A Conservation Plan for Hagley Park and the Christchurch Botanic Gardens Volume Three: Botanic Gardens



Image: Phillip Capper, 2007

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Conservation plan: Hagley Park and the Christchurch Botanic Gardens

Conservation plan status

This plan was commissioned in 2010 by the City Environment Group of the Christchurch City Council ("Council") to implement Project 5 of the Hagley Park/Botanic Gardens Master Plan 2007 to prepare a heritage conservation plan for both Hagley Park and the Christchurch Botanic Gardens. The purpose of the conservation plan is to ensure that the heritage values of these places are properly accounted for in the management, use and development of the said places. The conservation plan will inform future review of the Hagley Park Management Plan and the Christchurch Botanic Gardens Management Plan.

All content of the conservation plan is that provided by the authors. Views expressed are not necessarily those of the Council. The plan has no statutory status, is not formally adopted by the Council, and its role is to provide heritage value conservation description and policies. The Council is under no obligation to implement or act on anything included in the plan.

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Impact of the Canterbury earthquakes

The scale and significance of the heritage values in Hagley Park and the Botanic Gardens, and the terms of reference for the conservation plan, have always meant that the plan outcomes would be constrained to some degree, particularly with regard the heritage buildings, and reflect current thinking and information. The earthquakes added further limits, such as unavailability of resource information, and new elements of consideration, such as the requirement for building structural assessment. Therefore, this conservation plan represents the best information and recommendations able to be made at the time of preparation. In addition, some of the descriptions and recommendations may have become out of date and obsolete at the time of reading as earthquake damage has been repaired. Further conservation planning may be required in the future to address detailed heritage matters, particularly with respect to the heritage buildings.

Land status

The current status of Hagley Park and the Botanic Gardens is that all land making up these places is held in fee simple title by the Christchurch City Council. Hagley Park is classified as a Recreation Reserve under section 17 of the Reserves Act 1977. The Botanic Gardens is classified as a Local Purpose (Botanic Garden) Reserve under section 23 of the Reserves Act.

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Glossary of landscape terms used in this plan

Avenue: A tree-lined way or approach, usually long and broad.

Belt: The planting of trees around the perimeter of an estate or park with or without a drive and used to delineate a boundary.

Belvedere: In general a raised structure to provide a commanding or attractive view.

Borrow: pit.

Carrefour - crossroad or intersection of walks.

Carriage drive: Drive formed to accommodate horse -drawn carriages.

Carpet bedding: The practice of forming beds of low growing foliage plants, all of an even height, in patterns that resemble a carpet, both in the intricacy of their design and the uniformity of their surface.

Clump: A number or cluster of trees, not necessarily of the same species, planted together to form a distinct group to relieve the monotony of open ground.

Colonial Revival: Garden style appearing in 1930's modelled on nineteenth century garden forms and plants.

Crazy paving: A pavement or path composed of irregular pieces of stone.

Dell: A hollow or small valley usually well planted.

Drive : A route around but within a park originally intended for horse drawn carriages.

Dendrologist: A person who studies trees.

Deployment: Placement or arrangement.

Dot plants: Tall plants in bedding schemes used for contrast of height and colour such as standard fuschia, canna lily and sometimes cabbage trees.

Emblematic: A process of representing symbolic objects.

Episodical paths: walks emanating from the main walk to show particular compartments of plants. A concept promoted by J. C. Loudon and used by him in his design for the Derby Arboretum.

Eyot: A small island in a river or a lake.

Exedra: Popular eighteenth-century garden feature or folly, often used as an ornamental curved screening device to hide another part of the garden. Exedra were either constructed solid features or planted hedges and were used to visually terminate an axis. They frequently incorporated ornamentation in niches or statues against the backdrop of the exedra as well as seats, fountains and paving.

Foot walks: refer walks.

Gardenesque: In a Gardenesque plan, all the trees, shrubs and other plants are positioned and managed in such a way that the character of each plant can be displayed to its full potential. The

Gardenesque tended to emphasize botanical curiosities and a collector's approach and was seen as an ideal display method for Botanic Gardens in the nineteenth century.

Gnomon: That part of a sundial that casts the shadow.

Grove: A small wood/collection of trees grown for ornamental appearance.Either geometrically planted or ireegularly planted in the open style .Open groves had large shady trees, the branches of which provided a canopy.

Gothic revival: A phenomenon in architecture, design and literature of the eighteenth and nineteenth centuries, involving the re-use of a wide range of medieval styles of architecture and references to the middle ages.

Japonaiserie: A style in art reflecting Japanese qualities or motifs.

Lakelet: Small and usually rock enclosed water bodies.

Lintel: Horizontal architectural member spanning and usually carrying the load above an opening.

Live hedge: Plants used as hedging verses a ditch-bank or timber structure.

Mound: Popular feature of the Gardenesque style which used both natural and artificial mounds to help stage groupings of shrubs or single species and show them to best advantage. Frequently used in parks and gardens with level terrain to provide focal features and visual interest.

Parallel: A trench dug parallel to a fortification - also known as a parallel trench. In the nineteenth century these were of variable construction and depth, ranging from 1.5-1.8m up to 3m in depth.

Pavilion: A light, sometimes ornamental structure in a garden, park or place of recreation, used for entertainment or shelter.

Pared turf: Outer edge of grass is cut away to form a neat edge to line walks . Usually associated with walks which are sunk below the level of the turf.

Patera: Small flat circular or oval ornament in classical architecture as seen on the pillars of the Rolleston Avenue gates.

Pinetum: A collection of trees composed of conifers.

Plantation: Arborecultural term relating to the collective cultivation of artificially established trees. Nineteenth century plantations were regularly arranged in rows and other geometric formations, irregularly laid out, or set out in groups reflecting their botanic characteristics.

Plat: Flat area of plain grass.

Pollard: A method of pruning trees to produce a close rounded head of young branches.

Promenade: Lengthy walks or roads.

Putti: Representation of a cherub, infant or small boy, often shown winged.

Ribbon border also known as ribbon bedding: The practice of planting narrow lines of highly coloured bedding plants in parallel rows beside paths.

Rosary or Rosarium: A rose garden of a formal kind, often circular in design and laid out with pergolas and walks with strong axial lines and most likely a central fountain or pool area.

Rose Garden: A garden or area for growing roses.

Rustic work or rustication: A style of landscape construction using simple natural materials (predominantly wood, bark, tree trunks, branches, thatch etc) in rather a primitive form which was intended to display the hand of the maker rather than the work of nature. Popularly used for seats, foot bridges, summerhouses, fences and gates etc Also known as rustic work.

Show Houses: Buildings for the cultivation and display of particular collections of plants within a Botanic Garden.

Shrubbery: Victorian term for a garden for growing a mix of small shrubs in foreground and trees in background.

Sylvan: Relating to or characteristic of woods.

Tazza (pural tazze): Shallow bowl mounted on a stem or supported with a circular base, for the display of flowers and plants, popular in the Victorian period.

Turf ribbon borders – narrow grass ribbons used to separate walks from planted gardens.

Voussoir: A wedge-shaped or tapered stone used to construct an arch.

Walk: Path in a garden intended for walking on, either for gentle exercise, for social purposes or to view a garden.

Section 1 ANALYSIS AND ASSESSMENT OF COMPONENTS AND COLLECTIONS CHRISTCHURCH BOTANIC GARDENS



Section 1. Analysis and assessment of components and collections

1.1 General

1.1.1 Location

The Christchurch Botanic Gardens is positioned at the western terminus of Gloucester, Worcester and Hereford Streets. It is aproned on its northern, western and southern sides by the open greenspace of Hagley Park and sits within Christchurch's Cultural Precinct.¹

1.1.2 Physical description

The Botanic Gardens is a predominantly organic-shaped site of 21 hectares with boundaries defined by the meander of the Avon River/Ōtākaro on the southern, western, and most of the northern sides, with the exception of lots occupied by the Canterbury Museum and Christ's College. On its eastern boundary the Gardens abut Rolleston Avenue, giving it a strongly linear spatial demarcation that extends approximately 200 metres from the Museum gates, to the bridge at the hospital at the end of Cashel Street. These boundaries, with the exception of the insertions of the Museum and Christ's College, reflect the original survey pattern of the city and the early planned relationship between the Gardens and its important neighbour, Hagley Park.

It is, however, noted that although legally defined as Part Reserve 25 SO 11870, the Gardens' management area includes approximately 12 hectares of Hagley Park (Part Rural Section 41181, SO 15235). This is the Daffodil Woodland area, Pinetum and the United Car Park between the Avon River, hospital grounds and the United Sports Club area, and the Avon River corridor, including the northern bank from the United Car Park to the Botanic Gardens Car Park.² For this reason these areas have been included in the analysis and assessment section of Hagley Park (Volume 2).

The spatial organisation of the Gardens remains heavily influenced by the original pattern of 'enclosures' which were gradually transformed into the lawn areas now known as the Archery Lawn and Armstrong Lawn, as well as the lawn area fronting the Curator's House. The principal circulation pathways through and bordering these lawn areas direct a predominantly east-west movement through the Gardens. Beyond the Archery Lawn a complex network of primary and secondary path systems bisect the central core of the Gardens linking the plant collections, lakelets, Show Houses, lawn areas and public facilities. A ribbon walk follows the line of the river extending from a point adjacent to the Curator's House all the way around to the North Bridge. The hierarchy of paths is generally expressed through different surface treatments. Primary circulation routes (both pedestrian and vehicular), and some secondary paths are sealed, most secondary paths are surfaced with pea gravel, and other narrow and more intimate footwalks are constructed of crazy paving.³

A sense of entrance is achieved at the (historic main) Hereford Street entrance by the imposing set of memorial gates and the Moorhouse Statue. Both of these features are historical markers as well as ornamental features in their own right. There are two other long established formal access points

¹ The Cultural Precinct is an area of less than one square kilometre, from Cathedral Square to Rolleston Avenue, including the Christchurch Botanic Gardens, Canterbury Museum, and Christ's College to the west of Rolleston Avenue, that celebrates Christchurch's rich cultural heritage

² The Botanic Gardens Management Plan 2007, p. 9, CCC

³ A pavement or path composed of irregular pieces of stone

on Rolleston Avenue which correspond loosely with the terminus of both Cashel and Worcester Streets. Entrance points via the Woodland Bridge, West Bridge and the North Bridge entrances are more informal.

Within the grounds there is a strong sense of visual containment achieved by a semi-closed and closed canopy of predominantly Northern Hemisphere broad-headed deciduous trees and impressive sized conifers. For the most part this is balanced at ground level by expansive lawn areas and water bodies. There is diversity of visual character within the landscape, created in large part by the palette of tree species and the Gardens' taxonomic, geographic, ecological and horticultural based plant collections. Specialist garden areas, Show Houses, plant display practices and signage reflect the botanical functions of the Gardens while ornamental borders, incised carpet beds, a childrens' playground and the Tea Kiosk add a mixed pleasure ground/amenity aesthetic.

Scheduled and other venerable and mature trees reference some of the Gardens' previous spatial layouts, and many mark important commemorative occasions. These give the Gardens a high degree of time depth⁴ which is further reinforced by late nineteenth-century and early twentieth-century heritage fabric and surviving examples of the Victorian-era design principles used in the early layout of the grounds. This is overlaid with more contemporary landscape treatments and practices, plant species and sculptural interventions.

Significant aspects of the designed, living and natural fabric of the site that have an identified heritage value or significant experiential quality are identified on the location plan and discussed in more detail in the analysis of components and collections sections which follow.

1.2. Analysis of the Botanic Gardens as a whole

1.2.1 Setting

Setting is defined in the ICOMOS New Zealand Charter 2010 as "the area around and/or adjacent to a place of cultural heritage value that is integral to its function, meaning, and relationships. Setting includes the structures, outbuildings, features, gardens, curtilage, airspace, and accessways forming the spatial context of the place or used in association with the place. Setting also includes cultural landscapes, townscapes, and streetscapes; perspectives, views, and viewshafts to and from a place; and relationships with other places which contribute to the cultural heritage value of the place. Setting may extend beyond the area defined by legal title, and may include a buffer zone necessary for the long-term protection of the cultural heritage value of the place."⁵

The Botanic Gardens setting includes the Rolleston Avenue frontage and parts of the legal Hagley Park area. The Gardens' also shares an historic associational, social and cultural relationship with the Canterbury Museum and the Robert McDougall Art Gallery which contribute to its cultural value, as well as an historical association with Christ's College through a shared boundary to the north of the Archery Lawn.

⁴ The legibility and enjoyment of the past in the present landscape

⁵ *ICOMOS New Zealand Charter for the Conservation of Places of Cultural Heritage Value* (ICOMOS New Zealand Charter 2010)

Rolleston Avenue frontage

That portion of the road frontage that abuts the Gardens' eastern boundary and extends the length of the Gardens, including the portion which contains the statue of William Rolleston, has been functionally, spatially and aesthetically linked to the Gardens since it was first planted in ca. 1865. From that time it has acted as both the treed backdrop and foreground to the Gardens to varying degrees. In addition, it was part of the promenade experience associated with the entrance to the Gardens and, from 1885, it has been linked to the Gardens through the statue of William Rolleston whose associational connections are written into both the Museum and the Gardens' early history.

Canterbury Museum and the Robert McDougall Art Gallery

There is a shared associational, social and cultural relationship between these two institutions and the Botanic Gardens. This is grounded in past cultural practices and historic planning concepts⁶ and continues today by virtue of their spatial relationship, shared history and their more recent cultural precinct identity.

The coupling of art, science and nature was a common late Victorian-era concept. At that time the value of public gardens, parks and botanical gardens was considered to extend far beyond the opportunities they offered for recreation and communion with nature. They were regarded as "civilising terrain" or places of betterment, offering educational and improving pursuits for "all levels of society", and museums, art galleries and libraries were frequently situated alongside, or within their grounds.⁷

This physical and intellectual coupling also reflected the Victorian-era's absorbing interest in the material character of the natural world and the close relationship between the Museum and the Gardens enabled the complementary scrutiny of the 'live' plant catalogue of the Botanic Gardens with the dried or polished, classified and displayed botanical collections held within the Museum.⁸

The educational value of this association was furthered with the addition of the McDougall Art Gallery which was sanctioned by the Domains Board and City Council in 1928. The location of this institution also followed early twentieth-century urban planning and architectural theory which advocated the separation of these cultural institutions from the everyday world. When pressing for the placement of the Gallery in the Domain, Christchurch architect and long time member of the Christchurch City Beautiful Association Samuel Hurst Seagar wrote *"The great mass of people look to the Art Gallery as a source of intense enjoyment - their study of art being akin to their study of Nature and the association of Nature and Art is formed when an Art Gallery is placed in a cultivated park or garden... By passing through beautiful and natural surroundings the mind is altered for the reception of the beauties of art. It is therefore a principle which must of necessity be followed that the Art Gallery be in a cultivated park or domain."⁹*

⁶ For a futher discussion concerning the significance of the placement of the science and cultural institutions juxtaposed on Worcester Street with the Cathedral see Lochhead I. 'Museum's preservation crucial', *The Press*, 18 October 2004, p. 11

⁷ Cherry, G. E, et al, Gardens, Civic Art and Town Planning: the work of Thomas H. Mawson (1866-1933), *Planning Perspectives*, 8 (1993), pp. 307-332

⁸ These included the Museum's Herbarium collection which had been under formation from at least 1864, as well as other botanical specimens of fibre, cones, seeds, timber, polished wood and geological specimens etc

⁹ The Press, 17 April 1928, clipping in Box 4, Folder 4c, McDougall Gallery Archive, CAGL

Today this relationship, although a less explicit 'civilising nexus', is expressed in the central city Cultural Precinct which connects the city's education, art, science, government, religious, historic and recreation heritage into one cultural layer.

Hagley Park

The Botanic Gardens and Hagley Park have shared a close spatial and intertwined historical and administrative relationship since the early 1860s. Although the Botanic Garden has acted as the premier site for significant tree planting activities, some of this cultural practice extended into Hagley Park with Domains Board members and others marking specific events across both grounds. In 1902 Coronation oaks were planted in both the Botanic Gardens and Hagley Park; the Governor General Lord Cobham planted oaks in both the Gardens and Hagley Park in 1961 and 1962 respectively; and in 1963 former Superintendents and Directors planted a clump of stone pines to commemorate the Botanic Gardens' centenary in Hagley Park. The early development and stewardship of both Hagley Park and the Botanic Gardens was concurrent, planned and undertaken by the same individuals and, although each landscape is a distinct typology in its own right, each reflect the same period in their observable historic design conventions and period favoured plant palette. Together these landscapes are a representative catalogue of the earliest plant material raised by both Enoch Barker and John Armstrong for both places.

Since the late 1930s the Woodland has been considered part of the Botanic Gardens as indicated in Domains Board Minutes and, from the late 1960s, the development of the Pinetum has been seen as an extension of the Botanic Gardens within Hagley Park.

Christ's College boundary wall

There is a long-standing historic and associational relationship between the Botanic Gardens and Christ's College by virtue of the shared boundary wall on the north and west of the Gardens. This wall was planned and designed by the College specifically around requirements for the school's rugby matches and is a significant part of the history of the school and the Christ's College Old Boy's Association. It has also been an important backdrop to, and feature of, the Gardens Herbaceous Border Garden since 1923. The 1870s gate contributes to the time depth of the Gardens, and the long-standing convention of unimpeded daytime access between the two institutions is a further point of connection and historic practice. The history of the shared boundary wall is discussed more fully in section 1. 8.1.

1.2.2 Landscape character

This analysis of the character of the Botanic Gardens uses Ramsey's widely adopted methodology for the identification and assessment of heritage landscapes.¹⁰ Based on this methodology the Christchurch Botanic Gardens can be most appropriately classified under the recognised categories: *Type:* Botanic Gardens with developed pleasure ground

Period: The early framework of the Botanic Gardens was completed in the late Victorian period when Botanic Gardens were established mostly on lands allocated for government activities or for public domain, for the purpose of plant acclimatization, floral displays and venues for public events. In the case of the Christchurch Domain, an early conservation and scientific emphasis was overlayed with the stylistic traditions, prevailing aesthetic and features of European Botanic Gardens.

¹⁰ Ramsey, J. (1991) *Parks, Gardens and Special Trees: A Classification and Assessment Method for the Register of the National Estate,* Australian Heritage Commission

1.3 Heritage values

The following section documents those components within the Botanic Gardens which are considered to have heritage significance. The history of each element is detailed together with comment on the element's construction and condition, wherever possible. This follows accepted conservation practice which directs that for places with any degree of complexity, it is necessary to prepare individual assessments of component parts or aspects.¹¹

Analysis and assessment was undertaken using a three stage process which involved the assessment of heritage values, the ranking of the level of international, national, regional or local significance and the determination of the degree of significance. These assessments use accepted evaluation criteria as described below, and consider historical data, the context and historic themes that apply to the element, the way in which its extant features demonstrate and embody its function, its associations and its formal or aesthetic qualities.

1.3.1 Assessment of heritage values

The methodology and criteria used to undertake the assessment of significance has relied solely on that outlined in the consultant's brief. This was a seven value system used by the Christchurch City Council in their evaluation of heritage buildings, places and objects.¹² These values are:

Historical and Social significance

Historical and social values that demonstrate or are associated with:

- a particular person, group, organisation, institution, event, phase or activity;
- the continuity and/or change of a phase or activity;
- social, historical, traditional, economic, political or other patterns.

Cultural and Spiritual significance

Cultural and spiritual values that demonstrate or are associated with the distinctive characteristics of a way of life, philosophy, tradition, religion, or other belief including:

- the symbolic or commemorative value of the sites;
- significance to tangata whenua;
- associations with an identifiable group and esteemed by this group for its cultural values.

Architectural, Landscape and Aesthetic significance

Architectural, landscape architectural and aesthetic values that demonstrate or are associated with design values, form, scale, colour, texture and materials of the site.

Contextual significance

Contextual values that demonstrate or are associated with:

- a relationship to the environment (constructed and natural) setting, group, precinct or streetscape;
- a degree of consistency in terms of scale, form, materials, texture, colour, style and/or detailing in relationship to the environment (constructed and natural), setting, group, precinct or streetscape;
- a physical or visible landmark; a contribution to the character of the environment (constructed and natural) setting, a group, precinct or streetscape.

¹¹ Kerr, J. S. (2004) *The Conservation Plan*, Sixth Edition, p. 8

¹² Christchurch City Plan, Volume 2, Section 4.3.1

Archaeological significance

Archaeological values that demonstrate or are associated with:

- the potential to provide archaeological information through physical evidence;
- an understanding about social, historical, cultural, spiritual, technological or other values or past events, activities, people or phases.

Technological and Craftsmanship significance

Technological and craftsmanship values that demonstrate or are associated with:

• the nature and use of materials, finishes and/or technological or constructional methods that were innovative, or of notable quality for the period.

Scientific significance

Scientific values that demonstrate or are associated with:

- scientific or research value of a place;
- a contribution to research understanding of natural history;
- natural values showing patterns in natural history or continuing ecological, earth or evolutionary processes;
- contribution to scientific understanding of the environment.

1.3.2 Degree of heritage significance

A determination of the degree of significance of identified heritage structures has been undertaken in accordance with the following scale used by Christchurch City Council. Refer to Section 4: Conservation Policies for conservation processes relevant to these degrees of significance.

In the case of buildings, this determination has extended to the various elements or fabric which comprise the structure, and an assessment has been made as to the intrinsic value of the element or fabric, and the contribution these make to the structure's overall cultural significance. It should be noted that a building's original fabric may be assessed as having heritage significance, as can fabric that is added at a later time.

Degree of Significance scale:

High cultural significance

• Those features/elements which make an essential and fundamental contribution to the overall significance of the place and should be retained. It takes into account factors such as its age and origin, material condition and associational and aesthetic values.

Moderate cultural significance

• Those features/elements which make an important contribution to the overall significance of the place and should be retained where possible and practicable. This fabric makes an important contribution to the understanding of the heritage values of the place.

Some cultural significance

• Those features/elements that make a minor contribution to the overall significance of the place.

Non-contributory or Neutral significance

• Those features/elements that have no appreciable heritage significance but may allow the building or structure to function.

Intrusive

• Those features/elements that detract from the overall heritage significance of the place or obscure fabric of greater heritage value.

1.3.3 Ranking of significance

Overall assessments of heritage significance can be complemented and justified by the descriptive ranking of the individual elements of a place. The methodology and criteria used to undertake this determination was drawn from New South Wales heritage practice¹³ with necessary geographical substitutions.¹⁴

Local heritage significance

Local heritage significance, in relation to a place, building, work, relic, moveable object or precinct, means significance to an area in relation to the historical, scientific, cultural, social, archaeological, architectural, natural or aesthetic value of the item.

Regional heritage significance

Regional heritage significance, in relation to a place, building, work, relic, moveable object or precinct, means significance to the region in relation to the historical, scientific, cultural, social, archaeological, architectural, natural or aesthetic value of the item.

National heritage significance

National heritage significance, in relation to a place, building, work, relic, moveable object or precinct, means significance to the nation in relation to the historical, scientific, cultural, social, archaeological, architectural, natural or aesthetic value of the item.

International heritage significance

International heritage significance, in relation to a place, building, work, relic, moveable object or precinct, means significance internationally in relation to the historical, scientific, cultural, social, archaeological, architectural, natural or aesthetic value of the item.

¹³ New South Wales Heritage Office (2001) *Heritage Manual 2: Assessing Heritage Significance*; New South Wales Heritage Office (2009) *Assessing Significance for Historic Archaeological Sites*

¹⁴ State significance substituted by regional significance for New Zealand



1.3.4 Significant site fabric and area location map

Figure 1.1. Aerial view of the Botanic Gardens showing the general location of significant site fabric and garden zones referred to in the following assessments, Google Earth Imagery date 3 April 2009. Source: © 2011 Google

1.4 Modified natural features

1.4.1 Sandhill/Pine Mound

Fabric: Sandhill/Pine Mound	Also discussed in: Volume 1: 3.3.1	
Location plan reference: 1	Historical images: Volume 1: 3.21, Volume 3: 1.7	

Element:

Sandhill/Pine Mound positioned between the Armstrong and Archery Lawns.

Description:

Now known as the Pine Mound, the sandhill is a grass-covered knoll crowned with maritime pines (*Pinus pinaster*) which were planted, or possibly transplanted on the mound in 1871.

History:

The topography of the Botanic Gardens was highly modified to conform with late nineteenthcentury and early twentieth-century visions of a public domain. This included smoothing natural landforms and re-vegetating with a mix of exotic and native species. Two of the three large sandhills observed in the Domain in ca.1850 were levelled by 1872, but the third was used by John Armstrong to form a Pine Mound in 1871. This was a distinctive landscape feature popularised by John Claudius Loudon, the well-known Scottish botanist, garden and cemetery designer. In a report to the Domains Board dated 1875, John Armstrong referred to the sand hill as the *"Pine mound"* and it has been known by this name since that time. Photographs ca.1911-1915 indicate that there were approximately 26 pines planted on the mound in the early twentieth century.

Modifications:

- No evidence has been located to suggest that the sand hill was re-formed in any way by John Armstrong either to facilitate planting or enhance its profile.
- Steps added in 1933.
- Loss of many of the pines over time, most recently as a consequence of the 2010/2011 Canterbury earthquakes.

Other:

The Pine Mound has a high degree of authenticity, both as a pre 1850 landform and as a designed and planted 1871 landscape feature.



Figure 1.2. Pine Mound. 2010. Source: L. Beaumont

Assessment of significance values: Pine Mound

Historic and Social significance:

- The sandhill is a rare surviving aspect of the Botanic Gardens' original topography. In addition, as a Pine Mound, it has a high degree of rarity as a surviving landscape feature dating to 1871.
- It is the physical evidence of John Armstrong's association with the Botanic Gardens and continues to reference his design intent for this part of the Gardens. It contains the oldest group of *Pinus pinaster* remaining in the Botanic Gardens.
- It is the oldest surviving authentic designed element, and although planting density has altered over time, it still reflects Armstrong's original intention to display maritime pines in the Gardenesque style on an elevated terrain for particular effect.

Cultural and Spiritual significance:

• The Mound reflects a design convention which responded to the Victorian interest in the natural world, not only in the way the maritime pines were displayed as elevated specimens but also in the retention of the sandhill, a natural phenomenon of the site.

Architectural, Landscape and Aesthetic significance:

• It illustrates the practice popularised by J. C. Loudon of using planted mounds as both a way of enlarging the impact of a landscape and a way of showing specimens off to their best advantage by isolating and/or elevating them from the rest of the vegetation.

Contextual significance:

• The Pine Mound has a high landmark value which is attributed to the height, distinctive form and observable age of the trees which are both a focal feature and an orientation point. It is a character-defining feature of the Botanic Gardens.

Archaeological significance:

- The Mound has underground archaeological potential as a largely unmodified landform.
- Refer Archaeological Section 1.14.

Technological and Craftsmanship significance: N/A.

Scientific significance:

 The group of *Pinus pinaster* have the potential to reveal much about their age (post removal). The trees contain some of the earliest surviving genetic material in the Botanic Gardens¹⁵ and are of considerable importance for their potential contribution to the advancement of New Zealand forestry history and landscape history.

Heritage Significance Assessment: Pine Mound			
Degree of significance: Topography & Pines	High		
Ranking of significance: Topography	Of regional and local significance		
Ranking of significance: Pines as a landscape feature	Of national, regional and local significance		

Assessment summary: Pine Mound

¹⁵ Although planted on the sand hill in 1871 the Pine Mound pines may be have been part of an earlier planting scheme in Cathedral Square. Further research is need to establish their pre-1871 history

1.4.2 Avon River/Ōtākaro

Fabric: Avon River/Ōtākaro	Also discussed in: Volume 1: 3.1.1
Location plan reference: 2	Historical images: Volume 1: 3.1, 3.9, 3.42

Element: Waterbody.

Description:

Serpentine portion of the Avon River that contains the Botanic Gardens on three sides.

History:

The Avon River/Ōtākaro was an important mahinga kai and travel route between Ngāi Tahu kāinga at Kaiapoi and Banks Peninsula. As such, it was one of the important social and cultural networks that sustained an established system of reciprocal exchange known as kai-hau-kai.

Post European settlement, the form of the river dictated the extent and boundaries of the Domain, and it was an important and early organising element around which the Domain developed. It was the initial focus of Enoch Barker's development of the Domain as a public landscape and in 1864, a promenade was formed to trace its meander. At the same time trees and native shrubs were planted to ornament it and help frame views of a constructed eyot.¹⁶

The river was highly valued for its aesthetic and experiential qualities, which included the clarity of the water, its placid character and its perceived beauty, and it was considered to greatly enhance the Domain. It also had a high environmental value and, as a key element in the developing Domain, was a popular respite and striking contrast to the dust and heat of the developing city.

Through time it has been utilised as a swimming bath and it was the focus for a number of fundraising carnivals in the early twentieth century. Today it continues to be a well utilised pleasure boat passage.

In late nineteenth-century and early twentiethcentury publications it was one of the key attractions and defining elements of the Botanic Gardens, generating descriptors such as "our River-girt Garden" and "the dreamy Avon" which was said to flow around verdure filled islands, glide through the Domain and heighten the enjoyment of the Gardens.¹⁷ It continues to be a character defining feature of the Botanic Gardens.

Figure 1.3. Cover page *River and Rose Carnival* souvenir programme, 1915.



 $^{^{\}rm 16}\,$ A small island in a river or lake

¹⁷ Union Steam Ship Company of New Zealand Ltd(1884) Maoriland: an illustrated handbook of New Zealand; Journal of the Canterbury Agricultural and Pastoral Association, Vol 1. April 1913; City of Christchurch Year Book 1932-33

Modifications:

- Native vegetation cleared to enable planting of exotic species.
- At least one eyot formed in 1864 to ornament the river.
- Steps constructed into the bank at the bathing place in the river behind the present nursery site.
- Natural processes of the erosion of river banks and the river bed have modified the width and form of the bank in places.
- Temporary weir constructed near Botanic Gardens' bridge to deepen the river for the 1906 / 1907 International Exhibition.
- River bank graded and regularly stabilised with various materials through time including Halswell stone in 1964.

Assessment of significance values: Avon River/ Ōtākaro

Historic and Social significance:

- As outlined in the Avon River Masterplan, "the Avon River /Ōtākaro is considered to be the only feature of the prehistoric landscape of the central city that can still be enjoyed in anything near its original state."¹⁸
- The river was a dominant landmark in the first maps drawn for the Christchurch. Its meander was used to define the boundaries for a Government Domain as well as the boundaries between the Domain and Hagley Park.
- The river was a critical part of the early Acclimatisation Society's operation and influenced the location of their fish raising and water bird breeding operations.
- The river has been the setting for some of the city's earliest foot bridges and the river corridor has been a popular place for European forms of recreation and amenity since 1850.

Cultural and Spiritual significance:

- The site and setting of the Botanic Gardens, including the Avon River encompasses ancestral kāinga and mahinga kai where tūpuna once lived, travelled and harvested the bounty of the forests, wetlands and waterways. In addition, Ngāi Tahu has an ancestral relationship with the whenua (land), awa (river) and native species in general, which they trace through tribal whakapapa.
- The allocation of a river bounded landscape for use as a Domain reflects mid-nineteenth-century park planning practice which favoured the selection of park landscapes with picturesque elements such as rivers or streams along which walks could be laid.
- As outlined in the Avon River Masterplan,¹⁹ "during the past 150 years the river setting has been transformed into a showpiece of the Christchurch Garden City ideal, an oasis in the heart of a busy city."

Architectural, Landscape and Aesthetic significance:

• The river has a high amenity and high aesthetic value which are visually and physically incorporated into the experience of the Botanic Gardens. The form of its meander has directed the placement of walks, seats, planting, bridges and ornamental features through time and, from the earliest

¹⁸ Avon River / Ōtakaro (Central City) Masterplan, 2007, <u>http://resources.ccc.govt.nz/files/AvonRiverMasterplan-</u> <u>projects.pdf</u> p. 6, Accessed August 2012

¹⁹ Ibid

times, has prompted numerous artistic responses. These include photographs, art, poetry and film etc.

Contextual significance:

• The river has a high landmark value. As a waterbody in the central city it is considered to be "an outstanding feature and icon of the city being integral to the identity of Christchurch as the Garden City."²⁰ In relation to the Botanic Gardens it has significance as a focal feature, orientation point, boundary maker and linking device between display gardens. Through time it has imparted a special character and quality to the Botanic Gardens landscape and contributes to its unique sense of place.

Archaeological significance:

• Refer Archaeological Section 1.14.

Scientific significance:

• Changes in the river corridor over time illustrate continuing ecological and fluvial processes.

Assessment Summary: Avon River/Ōtākaro

Heritage Significance Assessment: Avon River	
Degree of significance:	High
Ranking of significance:	Of regional and local significance



Figure 1.4. Avon River and River Walk, 2010. Source: L. Beaumont

1.5 Planted fabric

1.5.1 Commemorative Trees

Fabric: Commemorative Trees	Also discussed in: Volume 1 and appendices
Location plan reference: Refer Volume 1:	Historical images: Volume 1: 3.23, 3.55, 6.2
Figures 3.7, 3.14, 3.20, 3.60, 3.85, 3.103	

Element: Commemorative vegetation 1863-2013.

Description:

A blend of overwhelmingly exotic species employed to mark historic events, visits by significant individuals and events associated with the Gardens in some other way. Many are associated with memorial markers which form another layer of historic fabric, as discussed in a later section.

Commemorative trees can be divided into:

- those planted by royalty or to recognise a royal occasion.
- gubernatorial²¹ plantings
- local officials such as the Mayor and members of the Reserves Department
- plantings made by Domains Boards members to mark their terms of office
- other plantings with a less direct and compelling association with the Botanic Gardens

History:

Trees, as one of the principal markers of commemoration have been used to implant memory into the landscape of the Botanic Gardens since its inaugural planting. The early selection of commemorative species helped to reinforce the connection between colonial Christchurch and England and, in the case of oak plantings, displayed an ongoing allegiance to the Crown and the mother country. This was further emphasised with associated planting rituals which, in the case of the first tree planting,²² included the planting and entwining of ivy at the base of the oak and the singing of "The Oak and the Ivy" and "Brave Old Oak."

An additional level of importance was associated with trees and tree-planting ceremonies presided over by Heads of State and representatives of the King or Queen, and Domains Board Minutes show that every effort was made to achieve a complete collection of trees recording the visits of 'Royal Personages and Governors and Governors General'.²³ These occasions included the placement of ceremonial elements such as engraved stones, brass plaques etc and involved the use of engraved silver planting trowels and in the case of the Governor General Lord Bledisloe's 1935 *Pinus canariensis*, the use of a newly fashioned stainless steel spade. These implements were often kept as momentoes in the Curator's office or by the Board as a secondary layer of commemorative fabric. Others, such as the Liverpool spade have found their way into the collections of the Canterbury Museum.²⁴

Twentieth-century acts of planting have utilised trees as signifiers for goodwill between various

²¹ Relating to Governors or Governors General

²² *Lyttelton Times*, 21 July 1864, p. 3

²³ The Press, 3 September 1917, p. 3; Annual Report by the Curator for the year ending 31 March 1946 CH355, Box 22 /1, CCCA

²⁴ A miniature sterling silver spade engraved, "Presented to His Excellency the Right Hon. the Earl of Liverpool P.C., G.C.M.G., M.V.O. Governor General of the Dominion of N.Z. to commemorate the planting of two trees in the Christchurch (N.Z.) Domain, September 1st 1917" held by the Canterbury Museum Acquisition, Reference no: EC180.107

nations (Australian Friendship gum,²⁵the Gansu Sister City elm,²⁶the Operation Deep Freeze Sequoiadendron, and the Adelaide Lord Mayor's eucalyptus) and these reflect both Christchurch and New Zealand's engagement in international networks.

Other ceremonial trees stand as a planted record of organisational histories and milestones and, in the case of the Christchurch Rotary Club, document visits to the city by Rotary International presidents.

Although all commemorative plantings express an association with the Botanic Gardens or a desire to inscribe a milestone event within the landscape of the Gardens not all of these trees are considered to have a high heritage value. Those considered to be of high significance are highlighted in the table of known commemorative trees in the appendices of this volume.

Modifications/Notes:

- It is considered unlikely that commemorative trees were relocated from their original planted locations but this possibility cannot be discounted. From 1912 James Young had *"tree-moving apparatus enabling the moving of trees weighing up to 2 tons"* and did so quite readily.²⁷
- There is a lack of clarity concerning some of commemorative trees which further research may help to resolve this is particularly the case with the Bowen Araucaria/Governor Grey tree and the Albert Edward oak and the first tree planted.
- It is very likely that additional commemorative plantings survive across the Botanic Gardens that may not been included in the records held by the Botanic Gardens but may be documented in newspaper articles and other sources.



Figure 1.5. Tree known as the Albert Edward oak and marker, 2010. Source: L. Beaumont

²⁵ The Press, 27 January 1933; Christchurch Domains Board -Newspaper clippings 1929-1946, CH343/80d, CCCA

²⁶ *The Press*, 7 November 1984, Clipping book, CBGA

²⁷ Christchurch Domains Board – No. 1 Album 1913-1928, CHC343/80c, CCCA

Assessment of significance values: Commemorative trees

Historic and Social significance:

- Commemorative trees have been an important and highly regarded feature of the Gardens since the first commemorative planting in the early 1860s. This is particularly true of the trees planted by royalty and these have a significant associational value. Some of these are recognised in the Christchurch City Plan as scheduled Category 1 Heritage Trees.
- All commemorative trees are the planted markers of past celebration. In this respect they have historic significance as a temporal record of visits by royalty, governors general, international Rotarians and past members of the Domains Board. They stand as memory markers of people, organisations and events, and occasionally mark philanthropic acts.
- Commemorative tree planting was an important part of early place making in Christchurch and the act of planted commemoration, accompanied by a plaque, inscribed an observable and familiar imperial history into the landscape of the Gardens. The surviving royal trees illustrate this.
- Surviving gubernatorial trees reflect the period respect accorded this role and stand as a tangible record of what was described in the early twentieth century as "the time-honoured custom that representatives of his majesty should immortalise themselves by planting a tree in the Domain boundaries."

Cultural and Spiritual significance:

- The choice of forest tree species deployed as historic markers illustrates period commemorative practice. The practice of planting oaks to mark royal occasions drew on historic emblematic associations. Oaks are traditionally linked with royalty, and their planting on the occasion of a royal milestone was a common convention used to express loyalty, ongoing allegiance to the Crown and also to reinforce the connection between the colonies and England.
- Other exotic species such as *Araucaria* and *Sequoiadendron* were often used as symbols of High Victorian culture. Their presence in the Gardens today illustrates a legacy of the early colonial enthusiasm for conifers and the determination of the Gardens' custodians to nurture these important plantings.
- The earliest trees illustrate the cultural transference of commemorative tree planting practices from Britain to Christchurch where it became a tradition in the Botanic Gardens. In addition to marking both shared and place-specific events associated with royalty, the Domains Board actively pursued a planted record of New Zealand's Governors General from the earliest times. This practice continued until 1983 and the remaining gubernatorial trees stand as a record of this tradition.
- The Rotary International trees have an associative and cultural significance. These trees are the largest cohesive group of plantings in a dedicated area and are a (now partial) planted record of the International office holders of Rotary between 1932 and 1979. Within this group is a tree planted by the Founder of Rotary, Paul Harris, as well as a Friendship Tree planted by Sydney Pascall, the initiator of this world wide practice.
- The Albert Edward oak has a high international cultural value as illustrated by the collection of its acorns in 1936 for the Australian Forestry League's arboretum of trees of historical interest.
- Christchurch Botanic Gardens is regarded as holding the largest number of 'royal trees' within New Zealand. Although no longer an up to date collection, as a group the gubernatorial tree

collection is the earliest and most complete record of its kind in New Zealand.

Architectural, Landscape and Aesthetic significance:

• Because of their age, size and venerable appearance many of the Gardens' oldest commemorative trees have an additional currency as architectural specimens. They are key character-defining features of the Botanic Gardens landscape and have been a consistent marker around which other aspects of the Gardens have developed.

Contextual significance:

• Many commemorative trees are a prominent visual landmark by virtue of their size and stature. As a collection they contribute much to the special character and perceptible time depth within the Gardens and the wider Heritage Precinct.

Archaeological significance:

- There is potential in the area around the base of these trees, particularly in the root zone, to contain archaeological material, particularly time capsules associated with royal and early commemorative plantings.
- Refer Archaeological Section 1.14.

Technological and Craftsmanship significance:

• A number of plaques and stones associated with these trees have a heritage value in their own right as examples of the period conventions associated with this activity. This extends to those which are still held by the Gardens but are no longer associated with a living tree.

Scientific significance:

• Formative plantings contain some of the earliest surviving genetic material in the Gardens.

Assessment summary: Commemorative trees

This is not considered an exhaustive list as planting records held by Council prior to 1950 are not a complete record of the Botanic Gardens' early commemorative plantings. Further research is needed to determine if any additional commemorative trees survive.

Significance of known surviving commemorative trees in the Botanic Gardens

Tree	Location	Degree of Significance	Nature of significance	Ranking of significance
Royal trees				
1863 Albert Edward oak	River Walk/First Tree Lawn	High	(H) (A) (S)	N, R, & L
1869 Prince Alfred's oak	Armstrong Lawn	High	(H) (A)	I, N, R, & L
1869 Duke of Edinburgh's Sequoiadendron	Armstrong Lawn	High	(H) (A)	I, N, R, & L
1893 York oak	Near the Curator's House	High	(H) (A)	I, N, R, & L
1902 Coronation oaks (pair)	Central lawn	High	(H) (A)	N, R, & L
1920 Duke of Windsor's	Archery Lawn	High	(H) (A)	I, N, R, & L

kauri				
1953 Christchurch Mayor to commemorate the coronation of Queen Elizabeth - <i>Liquidambar</i>	Rolleston Ave boundary area near the Museum	High	(H)	N, R, & L
1963 Queen Elizabeth's oak	Stafford Lawn	High	(H)	I, N, R, & L
Gubernatorial and Prime Min	nisterial trees			
1920 Lady Liverpool's pair of Fagus sylvatica purpurea	Archery Lawn to the side of the Duke's kauri	Moderate to High*	(H) (A)*	N, R, & L
1920 Former Prime Minister William Massey's <i>Fagus</i> <i>sylvatica</i>	Archery Lawn to the side of the Duke's kauri	Moderate to High*	(H) (A)*	N, R, & L
1920-1924 Lord Jellicoe's Fagus sylvatica var. cuprea	Armstrong Lawn	Moderate to High	(H) (A)	N, R, & L
1935 Lord Bledisloe's Pinus canariensis	West of Cuningham House	Moderate to High	(H) (A)	N, R, & L
1938 Governor General Lord Galway's <i>Fagus sylvatica</i>	Armstrong Lawn	Moderate to High	(H) (A)	N, R, & L
1946 Sir Cyril Newton's Betula papyrifera	Armstrong Lawn	Moderate to High	(H) (A)	N, R, & L
1964 Sir Bernard Fergusson's rimu	Armstrong Lawn	Moderate to High	(H) (A)	N, R, & L
1972 Sir Arthur Porritt's Magnolia grandiflora	Armstrong Lawn	Moderate to High	(H) (A)	N, R, & L
Domain Board Trees				
1917 Cedrus sp.	Rock Garden	Moderate*	(H)*	L
Rotary Trees				
1932 Sydney Pascall, International - Friendship Tree – <i>Cedrus deodara</i>	Rotary Lawn	Moderate to High	(H) (A)	N,R, & L
1935 Paul Harris, Rotary Founder, <i>Zelkova</i>	Rotary Lawn	Moderate to High	(H) (A)	N,R, & L
All other Rotary Trees	Rotary Lawn	Some	(H)	L
Other commemorative trees		·		
1880 Cedrus deodara planted to mark John Armstrong' birthday	Armstrong Lawn	High	(H) (A)	R & L
1920 George Harper's Cedrus deodara	Archery Lawn	Moderate*	(H) (A)*	L
1928 Robert McDougall's kauri	West end of Archery Lawn	Some*	(H) (A)*	L

1936 Arbor Day several Ginkgo biloba	Relocated from original sites	Some	(H) (A)	L
1967 Commemorative totara to honour Professor. Arnold Wall	Near the Cockayne Garden	Some	(H)	L
1972 Commemorative rimu in memory of James Cole	West side of Rosary	Some	(H)	L
1976 US Embassy's eight Cornus florida	Armstrong Lawn	Some	(H)	R, L
1984 Lady Beattie's tree commemorating the YMCA	Harper Lawn	Some	(H)	R, L
1990 Warwick Harris, Friends of the Gardens, Acer pseudoplantanus	Potts Lawn	Some	(H)	L
2003 Oak graft from Albert Edward oak planted by relatives of Enoch Barker ²⁸	Not determined	Moderate	(H)	L
2013 Wollemi pine marking the 150 th year of the Botanic Gardens	Gondwana Garden	High	(H) (S)	I, N, R,& L

Key to nature of significance

(H) Of association value and value as evidence

(A) Of aesthetic value

(S) Of scientific value

Key to ranking of significance

I – of significance internationally in relation to the historical, scientific, cultural, social,

archaeological, architectural, natural or aesthetic value of the item.

N – of significance to the nation in relation to the historical, scientific, cultural, social, archaeological, architectural, natural or aesthetic value of the item.

R –of significance to a region in relation to the historical, scientific, cultural, social, archaeological, architectural, natural or aesthetic value of the item.

L – of significance to an area in relation to the historical, scientific, cultural, social, archaeological, architectural, natural or aesthetic value of the item.

Note:

* In instances where provenance was not able to be conclusively proven²⁹ a provisional degree and ranking of significance has been assigned. Further research should be undertaken and every effort made to conclusively confirm provenance/planting details.

²⁸ Understood to mark the Botanic Gardens 140th year

²⁹ This level of research was beyond the scope of this conservation plan

1.5.2 Early, rare and associative trees

Fabric: Trees – Early, rare and associative	Also discussed in: Volume 1 and appendices
Location plan reference: various locations	Historical images: Volume 1:3.49, 3.76

Description:

Vegetation in this category is considered to be of importance because of its age and association with past garden zones or as indicators of historic design style.Some of these trees are nationally significant by virtue of their rarity and size, as recognised in FRI mensuration reports³⁰ and more recently by the New Zealand Institute of Horticulture New Zealand Notable Tree Trust.

The following list is not exhaustive as the Botanic Gardens' planting records pre 1950 are incomplete. Included to date are;

- *Phoenix roebelenii* at the entrance to the jungle in Cuningham House. This is believed to be the oldest species associated with the Winter Garden. However it is possible that other early species survive and this requires further investigation.³¹
- The *Cordyline* which is located between Cuningham House and the Rosary. This was a large specimen in 1928, as noted in photographs of Young's Rosary, and was incorporated into the design of the McPherson Rosary in 1934. Although cut down in 1970 because of declining health in the 1963/1964 it regenerated from the root and is therefore considered to be the same tree.³²
- Potts Lawn Hornbeam, Dutch elm and European ash planted ca.1900.³³
- *Eucalyptus delegatensis* subsp. *delegatensis* (scheduled) between the Rock Garden and Stafford Lawn. This is believed to be a remnant from James Young's Australian Section. Other Australian species which are believed to have formed part of the Armstrongs' nineteenth-century Australian Garden survive on the present 'Australian Lawn.' These include *Eucalyptus obliqua*, *E. globulus* ssp. *globulus*, *E. tenuiramis*, and *E. viminalis*.³⁴
- *Tilia americana* lining Beswick's Walk. Planted in September 1917 this walk honours Harry Joseph Beswick, Mayor of Christchurch and long serving Domains Board member.
- Taxus baccata 'Dovastoniana' east of the Rosary. One of very few of this age in New Zealand.
- Ageing Kowhai and Southern rata in the Water Garden area. These formed part of Young's New Zealand Garden.³⁵
- Cork oak and Sequoiadendron giganteum on the Archery Lawn.

- ³³ As noted by John P. Adam in 2008 in his investigation of the Potts Lawn
- ³⁴ The Star, 22 August 1881, p. 3
- ³⁵ Yellow, white and red flowering kowhai were used to edge the new native garden and these were described as being planted in rows and associated with plantings of beech.Unprovenanced newspaper clipping dated 9 June 1911, Clipping file, CBGA

³⁰ FRI Mensuration Report, No: 22 (unpublished); Burstall, S.W. & Sale, E.V. (1984) *Great Trees of New Zealand*

³¹ In 2000 it was noted by S. Chapman that approximately ten of the original plants placed in Cuningham House were extant including the *Phoenix roebelenii*. S Chapman (2000) *Cuningham House Management Report*, p. 15

³² Suggestions that this may have been a marker tree used in pre-European times by Māori journeying across the plains have been discounted to date on the basis of Joseph Armstrong's vegetation list quoted by Herriott (1919) in *Transactions and Proceedings of the New Zealand Institute*, Vol. 51, p. 414. In this paper Armstrong list of 'Indigenous Flora of Hagley Park and Domain, Christchurch, in 1864' records that no trees were present in either the Park or the Domain in 1864. However, at least one cabbage tree is recollected by the first Canterbury settlers who initially occupied the Hagley Park in 1850, so the possibility that this extant tree may have been a journey marker cannot be discounted.

- Metasequoia glyptostroboides (Dawn redwood) growing near Townend House. One of the first New Zealand generation Dawn Redwoods grown by and gifted to the Gardens by the Curator of Parks, Timaru Borough Council, who had received seed from the Arnold Arboretum in 1948.³⁶
- Pines on Pine Mound as previously noted.
- *Plagianthus spp*.and two old kowhai, *Sophora microphylla* in the Nursery area believed to date from the Armstrong's Arboretum³⁷ This Arboretum was planted in large part in response to prevailing environmental notions (now known as Displacement Theory³⁸) concerning the inevitable demise of indigenous flora, as noted by Armstrong in reports to the Domains Board *"The old nursery which contains nearly 2 acres I propose to layout and plant as a garden for the cultivation of New Zealand trees , shrubs and herbaceous plants; there are in the Colony many beautiful and interesting plants, which it is desired to preserve from the destruction which is fast overtaking the indigenous flora."³⁹ Remnant species from this garden reference not only the location of the Arboretum but also reflect past environmental concerns.*

Assessment of significance values: Early, rare and associative trees Historic and Social significance:

- A number of these trees are early plantings which have significance because of their association with the Gardens' nineteenth-century and early to mid twentieth-century Head Gardeners and Curators.
- They illustrate past garden layouts, period fashionable species and other species deemed representative of particular geographical zones. Some have been growing in the Botanic Gardens since the first phase of its development. In the case of the remnant trees believed to have formed part of the nineteenth-century New Zealand Arboretum, these are tangible evidence of the Armstrongs' response to the period environmental notions that contributed to the formation of their New Zealand garden.
- A number of tree species have a rarity value or are considered to be some of the largest/oldest representative examples in the country and in this regard they have high historic and scientific value.

Cultural and Spiritual significance:

- The oldest of the conifer species illustrate the prevailing period aesthetic which valued conifers both for their extreme contrast with deciduous English species, and their geographic origins, which contributed to their perceived 'special' value. In the case of the Stafford Lawn collection these may have formed part of the Armstrongs' extensive Pinetum, representing a particular geographical grouping (the exact nature of which requires further investigation.)
- The presence of very mature surviving conifers today illustrates a legacy of the early colonial
- ³⁶ Letter, H. Gilpin to Conservator of Forests, New Zealand Forest Service, 5 December, 1955, CH377, Box 4, CCCA; Anderson, A. W. (1949) 'The Dawn Redwood: A living relic of the Far Past', *The New Zealand Gardener* June 1, 1949, pp. 732-736; Cadwallader, B. G. (2009) NZ Metasequoia - First Generation Timeline, unpublished paper
- ³⁷ Adam, J. P. (2008) *Historic Landscape Report of the Potts Lawn and surrounding lands of the Christchurch Botanic Garden*
- ³⁸ Displacement theory, popular in the nineteenth century, considered that native species had evolved less than northern or European species, so were bound to be displaced in the battle for survival of the fittest once new exotic were introduced.
- ³⁹ Armstrong's Report to the Domains Board, 6 February 1875. Canterbury Domain Board Minute Book 1864-1906. pp. 83-88.,CH 343/133a, CCCA; *Colonist*, 30 December 1873, p. 3

enthusiasm for this tree type which was a key element in nineteenth-century park, estate and botanic gardens design. It also illustrates the determination of the Gardens' custodians to nurture these important plantings.

• Many of the Botanic Gardens' important trees were nominated or noted by S.W. Burstall in his 1984 publication *Great Trees of New Zealand*, and also appear in the research undertaken by H. H. Alan in 1941 in connection with his investigation of historic trees of New Zealand.⁴⁰ Burstall documents the extant *Cedrus libani, Taxus baccata 'Dovastoniana'* (Westfelton yew), *Eucalyptus delegatensis subsp. Delegatensis* and others.

More recently, the New Zealand Notable Tree Trust has listed a number of the Gardens' rare species including the *Glyptostrobus pensilis* which is believed to be one of the largest known cultivated specimens in New Zealand.

• The *Eucalyptus delegatensis* subsp. *delegatensis* is one of a small group of trees within the Gardens scheduled in the City Plan as a Category 1 Heritage Tree.

Architectural, Landscape and Aesthetic significance:

• Because of their age, size and venerable appearance they have a high landscape value both individually as specimen trees and as a collection. This is particularly the case with the Beswick's Lime walk and the impressive early to mid twentieth-century collection of arresting exotic species on the Armstrong Lawn

Contextual significance:

• Many are prominent visual landmarks by virtue of their size and stature. As a collection they contribute to the Gardens' unique sense of place and observable time depth both within the Gardens and the wider heritage precinct.

Archaeological significance:

- There is potential for the area around the base of these trees, particularly in the root zone to contain archaeological material.
- Refer Archaeological Section 1.14.

Technological and Craftsmanship significance: N/A.

Scientific significance:

- The collection contains some of the earliest surviving genetic material in the Gardens. Some of the species are represented in the SCION herbarium collection and were gathered in the early 1970s.
- Should the original parent plant of *Chamaecyparis lawsoniana* 'Armstrongii' (previously known as *Cupressus lawsoniana var Armstrongii*) which originated in the gardens and was raised by John Armstrong survive; this would have high national scientific and historic significance.

⁴⁰ Allan, H. H. (1947) Historic Trees, ACGO 8387 IA 63 Record 8/25, ANZ

Assessment summary: Early, rare and associative trees

This is not considered an exhaustive list as planting records held by Council prior to 1950 are not a complete record of the Botanic Gardens' early plantings. Further research is needed to determine if any other important plantings in this category survive.

Tree	Location	Degree of Significance	Nature of significance	Ranking of significane
Pinus pinaster group	Pine Mound	High	(H) (A) (S)	N, R, L
Phoenix roebelenii	Cuningham House jungle.	Moderate	(H) (A)	L
Cordyline australis	Between Cuningham House and the Rosary	Moderate to High*	(H)	R, L *
Hornbeam, Dutch elm and European ash	Potts Lawn	Moderate	(H) (A)	?, R. L
Eucalyptus delegatensis subsp. delegatensis	Site of the James Young's Australian Garden	Moderate	(H) (A) (S)	?, R. L
Eucalyptus collection	Site of the Armstrongs' Australian Garden	Moderate to High	(H) (A) (S)	?, R. L
<i>Tilia americana</i> walk	Beswick's Walk	High	(H) (A)	?, R. L
Taxus baccata 'Dovastoniana'	East of Rosary	Moderate	(H) (A)	?, R. L
Ageing Kowhai and Southern rata	Remnant of James Young's New Zealand garden	Moderate	(H) (A)	R, L
Cork oak	Archery Lawn	Moderate *	(H) (A)	?, R. L
Sequoiadendron giganteum	Remnant boundary plantings on Archery Lawn	Moderate to High	(H) (A) (S)	R, L
Plagianthus and two Sophora	Former New Zealand Arboretum	Moderate	(H) (A)	R, L
Glyptostrobus pensilis	Northern end of Gardens near the River	Moderate	(H) (A)	?,R.L
Araucaria araucana	Armstrong Lawn near the Eveleyn Couzins Memorial (a possible commemorative tree) refer Volume 1 Appendix 8	Moderate *	(H) (A	?,L
Ulmus glabra Camperdownii	Corner of Archery Lawn	Moderate *	(H) (A)	?, L
Metasequoia glyptostroboides	Lawn fronting Townend House	Moderate	(H) (A) (S)	N, R, L
Various avenue species planted 1964	Rolleston Avenue	Moderate	(H) (A)	L

Significance of known surviving early, rare and associative trees in the Botanic Gardens

Cinnamomum	Near Peace Bell	Some	(H) (S)	L
camphora				

Key to nature of significance

(H) Of association value and value as evidence

(A) Of aesthetic value

(S) Of scientific value

Key to ranking of significance

N – of significance to the nation in relation to the historical, scientific, cultural, social, archaeological, architectural, natural or aesthetic value of the item.

R –of significance to a region in relation to the historical, scientific, cultural, social, archaeological, architectural, natural or aesthetic value of the item.

L – of significance to an area in relation to the historical, scientific, cultural, social, archaeological, architectural, natural or aesthetic value of the item.

Note:

? indicates the need for further research to determine whether trees can be considered rare on a national level.

* In instances where provenance was not able to be conclusively proven⁴¹ a provisional degree and ranking of significance has been assigned. Further research should be undertaken and every effort made to conclusively confirm provenance/planting details.



Figure 1.6. View of planting on the Armstrong Lawn, Eveleyn Couzins Memorial on left Source: Sue Knight, 2011

⁴¹ The research required was beyond the scope of this conservation plan
1.5.3 Bedding display

Fabric: Annual bedding display	Also discussed in: Volume 1:3.4, 3.5, 3.6.1, 3.7.1, 3.8.1
Location plan reference: N/A	Historical images: Volume 1:3.23, 3.46, 3.81, 3.82

Description:

Popular horticultural practice featuring temporary, fast-growing plants, both flowering and foliage, which are mass planted in geometric patterns and letter inscriptions.

Modifications:

- Evolving interpretation of this display style from ribbon borders to carpet bedding to display bedding
- Reduction in the amount of lawn areas given over to bedding displays

History:

Display bedding was immensely popular from the 1870s throughout Europe, America and the colonies. Following the resignation of the Armstrongs and the appointment of Ambrose Taylor bedding displays flourished in the Domain, prompted by the Board who advocated this popularist planting style. By 1905 the South Walk was lined with incised beds of regularly changing colour interspersed with *Trachycarpus fortunei*, and additional beds were added under James Dawes' short term as Head Gardener. These were described as *"two large rectangular plots, each 60 feet x 35 feet divided into two sections of different geometrical design similar to eighteenth century parterre"* and were located opposite the Museum.

James Young took this form of garden art to greater heights creating what was described as "*particularly striking bedding displays*" which were effected in the rectangular border gardens that edged the western side of the South Walk on the Armstrong Lawn.⁴² Much of this lawn was covered with large bedding displays, and included his highly praised floral representation of the armorial bearings of the Isle of Man complete with motto "*Quocunque Jeceris Stabit.*"⁴³ This was laid out close to the Moorhouse Statue in 1913.



Figure 1.7. Bedding display, Armstrong Lawn ca. 1920s. Source: Historical photograph collection, Photograph 034, CBGP

⁴² Ashburton Guardian, 6 January 1914, p. 2; The Press, 4 November 1913, p. 8

⁴³ Literal translation of this is *Whichever way you throw me, I will stand*

In addition to his incised beds Young maintained a ribbon border on the Rolleston Avenue side of South Walk. This was 170 yards long and featured annuals arranged in continuous lines of single colours. ⁴⁴ Photographs of Young's other incised beds at this time suggest that he practised a looser approach to bedding display than that of true carpet bedding.⁴⁵

With the change of fashions and the ongoing development of the gardens, James Young's intensive bedding displays were gradually pared back to facilitate upkeep and ensure the Gardens presented a contemporary face to visitors. Under James McPherson the practice of what he described as stiff formal carpet-bedding was discontinued in line with the changing horticultural fashion which favoured a more height-varied and less manicured aesthetic in display beds.



Figure 1.8. James McPherson's trainees planting display beds, Armstrong Lawn late 1930s. Source: Historical photograph collection, Photograph 25-CHP, CBGPA

The practice of seasonal bedding continued with the focus remaining on two edges of the Armstrong Lawn; the south of the Museum Walk and the west of the South Walk. Here beds of a consistent rectangular form showcased annuals, both new releases and old-fashioned species, with a changing array of dot plants⁴⁶ and additional backdrop interest.

Bedding display is still an important part of the experience and aesthetic of the Armstrong Lawn.

⁴⁴ Cover page, *The City Beautiful*, Vol. V. No. 5, February 15th 1929

⁴⁵ The practice of forming beds of low-growing foliage plants, all of an even height, in patterns that resemble a carpet both in the intricacy of their design and the uniformity of surface

⁴⁶ Tall plants in bedding schemes used for contrast of height and colour such as standard fuschia, canna lily and cabbage trees

Assessment of significance values: Annual display bedding

Historic and Social significance:

• The practice of seasonal bedding display in its various forms has been an important element in the Botanic Gardens landscape since at least 1904 and the ongoing use of a regularly changing plant display on the Armstrong Lawns is a form of horticultural historic continuity.

Cultural and Spiritual significance:

- The practice was seen as a valued instructional device, exemplar of horticultural taste and part of the overall Botanic Gardens 'model' which was regarded as a refining agent and promoter of public standards.
- Regarded as a form of garden art, bedding displays were seen as a reflection of the Head Gardener's/Curator's aesthetic abilities.

Architectural, Landscape and Aesthetic significance:

• The practice of bedding was particularly valued for its role as a regularly changing foil to the more static arboreal backdrop of the Armstrong Lawn.

Contextual significance:

• N/A

Archaeological significance:

• Refer Archaeological Section 1.14

Technological and Craftsmanship significance:

• N/A

Scientific significance:

• N/A

Assessment summary: Bedding display

Heritage Significance Assessment: Bedding display Armstrong Lawn	
Degree of significance:	Moderate
Ranking of significance:	Of regional and local significance

1.6 Spatial organisation and design

Fabric: Spatial organisation and design	Also discussed in: Volume 1:3.2.2, 3.3.1,
Location plan reference: Volume 3: 1.1	Historical images: Volume 3:1.14

Description:

The design, organisation and development of spaces within the Botanic Gardens

Modifications:

- Changes in plant material, hard landscape materials, horticultural fashions, social practices and the natural processes of plant growth have modified the original experiential qualities of some spaces
- Loss of some ornamentation, both gifted and purpose-selected, has changed the historical and aesthetic texture of some spaces

History:

Enoch Barker's development programme for the Domain began with the formation of a circumferential promenade which traced the form of the Avon River/Ōtākaro. Two shorter walks were added which crossed the Domain linking the nursery with the southern side of the Domain. This divided what had been one undifferentiated space into several zones. These included a river margin zone, a boundary zone between the South Walk and Antigua Street (now Rolleston Avenue), a substantial area to the north for nursery purposes and a large central area made up of three spaces which initially operated as a gravel borrow and animal enclosures. Post 1872, and under John Armstrong, the internal space was further divided giving form to the two lawns (now known as the Armstrong Lawn and Archery Lawn).

The rationale for this early spatial organisation by Barker and the Armstrongs was twofold. Firstly, it took into account the Domain's early function as both a gravel resource and a containment area for the Acclimatisation Society's large animals and secondly, it followed the maxims of Victorianera design as expressed by J. C. Loudon.⁴⁷ This can be seen in the following elements.

• Orchestrated circulation system – the benefits of "health-giving" exercise were considered as important a part of the experience of the early Domain as botanical education, and to this end a lengthy walk or promenade was laid out by Enoch Barker to trace the outline of the Avon River. This idea of a circumferential walk around which different scenes were revealed was a particular recommendation for the layout of public landscapes and botanical gardens by Loudon.⁴⁸ Another was the concept of small episodical walks as offshoots from the main walk to show particular compartments of plants. (This is discussed in more detail in the following section.)

• Turf – grass was used as a visual foil for plants and trees and prohibitions against walking on the grass ensured that 'directed routes' were used to experience and negotiate the Domain.

• Placement of features – as visitor movement was governed by an adherence to the path system, views or scenes were arranged in relation to the circulation system, to be contemplated and appreciated while walking or sitting. The river was used to best advantage in the construction of scenes and Barker's eyot was a particular example of this. Placement of smaller-scale elements and important ornamental fabric such as sundials, monuments and botanical plant collections were placed at the carrefour of walks, or adjacent to walks to enable close scrutiny, and in the

⁴⁷ J. Claudius Loudon, Scottish botanist, leading nineteenth-century garden and cemetery designer, and author and editor of *The Gardens Magazine* and numerous landscape publications. Loudon's influence on New Zealand gardens was noted by Michael Murphy, Christchurch Horticulturalist in his early publications from 1885, and Loudon's similar impact on Australian gardens has been the subject of a number of Australian studies

⁴⁸ Loudon, J. C. (1860) An Encyclopaedia on Gardening... p. 489-490; Loudon, J. C. (1835) Remarks on laying out Public Gardens and Promenades, p. 649

case of sundials, use. Other features such as topographic variation were employed as seen in the *Pinus pinaster* group which were placed to best visual advantage on an existing mound. A small eminence is also recorded as part of Barker's layout which enabled a panoramic view of the Port Hills.

• Tree deployment – the arrangement and placement of specimen trees appears to have followed the Gardenesque style, as described by one correspondent in 1873 who wrote of *"trees in more or less isolated positions."*⁴⁹ This style promoted the display of plants as single specimens to show their botanic features to best advantage, and tended to emphasize botanical curiosities which, in the case of the Domain, included *Araucaria, Wellingtonia, Lawson's cypress, Cupressus macrocarpa,* variegated species and many others. It is possible that there may have been a hierarchical system or symbolic positioning of important trees across the Armstrong and Archery Lawns, but incomplete planting records prevent any in-depth study of this. It is however noted that these trees were the regular object of memento seekers and vandals which may explain the preponderance of high status trees on the Armstrong Lawn where they were most under the gaze of the Head Gardener.

• Arrangement of plants – the recommended organisation of botanical gardens, as promoted by Loudon, had the principle of succession at its core. "...Visitors should not pass from plants of the torrid, to those of the frigid zone when the arrangement is geographical; nor from Rununculacea to ferns and mosses where it is scientific." Arrangement was to be on the basis of consistency and truth, rather than surprise.⁵⁰ The Armstrongs are known to have used a strict taxonomic ordering system in both their New Zealand Arboretum and Pinetum,⁵¹ and although it is less clear what organising system they used across the whole of the Domain, it is noted that their New Zealand Garden and their Australian Garden are believed to have been positioned in close association.



Figure 1.9. South walk with the Head Gardener's cottage at the terminus of the walk undated but *Araucaria* believed to have been planted in 1870 Source: Burton brothers album 2, PA1-o-081-06, ATL

- ⁴⁹ *The Press*, 23 October 1871, p. 3; also noted in a number of other nineteenth century and early twentieth-century reports
- ⁵⁰ Loudon, J.C. (1835) *Remarks on laying out Public Gardens and Promenades*
- ⁵¹ As descibed by Joseph Armstrong "the plants were placed in proper precedence, according to their natural orders, Sir Joseph Hooker's system being followed." Lyttleton Times, 9 June, 1911, p.11

Other nineteenth-century development across the Domain included features common to Botanic Gardens such as the Pinetum, planted mound and large nursery. Developments planned but not realised by the Armstrongs were added by subsequent Head Gardeners and Curators who, while largely respecting the established spatial organisation of the Armstrong and Archery Lawns, developed the centre and south of the Domain,⁵² and introduced features that reflected changing landscape and horticultural fashions and accommodated evolving social practices.

This was particularly the case under James Young whose legacy included the introduction of a number of popularist attractions and a more permissive attitude to visitor engagement with the landscape. Two Show Houses (Townend House and Cuningham House), a large Rosary, the Children's Playground, a number of lakelets with associated gardens, a Tea Kiosk and a Lime Walk all added to the amenity of what was by then known as the Botanic Gardens. These features were linked together by a network of paths and a common design aesthetic which favoured rustic work,⁵³ large-scale ribbon borders and incised bedding displays.

The front lawn was modified by Young who transformed what had become a dense shrubbery abutting the boundary hedge on Rolleston Avenue into a green sward, edged with lengthy ribbon borders and backed by well-thinned mature trees.

From the early twentieth-century by-laws imposed by the Domains Board were relaxed and visitors were no longer prevented from walking on the lawns or congregating in large numbers without the express permission of the Domains Board. This impacted on the organisation of spaces, the placement of elements and the location of gardens which were no longer tied to views from the path, and less governed by distance to walks, as reflected in the relocation of the Peacock Fountain in 1915. This was relocated to a position in a small waterbody on the south-east corner of the Archery Lawn.



Figure 1.10. The Archery Lawn looking towards the Museum ca. 1915. From the early twentieth century visitors to the Domain were no longer prohibited from walking on the lawns. Source: Historical photograph collection, Photograph 045, CBGPA

⁵² Alteration to the path system in the area of the Art Gallery occurred to accommodate this new building
⁵³ These included the entrance arch in the Rosary, Iris garden Bridge, Kiosk Lakelet Bridge, fence fronting the Curator's House, tree surrounds and the rock collar around the pedestal of the Peacock Fountain

Subsequent Curator's introduced new furnishings and added additional paths to accommodate new and/or expanded botanic collections in the south-west of the Botanic Gardens. A different aesthetic saw the removal of Young's turf ribbon-edges and planted ribbon borders that had historically edged the walks in favour of a greater use of stone edging and pared turf.

The public's growing interest in alpine gardening was catered for in an expanded Alpine Rock Garden and the Leonard Cockayne Memorial Garden. A Rosary that better complemented the form, scale and architectural style of Cuningham House was constructed as a replacement to Young's Rosary. This had an impact on the spatial composition of the centre of the Gardens, erasing a number of paths and creating a strong north-south axis which created a better dialogue between the Neo-Classical style of the Winter Garden, the Rosary and its immediate setting.⁵⁴

New botanical collection imperatives in the 1950s saw an expansion of the Botanic Gardens' Show Houses, and additional dedicated display houses introduced a mix of architectural styles within the central core. These offered a sequence of environmental experiences from the desert to the New Zealand bush in one complex of buildings. Other newly established specialised garden areas (Rose Species Garden, Primula and Waterside Garden) continued the Botanic Gardens' extension into Hagley Park, and these collections increased both the number and sense of differentiated space.

The new Rolleston Avenue wall materially changed the Gardens' boundary in 1962, replacing the live hedge with a stone and metal-railed structure of contemporary design. However the location of the boundary and the arrangement and position of the Rolleston Avenue gates remained unchanged.

Most recently the space of the Armstrong Lawn was modified with the addition of the restored Peacock Fountain and the formation of new paths leading to and around this ornamental feature. A further change saw the erasure of the long-standing path from the Moorhouse Statue to the River Walk.

Summary

A. Armstrong Lawn: South Walk, Museum Walk, entrance points from Rolleston Avenue, path fronting the Pine Mound and the Curator's House

From the earliest time the Armstrong Lawn was regarded as a high status part of the Botanic Gardens for its combination of royal and gubernatorial plantings, ornamental fabric (Gates, Moorhouse Statue and former Rolleston Sundial) and its association with the Museum. From 1920 it acquired an additional status with the construction of the Curator's House.

Although changes in planted fabric have naturally occurred, the Armstrong Lawn continues to retain planted evidence of its former role as the historical portion of the Domain. Similarly, although there have been modifications to portions of the pathway system, and in some cases its dimensions, the remaining path network is still coherent and continues to illustrate nineteenth-century design principles and aspects of the former use of this part of the Botanic Gardens.

Over time the impressive size of trees, and in some cases their strange and arresting forms, have contributed much to the distinctiveness of the Lawn. This also includes mid-ground views of the Pine Mound which has been part of the experience of this lawn since 1871.

⁵⁴ However, the wide Central Walk which separates these two features is recognised as being visually and functionally problematic.

The Armstrong Lawn and its paths retain several observable layers of early design, namely:

- A continuity of entrance points, established prior to the twentieth century, and strengthened by the three imposing sets of gates which have been a part of the entrance experience since 1912
- Important functional relationships are still expressed in the location of the Curator's (and previously Head Gardener's) accommodation in relation to the original entrance (opposite Hereford Street
- The considered placement of the Moorhouse Statue, framed by the Hereford Gates, positioned near pathways and located to illustrate a symbolic relationship with the Museum, Hospital and Domain
- Views of the Museum and the Curator's House from South Walk, and lengthy views along the axis of the Museum Walk stretching into the core of the Gardens as seen from the Museum Gates

The Armstrong Lawn, South Walk, Museum Walk, and portion of the River Walk opposite the old Acclimatisation Society Grounds, the Moorhouse Statue, and the Pine Mound together with the terminus structures of the Museum and the former Curator's House, are considered to form the most significant portion of the Botanic Gardens in terms of the combination of heritage elements and the interrelationship between these elements. This is further enhanced by the commemorative tree collection and other early plantings.

B Archery Lawn

The Archery Lawn, or Archery Ground as it was otherwise known, was also regarded as a high status part of the Botanic Gardens, as evidenced by the number of important documented planting events. The Lawn's central area was levelled and sown in grass in 1866 and an additional path was added on the south side. Like the Armstrong Lawn, the Archery Lawn paths enabled a circumnavigation of this Lawn, and seats located on the walks enabled contemplative repose while promenading.

Again, like the Armstrong Lawn, early planting in the central grass plat followed the Gardenesque style, which ensured the form and natural growth patterns of trees could be best appreciated. This resulted in an initial high degree of open space and sense of expansiveness in the central area of the Lawn, as noted in photographs from the early twentieth century. In contrast, rows and heavier planting densities on the north, south, and west created a sense of seclusion and provided shelter.⁵⁵ Species common to the Victorian-era plant palette were represented, most notably a row of *Sequoiadendron giganteum* on the north side of the Lawn. The extant Camperdown elm is likely to date from this period. Both the Archery Lawn and the Armstrong Lawn were particularly valued for their compositional qualities and by the 1930s were described as "noble, worthy features".⁵⁶

Changes to the Archery Lawn over time have included the addition of the McDougall Art Gallery, which necessitated the reconfiguration of the Museum Path and the shortening of the Armstrongs' Herbaceous Border Garden; the construction of the Eveleyn Couzins Memorial Gateway; the squaring off of the path on the west of the Lawn and the addition of a new path on the south-western end of the Lawn.

The original paths which directed movement around the Archery Lawn on its north and south

⁵⁵ Unsourced clippings, June 1911 & 17 April 1914, Clipping file CBGA

⁵⁶ City of Christchurch Year Book, 1932-1933

margins survive, and although these have been widened and then reduced in width through time, they continue to illustrate past use and historic conventions governing the design of botanic gardens and public parks. The Armstrongs' path bordering the Herbaceous Border Garden is also another example of this. Formed in 1875 for the display of rose trees, herbaceous plants and rare shrubs, and referred to as a 'Herbaceous Garden' from this time, this particular garden typology has been a constant feature on the perimeter of the Archery Lawn for 138 years.

C. River Walk, River, Woodlands Bridge, Kiosk Bridge, Albert Edward oak

The relationship of the River Walk to the Avon River/Ōtākaro is a significant one and directed Enoch Barker's original layout of the Botanic Gardens. The sinuous curves of the river were said to add to the general appearance of the Domain and provided a series of different scenes for promenading visitors.

Since Barker's initial formation of the circumferential walk between 1860 and 1864 there have been some modifications to its width, and in some stretches, the distance between the river and the walk has been modified. Despite this loss of integrity, the experiential quality as the driver for its layout still persists.

The importance of the River Walk is underscored by the presence of the Albert Edward oak. This is regarded as the Botanic Gardens' foundation planting.

Historic connection points between the Botanic Gardens and Hagley Park still exist in the 1875 South Bridge location, the 1883 North Bridge location and the West Bridge or former dray bridge egress.⁵⁷ The South Bridge point also references the historic relationship between the Acclimatisation Society's grounds in North Hagley Park and the Domain.

D. Central core: Rosary, Show Houses, Tea Kiosk and Tea Kiosk lakelet, Magnetic Observatory, Beswick's Walk, Cherry Mound, Stafford Lawn

While all parts of the Botanic Gardens can be described as being a historical composite to a greater or lesser degree, this portion of Gardens is considered to reflect the greatest degree of historic landscape layering as summarised below:

- Central Walk dating to James Young's development of the centre of the Domain
- Possible remnant conifers from the Armstrongs' 1875 Pinetum on the Stafford Lawn
- 1917 Beswick's Walk planted during James Young's curatorship
- Remnant trees from James Young's Australian Garden planted between 1913 and 1917
- 1923 Tea Kiosk occupying the foundations of the ca.1910 Kiosk
- 1910 Kiosk lakelet, re-formed in 1962
- 1924 Cuningham House Winter Garden and statues
- 1936 Cherry Mound, an enlargement of James Young's initial plantings by James McPherson
- 1934 Rosary formed over the area previously occupied by James Young's 1910 and 1912 Rose Garden
- ca.1940 Magnetic observatory workshop the remaining structure from the original 1900 complex
- 1954 Sundial in Rosary
- 1955/56 Townend House overlying the 1931 Townend House footprint
- 1957 Garrick House
- 1964 Gilpin House
- 1967 Foweraker House

⁵⁷ No information governing the historic selection of these sites has been located

- 1981 Fern House reconstructed from the original 1956 house
- 1987 Information Centre

Although the majority of these structures and garden features effect the stylistic expressions of various periods, all contribute to an understanding of the development of the Botanic Gardens and demonstrate changing social practices and customs. The Show Houses as a complex are evidence of changes in collection display and botanical education, but require further study as a collective group.

Remnant vegetation illustrates evidence of past landscape layouts and specific garden collections and is also a tangible reference to the work of past Curators.

The Rosary and Cuningham House, both separately and paired are an important part of the wider historical complex of the Botanical Gardens. Visually and contextually linked, they have been a significant part of the experience and character of the central core since the formation of the second Rosary in 1934.

E. Nursery area, Potts Lawn, Old Native Section, Australian Lawn, Christ's College brick wall The site of the present nursery operation overlays the original 1855 nursery, established by Enoch Barker. Parts of this original nursery were transformed into the Armstrongs' New Zealand Arboretum from 1875.Three remnant trees survive from the Armstrongs' New Zealand Arboretum (*Plagianthus* and two *Sophora*) and Eucalyptus spp from their Australian Garden.

Various nursery buildings have been constructed in this general area, including the 1966 staff offices and 1976 glasshouses (now removed). Evidence of the site's early twenty-first century record survives in the Christ's College brick wall dated to 1922.

The Potts Lawn is also understood to contain trees (Hornbeam, Dutch elm and European ash) as noted in a 2008 report which are believed to date from ca. 1900.⁵⁸

F. Children's Playground, Herbert Memorial Pavilion, Rotary Trees, Hall Lawn,

Described as "*primitive wildness*" prior to James Young's development, this part of the Botanic Gardens has functioned as a children's playground since 1918. At that time it included a large paddling pool, sand pit and an assortment of play equipment. Young's development of the playground is noted to have continued an established use of the Domain for children's play which dates to at least 1875 when a playground operated near the South (Woodlands) Bridge. This was described as being formed by the Armstrongs as a means of preventing children from damaging the borders and beds.

In 1944, James Young's playground was redesigned with assistance from the Christchurch Rotary Club. Young's features were replaced and new play equipment was added. Four years later the club erected the (extant) Herbert Memorial Pavilion. In 2003 the playground was again redesigned, a pergola was added and the spatial organisation of the playground reconfigured. Although this part of the Botanic Gardens illustrates a continuity of use the only remaining structure from past designs is believed to be the 1948 Herbert Memorial Pavilion.

Ten years prior to the addition of this Pavilion the Rotary Club had begun to use the lawn encircling the playground as a planted record to mark the visits of international presidents and other important Rotarians. This continued until at least 1988 and the wider playground landscape

⁵⁸ Adam, J. P. (2008) Historic Landscape Report on the Potts Lawn and surrounding land, for CCC

still contains a representative collection of Rotary trees including two considered to be of national importance as noted in a previous section.

The Azalea Garden, originally formed at the West Bridge entrance to the Gardens prior to the mid 1930s, was gradually expanded by successive Curators. Today, occupying the same (but an enlarged) area, it continues to illustrate the early twentieth-century design intent for this portion of the Gardens, however a lack of specific design detail precludes the identification of any surviving early planted or hard landscape fabric.



Figure 1.11. The Children's Playground, 1923 Source: AWNS-19230215-50-4, Sir George Grey Special Collections, AL

G. Water Gardens, Leonard Cockayne Memorial Garden, Harper Lawn, Western Lawn The Armstrongs' Pinetum occupied this expanse before James Young transformed the space into a series of Water Gardens and a New Zealand Native Garden between 1910 and 1927. Over the next 25 plus years the form of these gardens was interwoven and overlaid with new water gardens and garden extensions. In 1960 this involved the complete redesign and replanting of the Cockayne Garden.

As no detailed early twentieth century plans of this area survive it has not been possible to establish if any remnant fabric is extant, however the degree to which Young's gardens were overwritten would suggests that no vestigial aspects of the original design remain. In addition, limited information survives concerning the plant species displayed in Young's gardens, particularly the nature of important donated collections which are known to have been gifted specifically for these gardens. This makes the identification of any historic planted components impossible in all but a few instances. These are a Southern Rata and Sophora.

H. Rolleston Avenue – Avenue planting, Rolleston Statue and Rolleston Wall

While much of the early heritage fabric has been removed (avenue trees and hedge plantings) the present replanted avenue and extant Rolleston Statue continue to reflect some of the historic design intent, reinforcing this thorough fare as an important avenue.

Assessment of significance values: Spatial organisation and design

Historic and Social significance:

- The spatial organisation of the Armstrong Lawn still illustrates a number of significant aspects of its early arrangement, initially by Enoch Barker, and then in the layers added by John and Joseph Armstrong. This organisation was influenced by site specific constraints and period design conventions that promoted a particular form of visitor engagement with the Botanic Gardens.
- In the case of both the Armstrong Lawn and the Archery Lawn aspects of the early planting programme, particularly the seeming lack of scientific or geographic collection narrative, and the impressive stature and diversity of trees across these lawns, have contributed to their distinctive character and continue to reference their past role as the *"historical portion of the Domain."*
- The Armstrong Lawn still retains a significant degree of authenticity in the surviving combination of path patterning, the original principal entrance point and two later entrances, the location of the Curator's Cottage in relation to the principal entrance, the placement of the Moorhouse Statue, the Museum as a visual termination point on the South Walk, the surviving commemorative tree palette and the Pine Mound. As an interrelated collection of fabric and structures these illustrate some of the earliest layers of design in the Botanic Gardens and reference historic design conventions, social practices and site use.
- The Archery Lawn still retains aspects of its early spatial definition in the lengthy north and south paths which frame the central grass plat. Evidence of past boundary treatments are still observable in the *Sequoiadendron giganteum* on the north, and the Herbaceous Border Garden continues its 1875 origins as an area of display for herbaceous perennials
- A number of spaces, gardens and buildings have a degree of significance for their continuity of use. These are the Children's Playground which has been a site of children's recreation since 1918, the central core which has been a dedicated site for rose display since 1910, the location of Rock Gardens and Water Gardens from the 1920s, the Head Gardener's/Curator's residence which has had a presence on the Armstrong Lawn since at least 1872, the Show House complex which has been occupied by built structures for the display of subtropical species since 1913 and the Kiosk and lakelet first formed in 1910. While new fabric and designs have largely overwritten the original design and appearance of these gardens and buildings the spaces are nevertheless evidence of a continuity of site use. Reinforcing this, many of the physical linkages between today's gardens and buildings are still observable, continuing to illustrate James Young's early twentieth-century master design and his spatial organisation of this central core.

Cultural and Spiritual significance:

• The Armstrong and Archery Lawns are significant for a continuity of cultural practice and time honoured customs which have been played out across these landscapes. This is particularly the case with the practice of marking royal events through the planting of trees from the 1860s. It is also evident in the Domains Board's determined practice to "*immortalise the representatives of his [Governors and Governors General] by planting a tree in the Domain boundaries*" from 1870.

Architectural, Landscape and Aesthetic significance:

• The specialised gardens have landscape significance for their ability to convey the principle characteristics of distinctive landscape types and styles. They exhibit a high degree of aesthetic value which is derived from their progressive and layered development and the scale and maturation of the earliest plantings.

• The Botanic Gardens is the setting for a varied architectural heritage. This ranges from the impressive Neo-Classical style of the New Zealand Historic Places Trust listed Cuningham House to the functional, diminutive Magnetic Observatory workshop. These buildings, as both cluster arrangements and single structures particular to specific garden zones, make a significant contribution to the observable continuum of the Botanic Gardens.

Contextual significance:

• The Botanic Gardens is a conscious work of creation, laid out according to period design principles and social conventions. Its early and ongoing role in botanical education, as an exemplar of good taste, a model for modern horticultural practices and design has been influential in shaping Christchurch gardens and has contributed to the development of a distinctive city.

Archaeological significance:

- The archaeological footprint of the Potts Lawn and the 2012 site of the Nursery and Staff Office, as sites of past nursery operations, may have some archaeological potential.⁵⁹
- Refer Archaeological Section 1.14.

Technological and Craftsmanship significance:

• Considered in respect of individual elements.

Scientific significance:

• The accumulated plant fabric built up in layers from various development periods has resulted in a rich horticultural heritage and a significant arboricultural record from the mid nineteenth century and twentieth century.

Assessment summary: Design including spatial organisation Note: The general contribution trees, infrastructure and heritage fabric makes to the design of spaces is taken into account in the following assessment however trees, paths, buildings and fabric having heritage significance in their own right are assessed in other sections.

Heritage Significance Assessment: Design including spatial organisation		
	Degree of significance	Ranking of significance
Armstrong Lawn	High	Of regional and local significance
Archery Lawn	High	Of regional and local significance
River Walk	Moderate	Of regional and local significance
Central core: Rosary, Cuningham House relationship	Moderate	Of local significance
Rosary	High	Of local significance
Show Houses and setting	Some ⁶⁰	Of local significance
Tea Kiosk and Tea Kiosk lakelet	Some	Of local significance

⁵⁹ Adam, J. P. (2008) Historic Landscape Report on the Potts Lawn and surrounding land, for CCC

⁶⁰ Further investigation into the Show House as a complex is required

Paulownia Lawn	Some	Of local significance
Beswick's Walk,	High	Of local significance
Cherry Mound, Stafford Lawn, Central Lawn	Some	Of local significance
Hall Lawn, Children's playground	Some	Of local significance
Magnetic Observatory and Lawn	Some	Of local significance
Water Garden area, Cockayne Garden, Harper Lawn, Western Lawn	Some	Of local significance
Border gardens near Nursery including Herbaceous Border Garden	High	Of regional significance
Rolleston Avenue	Some	Of local significance



Figure 1.12. South Walk with Curator's House at terminus ca.1950s. Source: Source: Historical photograph collection, 063, BGPA

1.7 Infrastructure

1.7.1 Paths

Fabric: Paths	Also discussed in: Volume 1:3.2.2, 3.3.1, 3.4.1, 3.6.1
Location plan reference: Volume 1:	Historical images: Volume 1:3.8, 3.9, 3.12, 3.23, 3.46
Figures 3.7, 3.14, 3.20, 3.58, 3.83, 3.100	Volume 3:1.13, 1.14

Description:

A mix of hard surface primary pathways and secondary footwalks. Some main pathways also serve as the circulation route for the guided electric shuttle tour.

Modifications:

- Paths have been reformed on a number of occasions. This has included their levelling, raising, widening and narrowing
- Original main point of entry into the Gardens opposite Hereford Street became a secondary egress when the Museum path was widened by John Armstrong
- After 1907/1908 the general public was allowed more freedom to walk on the grass and paths were no longer the only way to experience and negotiate the Domain

History:

Enoch Barker

As already noted the focus of Enoch Barker's development program from 1860 was the formation of a promenade which encircled the whole of the Domain and traced the meander of the Avon. This was a conventional design response to the river and linked the acts of promenading and contemplation with river views. Two additional walks were formed to cross the Domain on either side of one of the Acclimatisation Society's animal enclosures in the central core of the Domain. These directly linked the Government Nursery with the River Walk or promenade on the opposite side of the Domain. (1867 map, figure 1.14.)

The nature of this layout, while a pragmatic response to the site use requirements at that time, followed the guiding principles for the layout of Botanic Gardens as penned by J.C. Loudon who recommended"... surrounding the whole with a walk, which may also cross the garden in one or more places. Such a walk, to display in succession every kind of remarkable feature, is essential to all [botanic] gardens, whatever may be their extent or kind."⁶¹

This circumferential arrangement also influenced the location of, and provided access to, the Albert Edward Oak and the 1872 Head Gardener's Cottage (and possibly an early Government Gardener's cottage) at the terminus of the South Walk. The location of the Head Gardener's accommodation was again one of Loudon's recommendations. (Refer Curator's House section 1.10.1).

John and Joseph Armstrong

A number of other features promoted by Loudon were used by the Armstrongs (Pine Mound, Pinetum), and Loudon's principles for the layout of botanical gardens' paths and the display of plant collections are discernable in new work initated by them. One example of this was the paths which bisected the garden beds to the west of the Christ's College grounds adjacent to the former office and library. This was part of the area developed by them for a New Zealand Arboretum. These paths, or episodical walks as they were known, were recommended by Loudon in several of his landscape treatise, "On the main walk there may be small episodical walks to display the beauties of particular scenes in detail, for example particular compartments of

⁶¹ Loudon , J. C. (1860) An Encyclopaedia on Gardening... p. 490

different types of plants in a botanic garden."62

Two episodical walks persisted through time and continued to define spaces lying between the Nursery area the Rosary/Herbaceous Border Garden and the Christ's College wall until the development works for the new visitor centre necessitated their removal.

The Armstrong's also retained the two curved walks Barker had laid to cross the Domain in the central core, using these to form two of the boundaries of their Pinetum.

The walk running parallel with the Christ's College boundary was also laid out by Barker. A second path was formed by the Armstrongs to the south of this walk in 1875 to achieve parallel walks which contained their 260 yard long Herbaceous Border Garden. This parallel arrangement of paths also enabled the close scrutiny of plants.

Surviving paths which continue to illustrate Barker and the Armstrongs' path systems are:

- The River Walk portion of Barker's circumferential walk
- South Walk (part of Barkers circumferential walk)
- The Herbaceous Border Walk formed by the Armstrongs in 1875
- The earliest entry point (formerly the main entrance) into the Gardens opposite Hereford Street
- The entrance for hospital patients opposite Cashel St. which is now known as the Curator's House entrance
- The Museum Walk and entrance

James Young

As previously noted visitors were prohibited from walking on the grassy expanses of the Domain until the early twentieth century. Following this the need to arrange site fabric, gardens, vistas etc in relation to walks was less critical in design terms and the Botanic Gardens path system became more of a linking device between gardens than a vehicle to direct visitor experiences through a series of scenes and gardens.

Young's development works were focused on the central core of the Botanic Gardens where he added a network of paths to link together a series of new gardens which were progressively formed from 1910. However, he did initiate some changes to the Armstrong and Archery Lawn walks. These involved a squaring off of the west end of the Archery Lawn and the reconfiguring of the Herbaceous Border Garden area to effect two lengthy borders (instead of the Armstrongs' single border).

A circular bed (now the iris bed) at the terminus of the Herbaceous Border was created as part of the additional walks formed to accommodate the McDougall Art Gallery and its orientation to the Archery Lawn.

At the hands of Young the Armstrongs' walks which had enclosed two sides of their Pinetum were erased as were the other Pinetum boundaries. Barker's curved walks, which crossed the Domain from the River Walk to the original Nursery, were straightened although a small portion of the original form was retained and is extant in Central Walk between Beswick's Walk and the Paulownia Lawn

⁶² Loudon , J. C. (1835) *The Gardener's Magazine*, Vol. II, p. 649;& Loudon , J. C. (1860) p. 490 These were used by ¹¹¹ Loudon in his design for Derby Arboretum

Surviving paths which reflect James Young's organisation of circulation routes through the central core include:

- Beswick's Walk formed in 1917
- Walk from South (Woodlands) Bridge to Harper Lawn
- Walk leading from West Bridge to the Kiosk
- Walk leading to the Water Gardens from West Bridge
- Paulownia Lawn Walk

James McPherson

Changes in the twenty years following James Young's retirement saw an intensification of secondary paths in the Water Gardens zone to accommodate new and expanded gardens. The replacement of Young's Rosary with the McPherson Rosary necessitated a refining of the form of the Central Walk at its connection with Cuningham House and the formation of an axial walk to link the Winter Garden with the Rosary.

Surviving paths particular to James McPherson's reorganisation of the Botanic Gardens include the :

- Rosary path system
- Axial path from Cuningham House, through the Rosary terminating at the Harper Lawn

Late twentieth century

More recent changes to the path network have occurred in the last 50 years with the erasure of the path which led from the Moorhouse Statue to the River Walk and the addition of the diagonal paths on the Armstrong Lawn which lead to the Peacock fountain. The Children's Playground has also undergone revision and pathways now link features across the Rotary Lawn with the Kiosk and its immediate setting.

Summary of surviving early paths

Changes in garden areas, loss of trees edging paths, vignettes and views from paths no longer extant or obscured by tree growth etc. have altered the designed experiential qualities of many of the path layouts. However, a number of the key design drivers for the earliest systems are still expressed in the remnants of the nineteenth-century pathways and in the overlays of subsequent path networks. These are:

- Enoch Barker's River Walk
- South Walk
- Footwalks into the Gardens from Rolleston Avenue
- Museum Walk
- Perimeter walks edging the Archery Lawn including the Herbaceous Border Garden Walk
- Beswick's Walk
- Rosary and Cuningham House axis
- Remnant of Enoch Barker's 'dividing path' incorporated in the Central Walk by James Young.
- Walk from South Bridge to Harper Lawn
- Walk leading to the Kiosk from West Bridge
- Walk leading to the Water Gardens from West Bridge
- Paulownia Lawn Walk

Refer to the following page for a map showing the location of these paths and part paths as described above.



KEY

- 1. Footwalks into the Gardens from Rolleston Avenue
- 2. South Walk
- 3. Museum Walk
- 4. River Walk
- 5. Herbaceous Border Garden Walk
- 6. Perimeter Archery Lawn Walk
- 7. Walk from South Bridge to Harper Lawn
- 8. Axial path from Cuningham House through the Rosary terminating at Harper Lawn
- 9. Rosary paths
- 10. Portion of Central Walk
- 11. Beswick's Walk
- 12. Walk leading to Water Gardens from West Bridge
- * Former location of episodical paths

Figure 1.13. Map showing the location of walks referred to in the analysis of paths Source: Base map -'Walking map of the Christchurch Botanic Gardens', December 2011

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Figure 1.15. (top) South Walk, between 1882 and 1919, Figure 1.16. (centre) 1941 view of South Walk and Figure 1.17. (lower) 2010 view of South Walk. Sources: PAC-10009676, State Library of Victoria ; Postcard, L. Beaumont; Photograph, L. Beaumont 2010

Assessment of significance values: Path system

Historic and Social significance:

- The first layer of walks was laid out by the first Government Gardener, Enoch Barker, and these responded to the form of the river and the boundaries the site. The main body of this system is now known as the Riverside Walk and contains the Botanic Gardens' foundation tree.
- Surviving paths from the Barker and Armstrong period, and the relationship of these to particular vista's, plantings and surviving heritage fabric, continue to illustrate historic use and past conventions governing the early orchestrated passage through the landscape and the prohibition of walking on the Botanic Gardens' lawn.
- Although the authenticity of the Riverside Walk layout is weakened by changes in the distance between the river and the walk (particularly from the Tea Kiosk to the Woodland Bridge) this has not diminished the designed experiential qualities. The importance of the physical connection between this walk and the river continues to be expressed The Riverside Walk continues to illustrate Barker's 1860s design strategy of incorporating the visual and experiential qualities of the Avon River/Ōtākaro into the Gardens. It is still enjoyed in this way today.
- James Young's linden-edged walk known as Beswick's Walk still retains the sensory experience which was a key planned feature in its design and planting.
- The axial paths through the 1934 Rosary remain a key design feature of this garden tying it functionally and visually to Cuningham House as designed.
- The path bordering the north of the Archery Lawn has been a separating device between the Herbaceous Border Garden and the central grass expanse of the Archery Lawn since 1875. It delimits the edge of the Armstrong's Herbaceous Border Garden and illustrates a continuity of use in this part of the Botanic Gardens.
- Much of the path network in the central core continues to illustrate James Young's design intent for that area.

Cultural and Spiritual significance:

 The small portion of path from the Rolleston Avenue gates opposite Hereford Street leading on to South Walk is extant from Barker's 1860s grounds layout. This was the main entrance into the Domain for many years, and was accorded additional importance with the placement of the International Exhibition gates in 1883 and the Moorhouse Statue in 1885. Although the authenticity of this path's design was weakened with the removal of the western portion of the path post 1963, the remnant continues to illustrate part of the early intended entrance experience and aspects of the designed 'directed promenade' through the Gardens.

Architectural, Landscape and Aesthetic significance:

- Aspects of the path system continue to illustrate nineteenth century principals for the laying out of Botanic Gardens.
- There has been little change in the path system within and around the McPherson Rosary since its formation in 1934 and it retains a high degree of integrity both as a designed element to direct movement around the rose beds and also as a linking device emphasising this garden's formal and aesthetic connections with the Cuningham Winter Garden.
- Barker's path system also included the South Walk which established an important view shaft to to the Head Gardener's / Keeper's cottage (and then the Curator's House) and back to the

Museum.

Contextual significance:

• Some paths have a high degree of contextual significance by virtue of their planned and ongoing relationship with other long established features within the Gardens, both planted and natural. This is the case with the Riverside walk, Beswick's Walk, the (former) main entrance and the Rosary and the Armstrong and Archery Lawns.

Archaeological significance:

• Refer Archaeological Section 1.14

Technological and Craftsmanship significance:

•N/A

Assessment summary: Paths

Heritage Significance Assessm	Heritage Significance Assessment: Path system		
Path	Degree of significance	Ranking of significance	
River Walk	Moderate	Of regional and local significance	
Museum Walk	High	Of regional and local significance	
South Walk	High	Of regional and local significance	
Footwalks from Rolleston Avenue to South Walk	High	Of regional and local significance	
Portion of Central Walk between Beswick's Walk and the Paulownia Lawn	Some	Of local significance	
Beswick's Walk	High	Of local significance	
Rosary and Cuningham House axial path	High	Of local significance	
Rosary paths	High	Of local significance	
Perimeter Archery Lawn including Herbaceous Border Garden Walk	High	Of local significance	
Walk leading to Water Garden from West Bridge	Some	Of local significance	
Walk from South Bridge to Harper Lawn	Some	Of local significance	
Rolleston Avenue	Not established	Not established ⁶³	

⁶³ Requires further investigation to determine changes through time

1.7.2 Bridges

Fabric: Woodlands Footbridge	Also discussed in: Volume 1:3.3.1
Location plan reference: 9	Historical images: Volume 1:3.9, 3.43; Volume 3: 1.20, 1.22, 1.23

Description:

The Woodlands Footbridge is located in the southern side of the Botanic Gardens crossing the Avon River to the Bandsmen's Memorial Rotunda.

Modifications:

- The current bridge was built in 1975. Prior to this two other bridges had occupied this site.
- The first bridge was completed in 1873 and referred to as the Avon Domain Bridge.
- Some time before 1900 a timber bridge replaced the original foot bridge.
- The present bridge, pictured below replaced this in 1975.



Figure 1.18. Pre-stressed concrete structure of bridge. Source: PDAL 2010

History:

In 1871 the Domains Board began to consider erecting a bridge across the Avon River to provide access from the Botanic Gardens to the Acclimatisation Society Ground in South Hagley Park. At the proposed site of the bridge, the river was 73 feet in width.

It was not until 1872 that the Provincial Engineer, George Thornton, was asked to prepare plans and specifications for the bridge and these were completed in March of that year. Three tenders were received for the construction of the bridge with the Scott Brothers being the successful tenderers. However, the project was delayed as a result of difficulty obtaining Oregon timber and the Scott Brothers asked if another timber species could be used.

In the following year Thornton drew up new plans using shorter lengths of Oregon in bolted splices which were duly approved by the board. However, three months later while the project was still on hold, the Domains Board members reviewed the bridge plans and raised a number of concerns. In particular, they considered that the proposed bridge was unsightly and were fearful

that it would detract from the beauty of the river.⁶⁴ They asked the Government to consider a much lighter structure. Two new plans were prepared, one of which was a suspension bridge design which was the most favoured. However, it appears from photographs that the alternative design was chosen and approved by the Board. The Provincial Engineer negotiated with the Scott Brothers to build the bridge for an affordable cost of £240. The bridge which was completed on 31 October 1873 appears in photographs as an elegant, arched timber bridge, as seen below.



Figure 1.19. Woodlands Footbridge ca 1880. Source: A City of Bridges

As Ince suggests the style of the bridge is very similar to the third Worcester Street bridge⁶⁵. Furthermore, he speculates that the Provincial Engineer may have simply used the drawing he had available for Armagh Street.⁶⁶



Source: Woodlands Footbridge ca. 1880, A City of Bridges

⁶⁴ Ince, J. A. (1998) A City of Bridges – A History of Bridges over the Avon and Heathcote Rivers in Christchurch, p. 99

⁶⁵ Ibid, p. 101

⁶⁶ Ibid p. 101

The original structure was replaced by a second timber bridge some time before 1900. The new bridge was similar to the first bridge although somewhat longer with five spans. Like the Kiosk Bridge it was gated, although the gate was positioned at the mid-point of the bridge.

In 1975 the timber footbridge was replaced by the current bridge. The new bridge is made of prestressed concrete units in the style known as Swedish Table Design.⁶⁷



Figure 1.21. Woodlands Footbridge, 1922. Source: Sir George Grey Special Collections, AWNS-19220504-33-1, AL



Figure 1.22. View of the Woodlands Bridge photographed between 1960 and 1972. Source: Postcard, L Beaumont private collection

⁶⁷ Ibid, pp. 99-101

Associated with the structure:

George Thornton (1828-1914)

Born in Yorkshire, George Thornton became a civil engineer before emigrating with his wife to Melbourne, Australia in 1853. The couple moved to New Zealand in 1862 and George was appointed Assistant Provincial Engineer for Canterbury under Edward Dobson in 1863. After Dobson left for Australia in 1868, Thornton was appointed Acting Provincial Engineer, a post he held until he eventually became the Provincial Engineer in January 1874.

After the provinces were abolished he went into private practice in Christchurch, and later in partnership with W J Bull.

Architectural analysis

The current Woodlands Footbridge is a contemporary cambered concrete design. A slender and shallow arch is supported by angled slab piers. Steel railings on either side follow the camber of the bridge. A gate is situated on the southern side of the bridge.

Architectural influences:

The current Woodlands Footbridge is a contemporary cambered concrete design. A slender and shallow arch is supported by angled slab piers. Steel railings on either side follow the camber of the bridge. A gate is situated on the southern side of the bridge.

Construction details:

The bridge is constructed in pre stressed concrete and supported on angled concrete piers at either end.

Assessment of significance values: Woodland Footbridge

Historic and Social significance:

• The bridge serves as an important pedestrian connection across the Avon River leading directly to the Band Rotunda, once a popular platform for entertaining the public. It continues a relationship with this part of Hagley Park which was first established in 1873 with the construction of the first bridge. The Woodlands Bridge was the first bridge constructed in the Domain.

Cultural and Spiritual significance:

- The bridge is part of the cultural make up of the Gardens creating a link across the Avon making the gardens fully accessible for pedestrians.
- The setting of the bridge including the Avon River, over which it is situated, provides a spiritual environment for the bridge.

Architectural, Landscape and Aesthetic significance

• The bridge was built in a style sometimes referred to as the Swedish Table Design which is evident in the light appearance and the cambered form. It is simply designed with a light and elegant appearance providing aesthetic value in the Gardens. The former timber bridge was of a much heavier appearance and probably more conspicuous in its setting.

Contextual significance:

• The footbridge has a longstanding relationship with the Gardens providing access from one side of the Avon to the other. Also known as the Band Rotunda Footbridge, it provides access to the Bandsmen's Memorial Rotunda. It has some landmark value particularly because of this shared association.

Archaeological significance:

- It is possible some remnants still exists of the former bridge providing some archaeological evidence of the site.
- Refer section 1.14

Technological and Craftsmanship significance:

• The structure is an example of concrete technology for pre cast cambering for bridges.

Significance of elements : Woodlands Footbridge

An indication of the assumed period from which each element originates is given in the following table:

Original fabric (OF) This fabric dates from the time the footbridge was first constructed in 1873.

- **Later fabric (LF)** This is fabric which was added after the original construction date but excludes recent fabric.
- **Recent fabric (RF)** This is fabric that has been added since 1975 when the bridge was built or has been added within the last 20 years. It generally has no heritage value.

Setting:

The setting has significance as the current bridge shares the footprint of the original foot bridge.

Present rating: Moderate significance

High Significance

Original Location of the first bridge (OF)



Bridge:

The bridge is completely new fabric with no apparent remnants from the original bridge.

Present rating: Some significance



Assessment summary: Woodlands Bridge

Heritage Significance Assessment: Woodlands Bridge	
Degree of significance:	Some
Ranking of significance:	Of local significance



Figure 1.23. View of the Woodlands Bridge spanning the Avon River 2010. Source: L Beaumont