails

Bush trails generally follow the waterways and are connected to a wider walkway network along the Puhinui Stream. Bush trails are narrower in width to reduce any potential impact on sensitive stream margins and native vegetation. Bush trails are generally compacted gravel and approximately 1.5m in width or less.

An extension of the bush trail along the western stream corridor to continue along the edge of the lakes would provide access to the waters edge.

### Garden paths

Garden paths are integrated with garden developments and designed specifically to relate to the character, theme, and circulation requirements for each garden. For this reason, garden paths may be a variety of widths and surface materials. However, garden paths should be a minimum width of 1.2m to meet mobility requirements and a maximum width of 1.8m to remain in keeping with the scale of the garden and the hierarchy of other paths. Garden paths should use low impact, recycled and permeable paving materials where possible, such as gravel, shell and recycled brick.

### Service access

With the removal of the loop road and the relocation of the nursery, separate service vehicle access to the central depot will be provided from the northern entry. This is to reduce any potential conflict between larger vehicles (e.g. trucks for composting) and pedestrians on main walking routes. Smaller service vehicles such as Utes and mules may use the main walking routes for maintenance access to gardens. The appearance of a working garden is an important point of difference for the Botanic Gardens and should be kept.

### Incidents

Incidents are landscape structures that are part of the overall site fabric (rather than belonging to a specific garden design or art). They may be bridges, jetties, walls and other features that interact with the land in some way and provide interesting experiences for visitors.



## 4.03 Viewshafts and open space

The identification of viewshafts is important for a site like the Botanic Gardens, where gardens are actively modified on a daily basis and guidance is needed to avoid inadvertently planting out key views.

The protection of important views will help to reinforce the relationship of the Botanic Gardens to its surrounding context, and assist with wayfinding and navigation through the site by referencing back to key landmarks (such as Huakaiwaka).

Views generally have an origin point, such as a main walking route, and terminate with a landmark within the site, such as the visitors centre, the lake, a path node, or hill backdrop. Some views are equally significant in both directions, particularly views to and from the visitors centre.

### Principles

The principles that apply to all viewshafts are as follows:

- Any new trees planted in the vicinity of a viewshaft should frame not obscure the viewshaft, taking into consideration the long term canopy spread and growth habit of the tree
- No structure (such as a shelter, park furniture, signage, gateway or artwork) should be placed within or at the terminus of a viewshaft, unless it is a building of appropriate scale that has been designed for this purpose (such as the Visitors Centre or Epiphytum).
- Elevation and topography should be considered in addition to vegetation, as a factor determining how views may be managed to or from elevated positions. In these situations tree planting may have little impact on views.

### Hierarchy

There is a hierarchy for key views at the Botanic Gardens, both in terms of their importance and how they are managed. The categories are explained further on the following page. Detailed descriptions are also provided for each viewshaft in subsequent pages to explain the purpose of the viewshaft and how it should be managed.



### View category 1

These views are unobstructed distant views considered to be the most important in the Gardens. These views provide open visual connections across and between the pacific lawns framed by groves of trees, and include:

- Viewshaft 1 (distant view to hill back drop)
- Viewshaft 2 (between visitors centre and proposed Epiphytum in both directions)
- Viewshaft 3 (from proposed Epiphytum)
- Viewshaft 4 (view across pond to northern entrance)

These viewshafts should be protected from future tree planting, gardens or built structures within the viewshaft unless identified in the master plan. In some cases trees may need to be removed or pruned and structures removed to open up partially obscured views.

The arboretum areas, and areas of significant tree planting are defined on the viewshaft plan in relation to the viewshafts to avoid encroachment.

### View category 2

This category includes views which may be under the canopy of high branching trees, or through a narrowly defined viewshaft framed by trees. There are no gardens, plant collections or mid-height shrubs in the foreground of these views. These views include:

- Viewshaft 5 (view to lake and urban trees area along edge of pohutukawa tree fringe to lawn)
- Viewshaft 6 (view under trees from main path looking to the lake)
- Viewshaft 9 (view between Arboretum planting areas to hill back drop)
- Viewshaft 10 (view under canopy of existing totaras from main path looking toward northern entrance)
- Viewshaft 13 (view under canopy of arboretum trees from secondary path looking toward the Rose Garden)

These viewshafts should be managed by pruning trees, and not planting any dense / low branching trees or underplanting that will obscure the view. These views should have an open parkland feel with trees in lawn.

### View category 3

These views are layered, i.e. they are across existing gardens and plant collections, but the planting heights and arrangements provide a sense of depth and distance. These are typically shorter ranging views, but assist with orientation and wayfinding by providing a visual connection to a landmark, such as the lake or a main path node. These views include:

- Viewshaft 7 (view from main path across perennial garden to the lake)
- Viewshaft 8 (view across Palm Garden to node, and in reverse from node and Rose Garden to Palm Garden)

These views are managed by maintaining the height of vegetation to create a layered effect, with lower growing plants in the foreground and taller vegetation framing the view. Trees or large shrubs likely to increase in scale from that shown in the photos should be relocated or pruned.

### View category 4

This category includes external views to or from outside the Botanic Gardens. This includes views into the Gardens from adjoining streets and the motorway, and views to distant landmarks from within the site. External views which cannot be controlled by managing the height of boundary planting within the Gardens are not included (such as views into the Botanic Gardens from parks or streets with a higher elevation than the Gardens).

- Viewshaft 11 (view across the northern end of the Botanic Gardens to distant hills.)
- Viewshaft 12 (view of the Visitors Centre from Orams Road motorway overbridge)



### Viewshaft 1

This is a category one view, and is part of the arrival sequence from the Visitors Centre. From the front terrace of the visitors centre, the view aligns with the highest point on the bush clad hill in the background. This distant view provides context, and a connection to the wider landscape. It is an all-encompassing view, i.e. it also captures the ground level view of the lawn, lake, and gardens described in viewshaft 2.

This view should be managed to ensure broad views to the native bush and hill backdrop are not obscured by any tree or structure placed in the immediate foreground.



### Viewshaft 2

This is a category one view aligning with viewshaft one, but is intended to protect views at eye level along the ground plane, rather than the distant views described for viewshaft one. This view is between the Visitors Centre and the future Epiphytum (currently the Rose pergola) and includes the lawns, lake, and a glimpse of the Rose Garden. Recently removed trees in this viewshaft now reveal more of the site beyond the lake.

To maintain this view, trees should not be planted in the lawns or along the lake edge within the viewshaft, to ensure the view to the future Epiphytum is not obscured. Plant collections and structures such as shelters should not be built within the viewshaft unless shown on the master plan.



### Viewshaft 2 (reverse view)

This is the reverse view of viewshaft 2 looking from the future Epiphytum location (currently the Rose Garden pergola) back toward the Visitors Centre.

The management requirements for this view are explained under viewshaft 2 above, and will ensure that views to the Visitors Centre are not obscured from this viewpoint.



### Viewshaft 3

This is a category one view from the future Epiphytum (currently the Rose Pergola) across the lawns to the native bush backdrop. The view is framed by Gondwana Arboretum trees on either side of the lawn. This view continues on from Viewshaft one and terminates at the start of viewshaft 4. The Epiphytum will provide a gateway to the northern half of the site. The space is relatively confined here by the NZ rose garden and the ground sloping away to the stream gully. To create the desired visual connection, the eastern border of the Rose Garden will need to be trimmed back and reformed. A number of arboretum trees will also need to be relocated from the right side of the lawn. To manage the view, no planting or structures should be located within the viewshaft.



### Viewshaft 4

This is a category one view across the lawns looking from the end of viewshaft 3 toward the Gondwana node on the Pacific strip. Equally, a visitor approaching the Botanic Gardens from the northern entry will be made aware of the extent of the gardens by the view across the lawns disappearing into the distance.

Low planting around the event site lake is acceptable, and tree planting (e.g. kahikatea) is permitted along the northern edge of the lake as it will help frame the view (and shade the lake). No tree planting or structures should be located within the remainder of the viewshaft unless existing and/ or shown on the master plan.



### Viewshaft 5

This is a category two view from the Visitors Centre looking towards the future location of the Ethnobotanic Garden/ Pacific Garden (currently Urban Trees). A glimpse of the lower lake is visible from this viewpoint, framed by pohutukawa planted around the fringe of the lawn. The intention is to provide a glimpse of the water and potentially a landscape 'incident' (such as a jetty or boardwalk across the lake) suggestive of the opportunities that lie beyond the front lawn.

The *Metrosideros* foliage and branching should be managed to frame but not obstruct the view. Trees currently in the viewshaft are not a priority to remove, but if ever removed for health reasons, it is recommended they be replaced with low growing plants to preserve the view of the Ethnobotanic Garden/ Pacific Garden.



### Viewshaft 6

This is a category two view looking from from the main walking route (pacific strip) adjacent to the Potters Children's Garden toward the water's edge (not beyond the lake). This view of the lake assists with orientation and wayfinding from this viewpoint.

This view should be managed by keeping it free from any structures, including the toilet proposed for this area, and maintaining views of the water underneath the canopy of trees. Low growing planting along the lake edge should also not obscure the view of the water from this viewpoint.



### Viewshaft 7

This is a category three view from the main walking route (pacific strip) along the new path alignment between the Perennial Garden and the Threatened Native Plant Garden. The view looks out across the Perennial Garden toward the lake and the lawn beyond the lake against a backdrop of vegetation. There is also a distant view of the hill and native bush backdrop from this location. This view forms part of the experiential sequence of this new walking route.

Tree planting should be managed within this viewshaft so that the view of the lake, the lawn directly beyond the visible section of lake, and the hill backdrop is not obscured.



### Viewshaft 8

This is a category three, two-way view (i.e. viewed in both directions). The view is from the secondary path loop through the Palm Garden, across the pond toward the Palm Garden entrance (node). This also captures the view to the hill in the distance which is currently framed by the hedge around the service area. This is a framing view showcasing the depth and layers of the garden.

When the hedge around the service area is removed the viewshaft will be widened. This new viewshaft will look from this point in the Palm Garden toward the Rose Garden. This view will assist the visitor with wayfinding and is intended to be a two-way view.



### Viewshaft 8 (reverse)

This is the reverse view of viewshaft 8, looking from the entry node and the Rose Garden back across the Palm Garden.

The management requirements for viewshaft 8 in both directions include managing the vegetation heights and species in this area to achieve the same layered effect and sense of depth over time, and to maintain a visual connection between the entry node, the Palm Garden and the Rose Garden.



### Viewshaft 9

This is a category two view looking from the main walking route (pacific strip) across low lying, open land towards the native bush backdrop. The view is framed by the edge of the Gondwana Arboretum, including mature kauri trees.

This is a framing view and does not need to be completely clear/ open, so long as a visual connection is maintained between the pacific strip, the lawn areas and the bush backdrop beyond.



### Viewshaft 10

This is a category two view, from the same origin as viewshaft 9, but looking across a pacific lawn toward the Gondwana entry node (the same node viewed in viewshaft 4). The view is framed by existing mature totara and future arboretum planting. The intention is to maintain a visual connection between the northern entrance/ node and the main walking route to assist with orientation and wayfinding.

The pylon in the background of this view should be screened by tree planting around the proposed carpark and nursery area, and tree planting within the Gondwana node.



[Note: There is no photo for this viewshaft as it cannot be captured from any one particular angle.]

### Viewshaft 11

This is a category four view that stretches across the site and extends to views of distant landforms beyond the site. This view creates a sense of space and depth, and connectedness to the broader landscape. It is a filtered and layered view, with vegetation of varying heights framing the distant views. The view is experienced from the high points anywhere along the alignment of the view.

This view is a challenge to maintain due to the number of trees within the vista, as well as the natural topography of the landscape. However, this view must be considered when any future planting or development occurs to preserve and enhance the view.



### Viewshaft 12

This is a category four view into the Botanic Gardens from the southbound lane of the southern motorway, and the Orams Road motorway overbridge. A brief glimpse is caught of the visitors centre from a moving vehicle, through the dense boundary planting that provides a noise and visual barrier along the motorway edge. The buffer is important to protect the amenity of the Gardens, but provides an anonymous edge. This viewshaft provides a rare opportunity to promote the Gardens to a mobile audience.

This view should be protected by managing vegetation height within the viewshaft.



### Viewshaft 13

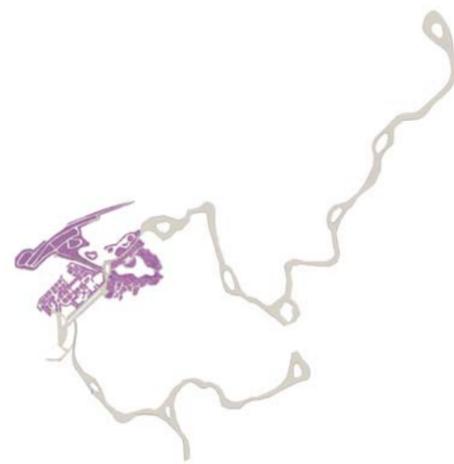
Viewshaft 13 is a category two view looking from the secondary loop path across the pacific lawn to the Rose Garden. The view is framed by trees within Gondwana Arboretum.

The view should be managed to avoid tree planting that may obscure views of the Rose Garden and the bridge across the pond. This view may be underneath the canopy of trees provided that the same effect is achieved. Arboretum trees should not be underplanted in this area.



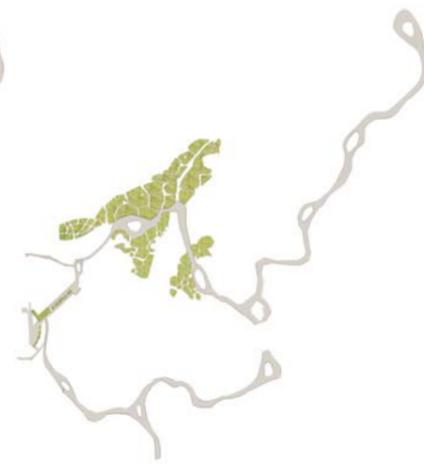
garden cluster around node with entry points

- 01 main path
- 02 garden path
- 03 garden
- 04 node
- 05 garden entry



garden cluster 1  
[predominantly culinary/ gardenesque & native]

- perennials
- native and endangered
- edible gardens
- new garden areas



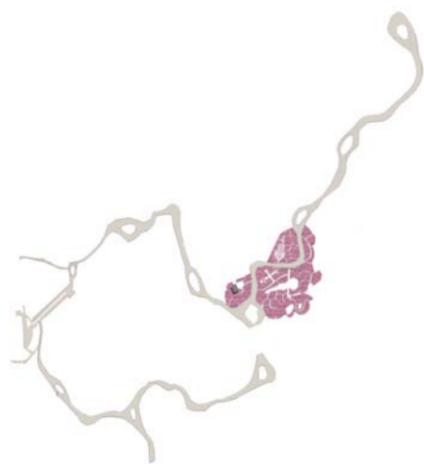
garden cluster 2  
[predominantly ethnobotanic & ecological]

- natives
- shrub trials
- new garden areas



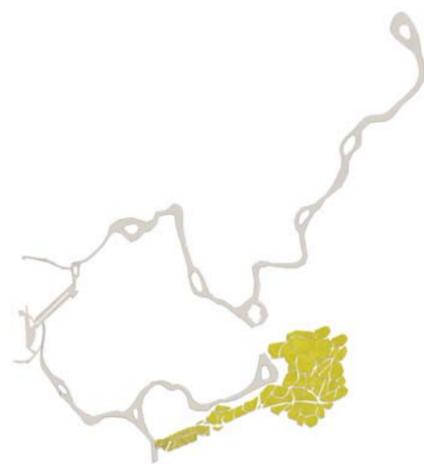
garden cluster 3  
[predominantly subtropical & native]

- palms
- new garden areas



garden cluster 4  
[predominantly heritage & taxonomic]

- roses
- roses/natives
- new garden areas



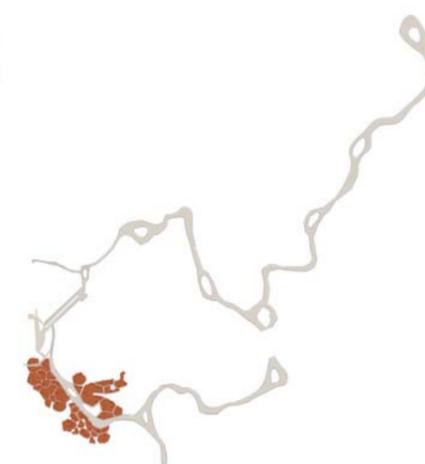
garden cluster 5  
[predominantly seasonal/ taxonomic]

- camellias/magnolias
- spring blossom valley
- potential extension of existing



garden cluster 6  
[predominantly geographic or narrative]

- children's garden
- south african collection
- potential extension of existing



garden cluster 7  
[predominantly taxonomic/culinary]

- rock garden
- herb garden
- new garden areas

## 4.04 Garden Cluster Themes

The coloured garden areas are representative of gardens and collections that 'belong' to a node along the pacific strip.

### Node appearance

Each node along the pacific strip will be similar in appearance. Consistent or repeated elements such as the trees and underplanting chosen for each node will assist with orientation and wayfinding, and reinforce the South Pacific identity of the Botanic Gardens.

### Gateways

Gardens and collections are all directly accessed off a node. The entry to each garden would be defined by a gateway that may be unique to that garden.

### Circulation

Pedestrian circulation within each garden would create a complete circuit returning back to the gateway. The principle of entering and exiting each garden in the same location assists with wayfinding and orientation.

### Edges

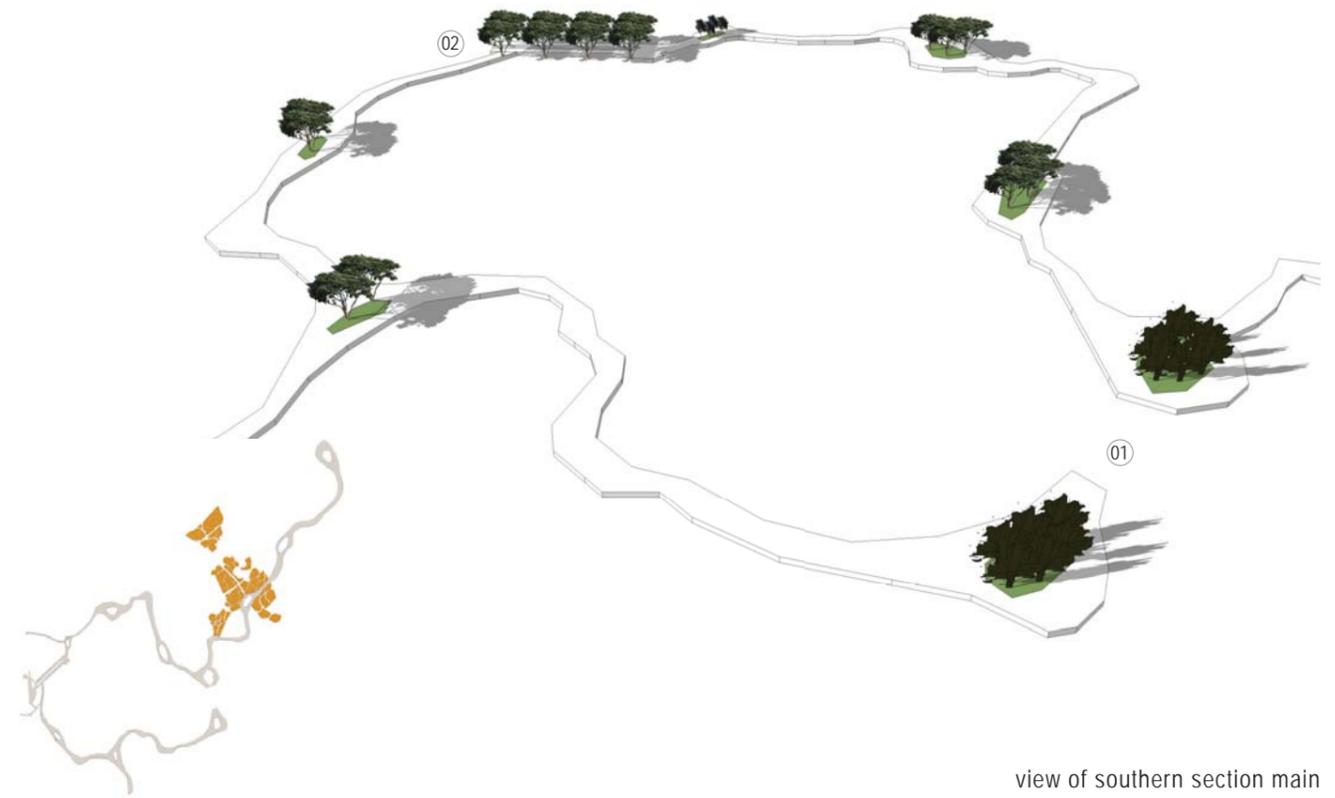
The edges of each garden abutting the 'pacific strip' would be planted with a mix of species that are representative of the collection. Even if the visitor does not enter the garden itself, they will still be engaging with the borders along the pacific strip.

### Garden themes

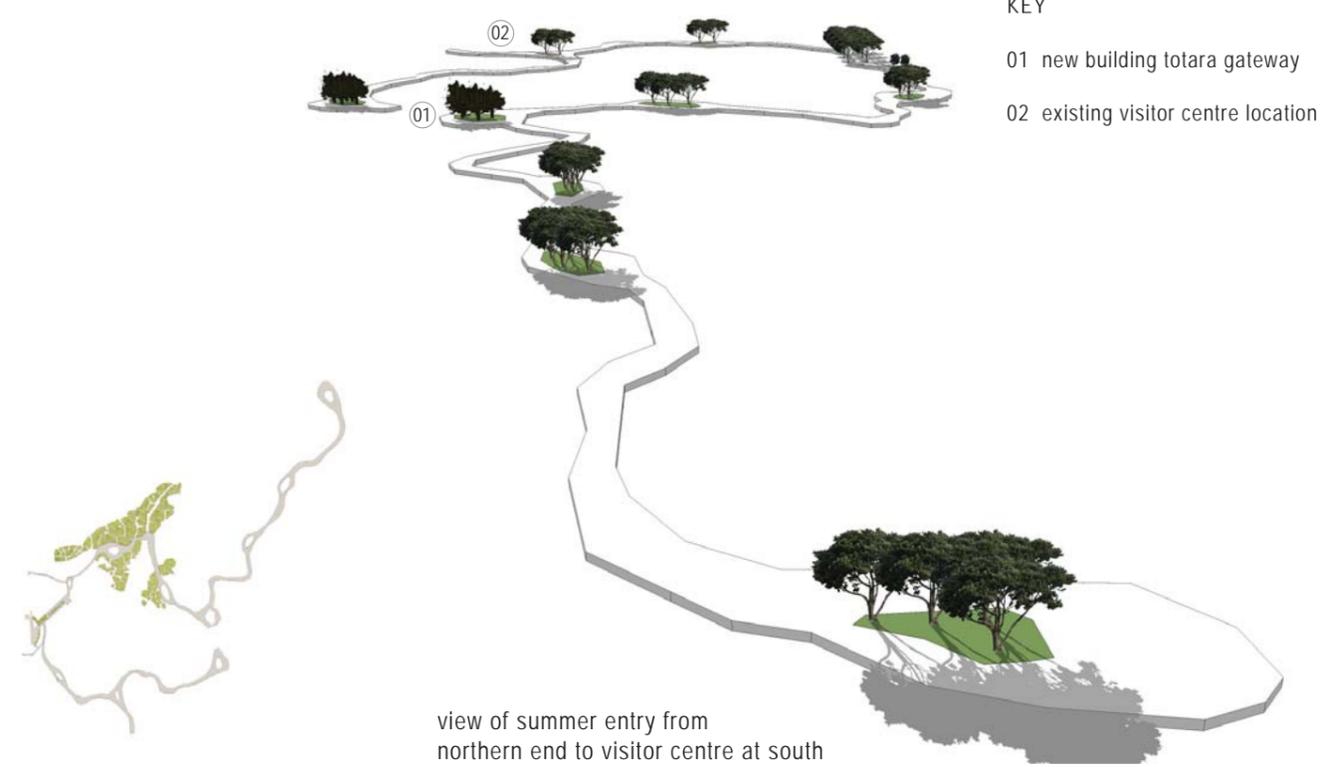
Themes created for each node assist with interpretation and sequencing, and also provide a rationale for locating new garden developments. Themes may reinforce the educational messages and associations between gardens of a similar nature. The master plan allows some flexibility to develop these themes during subsequent stages of developed design.

### Exceptions

There may be some exceptions to the rule where established gardens can not be retrofitted with a gateway to a node. However exceptions should be minimised. It is the repetition of these principles that will create a logical and intuitive experience for visitors. Trial planting areas may be located behind gardens and not accessed from a node.



view of southern section main route with totara gateway at new building



view of summer entry from northern end to visitor centre at south

- KEY
- 01 new building totara gateway
  - 02 existing visitor centre location

### 4.05 Garden theming- scale and colour

A logical rationale for height, scale and colour will enhance the composition and layout of the Gardens, and assist with wayfinding. This in turn will influence the theme of garden clusters around nodes.

#### Scale and height

Based on an existing loose composition, there is a gradual progression in height and scale moving away from the visitors centre.

The planting around the visitors centre area is relatively low in height, and fine grained in scale, with gardens often portioned into smaller areas associated with courtyard or domestic style gardens. The structure for these spaces is more likely to be provided by buildings and built structures.

The vegetation becomes taller with a greater mix of shrubs and trees the further you get from the visitors centre, moving into a parkland scale in the northern area with open wandering spaces amidst large trees.

This provides a transition in character that is appropriate against the backdrop of native bush along the northern boundary.

#### Colour

Colourful flowering plants and foliage is an undeniable attraction for most visitors. Perennial and rose gardens, and seasonal displays of spring blossoms and bulbs are a favourite feature of any Botanic Gardens, and are usually located within easy walking distance of the main entrance and visitors centre.

A colour circle has been defined on this plan to maintain the principle of incorporating colour to entice visitors through the Botanic Gardens, and to create further opportunities within a defined area. The effect can be likened to a supermarket, and art of appealing to the acquisitive nature of most consumers. Colour is a visual language that appeals to the senses. Interwoven with colourful displays is the opportunity for interpretation and education about the study and conservation of plants.





## 4.06 New garden development

This plan identifies suitable areas for new garden developments. These areas are largely flexible, and the design brief for garden developments may to some extent dictate the most appropriate site depending on soil condition, aspect, slope, shelter etc. New garden developments should also take into account :

- theming clusters around nodes, and
- theming- scale and colour

New garden themes should, wherever possible, support the vision of a spectacular South Pacific garden, the Auckland regional identity of the Gardens, and the emphasis on plants that are appropriate for the Auckland region.

### Proposals underway

Redevelopments underway as mandated by the Management Plan 2001 include:

- The extension of the Potter Children's Garden adjacent to the existing play area
- The edible garden adjacent to the Logan Campbell building (part of Lifestyle Courtyards)
- Extension of the Gondwana Arboretum

### Opportunities

New plant collections mandated in the Management Plan 2001 but not implemented include:

- An Ethnobotanical garden (traditional Maori garden) to preserve, study and cultivate a comprehensive selection of native plants valued for their cultural significance

The following new themes have been identified, and will be investigated for new garden developments:

- A Pacific Garden for subtropical and Polynesian plants
- A Heritage Orchard for heirloom fruit trees
- A sustainable garden focussing on environmental education opportunities for treating stormwater

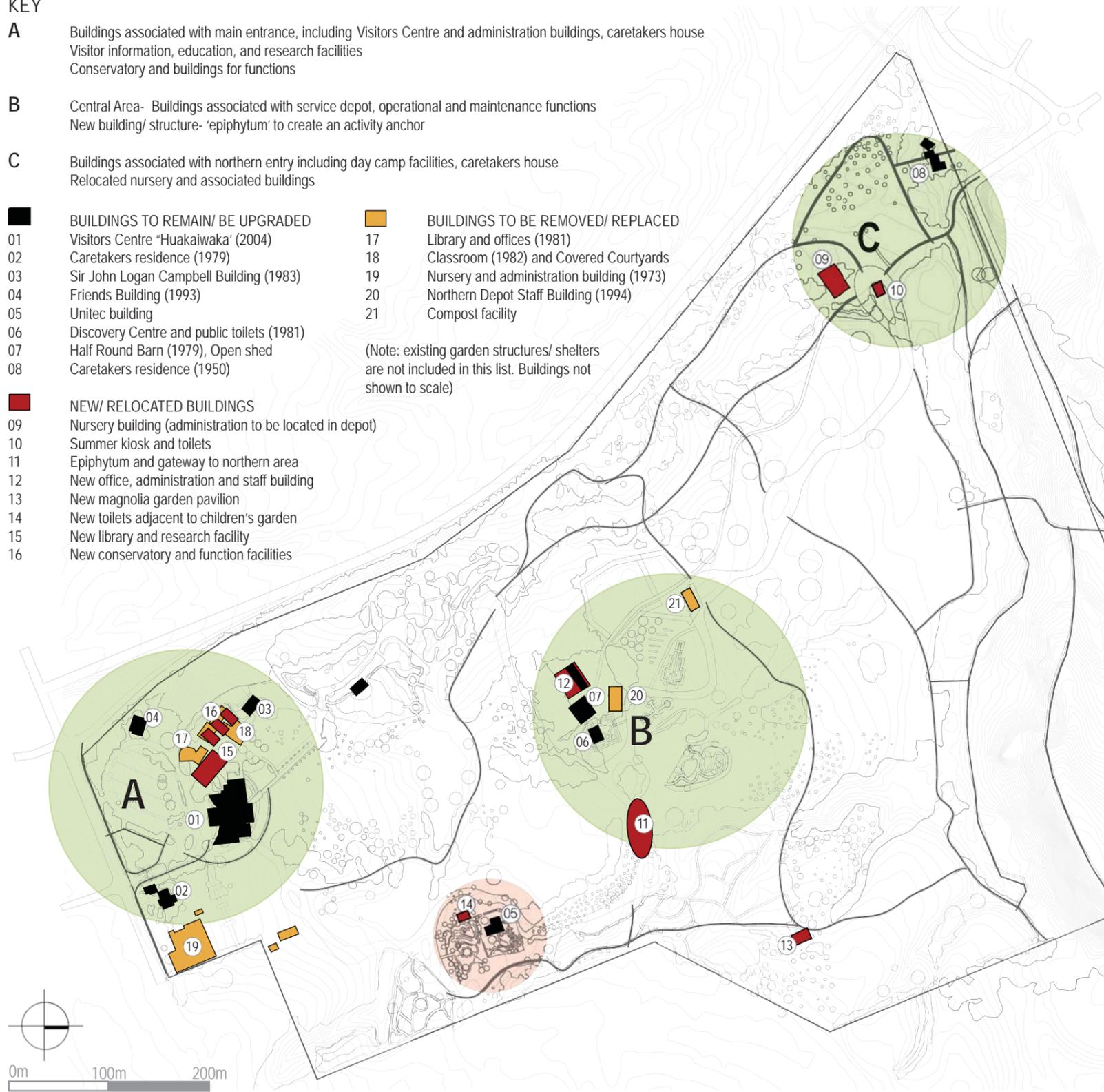
The removal/ relocation of the Conifer Garden, Urban Trees, Shrub Trials, Rock Garden, Herb Garden and Salvia Collection will accommodate other gardens relevant to nodal themes.

Plant trial areas may be located near the nursery or behind other gardens around the periphery. The service depot area is reduced in size to accommodate new garden developments and to create a connection to the palm garden from a node.



**KEY**

- A** Buildings associated with main entrance, including Visitors Centre and administration buildings, caretakers house  
Visitor information, education, and research facilities  
Conservatory and buildings for functions
  - B** Central Area- Buildings associated with service depot, operational and maintenance functions  
New building/ structure- 'epiphytum' to create an activity anchor
  - C** Buildings associated with northern entry including day camp facilities, caretakers house  
Relocated nursery and associated buildings
- |   |  |
|---|--|
| <ul style="list-style-type: none"> <li>01 Visitors Centre 'Huakaiwaka' (2004)</li> <li>02 Caretakers residence (1979)</li> <li>03 Sir John Logan Campbell Building (1983)</li> <li>04 Friends Building (1993)</li> <li>05 Unitec building</li> <li>06 Discovery Centre and public toilets (1981)</li> <li>07 Half Round Barn (1979), Open shed</li> <li>08 Caretakers residence (1950)</li> </ul> | <ul style="list-style-type: none"> <li>17 Library and offices (1981)</li> <li>18 Classroom (1982) and Covered Courtyards</li> <li>19 Nursery and administration building (1973)</li> <li>20 Northern Depot Staff Building (1994)</li> <li>21 Compost facility</li> </ul> <p>(Note: existing garden structures/ shelters are not included in this list. Buildings not shown to scale)</p> |
|---|--|
- NEW/ RELOCATED BUILDINGS**
  - 09 Nursery building (administration to be located in depot)
  - 10 Summer kiosk and toilets
  - 11 Epiphytum and gateway to northern area
  - 12 New office, administration and staff building
  - 13 New magnolia garden pavilion
  - 14 New toilets adjacent to children's garden
  - 15 New library and research facility
  - 16 New conservatory and function facilities



**4.07 Buildings and structures**

There are a number of buildings and structures within the Botanic Gardens associated with the following functions:

- Visitor experience
- Learning and research
- Office and administration
- Maintenance and service
- Plant display
- Functions and events
- Plant propagation
- Storage
- Staff Quarters/ residences

Where possible, similar activities should be co-located to make efficient use of available space, and buildings grouped in defined areas to minimise the impact of ad-hoc building development across the site. Public buildings should be visible and clearly distinguished from administration and service buildings, which may be screened from view.

**Main entrance**

The Visitors Centre 'Huakaiwaka' is the most important part of the arrival experience for visitors. A cluster of buildings associated with the Visitors Centre will support the important scientific and research function of the Botanic Gardens, and support relationship development with horticultural groups and educational institutions. In future this may include conference and lecture facilities.

Buildings which provide for functions and events provide revenue opportunities for the Gardens, and are best located near the main entrance where there is good access and parking for visitors and catering. A conservatory or upgraded covered courtyard will provide an all-weather, year round destination currently lacking at the Gardens (as supported by market and event research 2008). Public buildings in this area should have a positive interface and relationship with the gardens.

**Central area**

The central area includes the service depot, which will be reduced in size. Storage is at capacity, and existing buildings will need to be upgraded to accommodate more secure storage. Office and meeting space is also at capacity, and a new building will replace the nursery administration building while catering for additional staffing needs.

The Epiphytum will create a gateway and anchor building for the northern area. It is for the display of epiphytes and native forest plants not normally seen in detail at eye level. It will be a 'green architecture' structure that functions as a connection between plant collections.

**Northern entrance**

The northern entrance will be opened up for visitors, with low key parking based on LID principles. It will function predominantly as a summer entry during peak periods of use, and will accommodate a secure kiosk and toilets that will also support school day camps.

The buildings associated with the relocated nursery will cater for any specific indoor functions that must be located in the immediate vicinity of the nursery. All other administrative and storage functions will be accommodated in the depot.



## 4.08 Detailed area node 1

The first node along the 'pacific strip' is shown here in more detail to illustrate how some specific layout issues have been addressed.

### Pacific strip route

The existing axial path or 'Pohutukawa Walk' is the start of the pacific strip route. The axial path is duplicated with a smaller parallel path to create an improved interface with the edible garden.

The concept of creating direct visual and physical links between fixed points has been retained but softened by creating a continuous path treatment and planted nodes. The sculpture used as a visual cue to draw visitors into the space will be retained at the end of the main axis but not repeated along the pacific strip.

With the loop road removed, the main pedestrian route continues beyond the first node between the Perennial Garden and the Threatened Native Plant Garden (TNPG). This is currently a service route, but would be modified to address the interface with the adjoining gardens. The perennial garden would be screened adjacent to the wedding pavilion and open to the TNPG, and reversed for the second section to take advantage of elevated views across the perennial garden to the lake.

### Staged implementation

The Native Plant Identification Trail (NPIT) is currently accessed from the back of the TNPG. A gateway may be created here in the interim, but long term the NPIT would ideally be accessed directly from the first node, utilising the space currently occupied by the loop road.

### Exceptions- edible garden

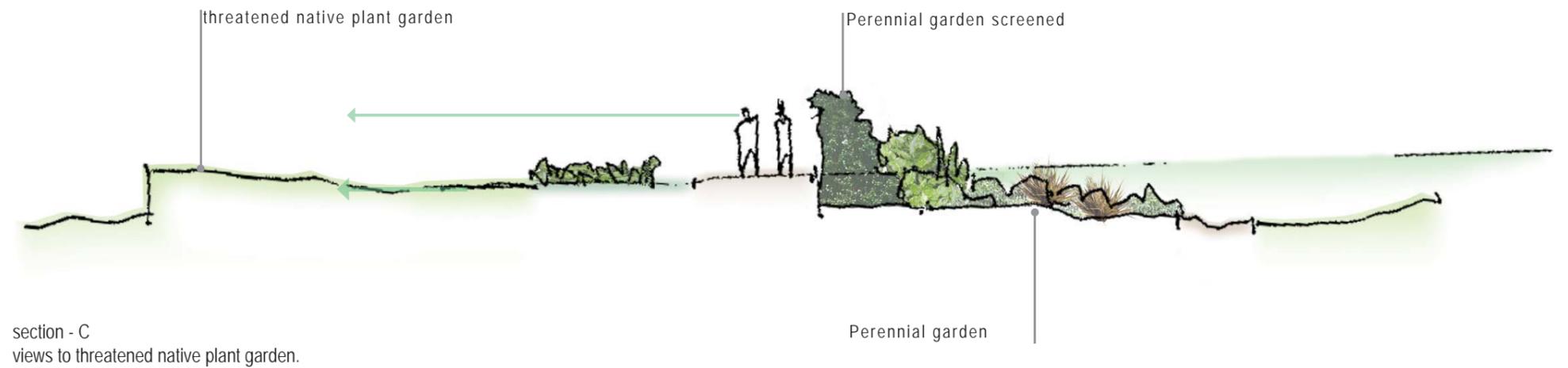
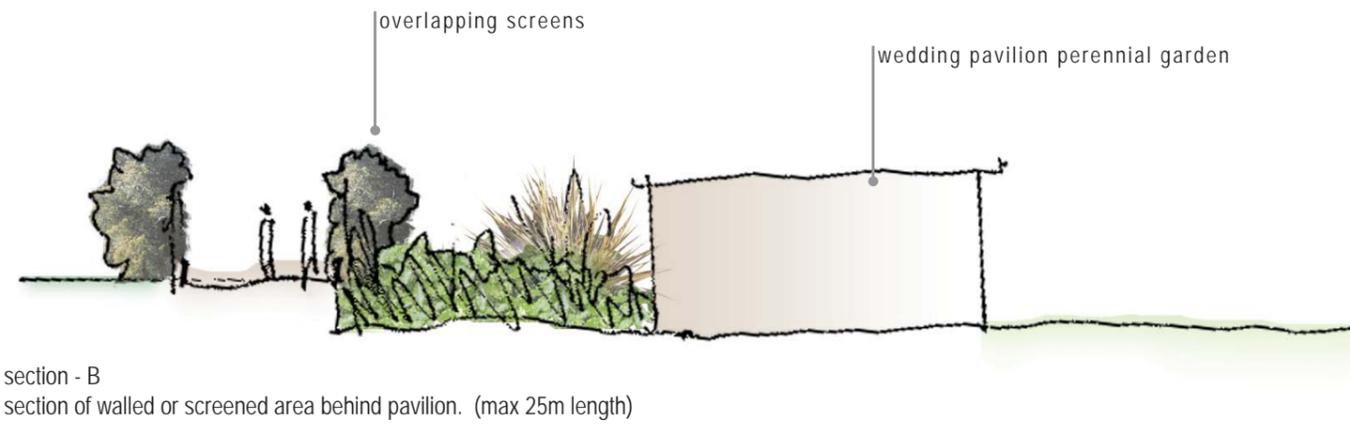
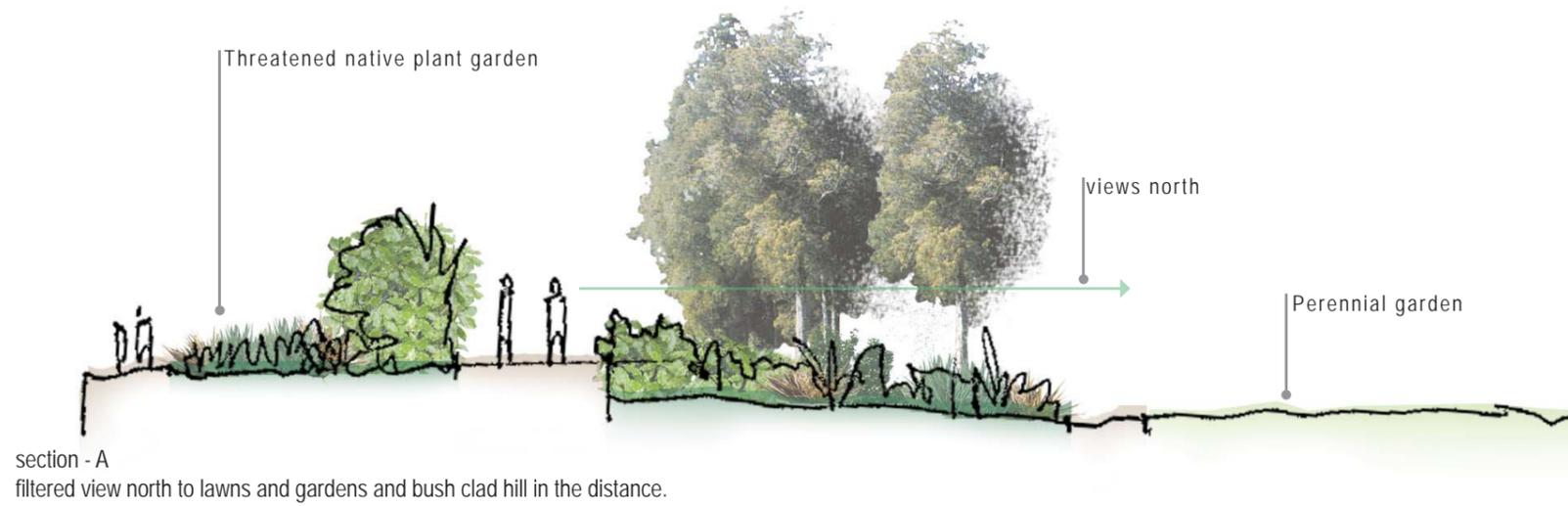
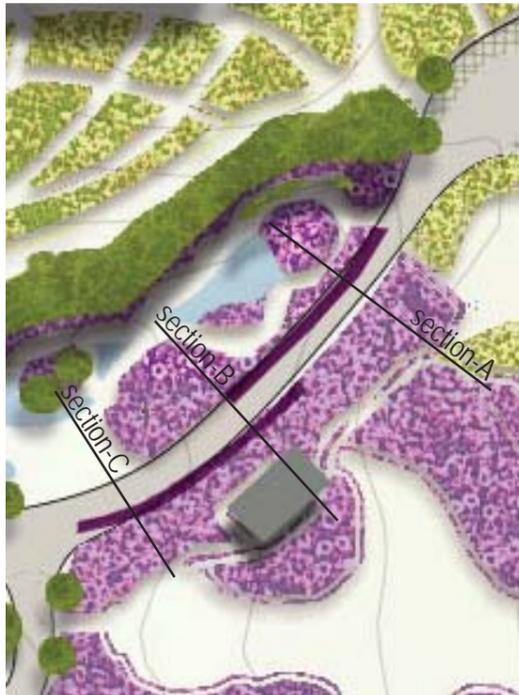
The Edible Garden is the only garden not accessed directly from the first node. An exception has been made because the duplicated axial path provides a logical alternative for the gateway location.

### Themes

The garden themes relating to the first node can be divided into two types: gardenesque/ lifestyle and indigenous/ ecological. This split does not necessarily support the concept of strengthening garden cluster themes around a node, and any future garden developments in this area should consider opportunities to develop a single theme.

#### KEY

01	gateway to threatened native plant garden	03	screen to threatened native plant garden and views north opened up	06	node one	11	existing water rill
02	interim gateway to nature plant ID trail with bridge over threatened native plant garden	04	screen to perennial garden and wedding site	07	Huakaiwaka/ visitor centre	12	existing water sculpture
		05	future gateway to native plant ID trail	08	step down terrace to lawn level	13	section lines - refer to typical cross sections
				09	pohutukawa walk	14	site boundary
				10	gateway to edible garden		





KEY

- 01 formal avenue of trees
- 02 consider tree removal to open up sight line to visitors centre
- 03 existing Totara hedge (with sections removed)
- 04 widen footpath(3m)
- 05 proposed new free left turn
- 06 timber bridge access over swale
- 07 swale connection to pond fore bay
- 08 planted swale for collecting & treating run off

- 09 pedestrian/pram crossing
- 10 low to mid height south pacific theme planting
- 11 bus overlay
- 12 contemporary large scale entry statement/ gateway. e.g. vertical sculptural elements and catenary lights
- 13 site boundary
- 14 Remove bus overlay in this area
- 15 Potential to convert to bus overlay in future

#### 4.09 Detailed area: entrance

The main entrance gives the first impression about the identity of the Botanic Gardens. The visitors centre 'Huakaiwaka' has successfully created a focus and point of reference for the Gardens, and builds on the vision of a "spectacular South Pacific Garden". The experience of approaching Huakaiwaka, passing through it, and revealing the Gardens beyond is an important part of the arrival sequence. However, the arrival sequence should start from the road frontage rather than within the site itself.

The Botanic Gardens are by nature internalized, to protect the visitor from noise and traffic, and to provide containment for the gardens and collections. Vegetative screening around the perimeter helps mitigate views of car parking at the entrance, but also helps to create an anonymous frontage to the Gardens.

##### Road frontage

Repeated and continuous elements along the frontage set up a visual rhythm that signals the approaching entranceway. These elements should have a scale and presence befitting the scale of the Gardens, and be designed to reflect the unique identity of the place. These may be avenues of trees and vertical sculptural elements located where gaps are opened up in the boundary hedging to frame views to the Visitors Centre. Low, colourful planting in these locations can still screen cars in the car park. A future redesign of the carpark layout could enable more effective screening of cars without obscuring views in, while also catering for evolving functional requirements such as more layover space for buses and shuttles.

The Wisteria and Tecomanthe arbor and dense planting currently enclose the entry, and should be replaced by sculptural gateway elements and low colourful planting that draw visitors into the site and reveal framed views of Huakaiwaka. Feature lighting should also be considered to expand night time attractions.

##### Vehicle entrance

Vehicles exiting the Botanic Gardens in a west-bound direction frequently experience delays due to heavy traffic volumes and a lack of speed control devices on Hill Road. Additionally, vehicles in the west-bound lane on Hill Road attempting to turn into the Botanic Gardens entrance frequently experience delays due to traffic exiting the motorway.



Hamilton Gardens entrance



Main gate at Singapore Botanic Gardens



Temporary art installation- red trees

To resolve these traffic safety issues, a detailed investigation and specific design solution is required for the entry. Preliminary discussions with Council traffic engineers have revealed the following:

- A flush median for vehicles waiting to turn into or out of the Gardens in a west-bound direction is unlikely to resolve traffic issues because of conflicting vehicle turning movements at the cross intersection.
- A signalized intersection is not feasible due to the proximity of the Botanic Gardens entrance to the motorway off-ramp, and the possibility of queuing vehicles backed up to the motorway. The option of moving the main entrance and/ or exit further to the east to meet the minimum distance requirement from the off-ramp has not been investigated.
- A roundabout is the best solution for easing traffic conflicts and slowing traffic speeds, but is less conducive to pedestrian movements. This option would need to be combined with pedestrian crossing points and/ or refuge islands in several locations along this section of Hill Road.
- A proposed free left turn has been shown on the master plan to ease queuing issues. This would be designed to facilitate pedestrian movement across the entrance.

### Pedestrian access and circulation

Pedestrian access into the Botanic Gardens is currently compromised by narrow paths, indirect walking routes and poor crossings. The master plan proposes widened footpaths on both sides of the entry, and direct walkway access to the main entrance of the Visitor Centre 'Huakaiwaka'. Low, colourful planting with a south pacific theme provides a safe walking route with clear sightlines, and opens up further opportunities for visitor interaction with plant collections.

### Overflow parking

An overflow car park is provided on the former nursery site. This carpark replaces the overflow parking area currently managed on the north facing lawn below the Nathan home for peak use times and events. The lawn is proposed for new gardens and collections, rather than car parking which detracts from the amenity and functionality of the gardens in this location. The capacity of the overflow carpark is less than the Nathan lawn area, and would be a permeable surface with integrated LID solutions such as rain gardens. The proposed new overflow parking location offers greater surveillance and security with its proximity to the road, visitors centre and caretakers house. This location also takes advantage of elevated views over the gardens as part of the arrival sequence. When not in use as an overflow carpark, this space would be low key, green (with trees and planting) and would be flexible in design and layout to enable other uses such as a marquee site.



Auckland Botanic Gardens main gate- Wisteria and Tecomanthe arbor



Huakaiwaka



Lighting installation



Theme planting