Section 2.0

DEVELOPMENT OF ADELAIDE BOTANIC GARDEN

Photo: *A party seated in the Garden, with a palm and cycad garden in the middle-ground, and the Royal Adelaide Hospital buildings to the rear.*

2.1 ABORIGINAL (PRE-EUROPEAN) HISTORY OF THE SITE

2.1.1 The Kaurna People

Today the Aboriginal people of the Adelaide Plains call themselves *Kaurna* (pronounced Gar-na) but we cannot be quite sure what their ancestors called themselves before Europeans arrived. Most early Europeans simply referred to Aborigines by the nearest European placename, so early written descriptions of the local people just called them the Adelaide Tribe, as opposed to the Murray Tribe or the Encounter Bay Tribe. Missionaries and others who studied Aboriginal languages more closely, recorded the name *Cowandilla* for the local people in the nineteenth century. Another version of this name, *Kouandilla*, suggests that the words *Kaurna* and *Cowandilla* may in fact be more closely related than they appear at first glance, perhaps variants of one word (Hemming, 1990, pp.128–29). It was not until the early twentieth century that the word *Kaurna* first appeared in writing to mean the clan who had lived in the immediate vicinity of metropolitan Adelaide. By then most of its local members were dead, but some descendants were returning from outlying places such as Poonindie, Point Pearce, and Raukkan.

In 1972, the South Australian Museum published Robert Edwards' *The Kaurna People of the Adelaide Plains*, a work that helped to establish the name in the public mind. Two years later Norman Tindale's monumental *Aboriginal Tribes of Australia* published a map showing Kaurna land extending from Cape Jervis in the south to the River Broughton in the north. Many historians and anthropologists doubt that all the people living over such a large territory called themselves Kaurna, and some have also queried Tindale's whole notion of the 'tribe' as the organisational unit of Aboriginal society, but since the 1970s there has been general use of the name Kaurna in the Adelaide area. The Kaurna Plains Aboriginal School opened in 1986, and the name is now universally accepted as the traditional name for the indigenous people of what is now metropolitan Adelaide.

We do not know how long the Kaurna people occupied the land; certainly it must have been thousands of years, for sites on Kangaroo Island have been carbon dated to 21,000 years ago. Undoubtedly the River Torrens was an important resource, providing the most reliable water supply on the Adelaide plains. Throughout Australia, river estuaries usually supported a fairly large population, and we can assume that the abundant marine and bird life of the lower Torrens wetlands and the Port River would have been a valuable asset to the Kaurna people. The locality lacks a convenient and reliable supply of surface fresh water, however, and would have been a difficult place to live in summer, and there was probably a cyclical—perhaps annual—pattern of migration between the estuary and the hills. The Adelaide plains offered a range of environments to the Kaurna people, extending from the coast across the plains to the foothills of the ranges, offering different foods and water sources at different times of the year. Most likely the waterholes of the Torrens played a part in those movements (Ellis, 1976).

2.1.2 Kaurna places

Some Kaurna vocabulary was recorded in the 1840s, and there has also been recent reconstruction of some placenames in the Kaurna language. The River Torrens is variously identified as *Karrawirraparri* (red gum river) or *Tandanjapari* (red kangaroo river) (Hemming, 1998, p.18; Amery, 1997, p.1). One traditional name has been identified within the Adelaide Botanic Garden: 'the waterhole in the botanical gardens' was identified as *Kainka Wirra* (eucalypt forest) by Amelia Taylor in the 1930s, and was said to be of special significance to her father (Hemming, 1998, p.19; Amery, 1997, p.2). The present lake on the creek is known to have been constructed in the early stage of the Garden's development, but it may have been an enlargement of an existing waterhole, and some Aboriginal people were still living a semi-traditional lifestyle in the parklands in the 1850s. The general area of the Botanic Garden and Botanic Park is said to have been 'the site of camps, "corroborees", ceremonies, burials and other activities', and one dead hollow red gum has been identified as an Aboriginal shelter

(Hemming, 1998, p.21). Eugene von Guèrard sketched an Aboriginal encampment, believed to have been in the vicinity of Botanic Park, in the 1850s.

2.2 ADELAIDE BOTANIC GARDEN

2.2.1 Early attempts at establishing a botanic garden (1836–55)

Australian botanic gardens

The history and development of European settlement in South Australia from 1836, well known from texts such as Pike's *Paradise of Dissent: South Australia 1829–1857* (1957), the Jensens' *Colonial Architecture in South Australia* (1980), and, more recently, the *Wakefield Companion to South Australia* (2001), has produced a botanic garden in Adelaide which is at once regional, distinctive, and jewel-like. Yet the establishment of a botanic garden in Adelaide was not straight forward and several attempts were made before the final site was selected. These early attempts mirrored the vicissitudes of what was planned to be the 'model city' of a 'model colony', one intended from the outset to be developed as by free colonists in contradistinction to the penal beginnings of New South Wales and Van Diemen's Land.

Government gardens were established in the Australian colonies within a comparatively short time of European settlement, often within the first decade and generally as gardens in which to acclimatise plants. Government gardens were thus established in Sydney (1788), Hobart Town (1818), Brisbane (1828), and Palmerston (Port Darwin) (1869). These early government gardens were frequently located within a larger government domain that also contained a government house, as at Parramatta (1790s), Launceston (*c.*1808), Hobart (1811), Brisbane (1827), Perth (1829), Adelaide (1836), and Melbourne (1845). Such domains—in South Australia known as 'park lands'—formed an early and uniform type of large public reserve in Australia. Once established, these government gardens and their associated institutional organisations, developed collections that were documented and labelled, and were open to the public for the purposes of education, experimentation, research, and recreation (see Section 3.2). Such gardens were the forerunners of the botanic gardens established in Australian in the mid-nineteenth century at Sydney (1816), Hobart (1844), Melbourne (1846), Brisbane (1855), and Adelaide (1855).

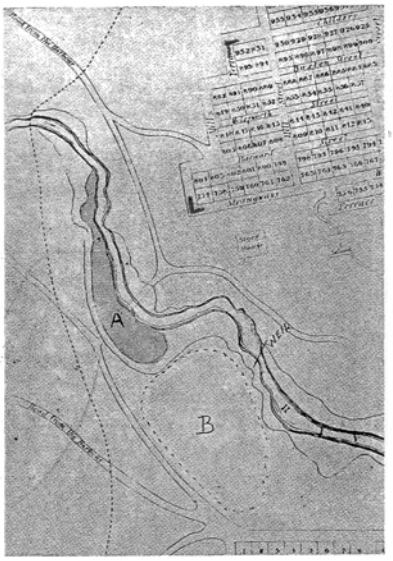

Figure 2.1 *The first (A) and second (B) sites for the botanic garden on the banks of the River Torrens in Park 27 (Bonython Park) today.*

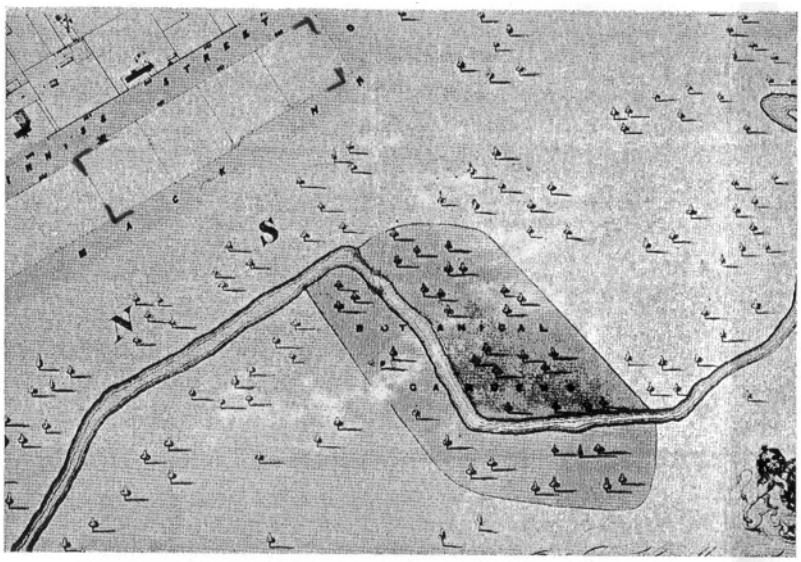

Figure 2.2 *The third site for the botanic garden on a bend of the River Torrens near Botanic Park.*

First site (1837)

The original survey of Adelaide (1836–37)—with its distinctive belt of park lands around the city and suburban North Adelaide and occupying the shallow valley of the River Torrens between them—showed an area set aside for a botanic garden (see Figure 2.1). This was located on an island in the Torrens (part of the west park lands), but the initial site, chosen without the benefit of any horticultural hindsight and with only limited knowledge of the local environment, proved quite unsuitable as it was prone to flooding and was never developed.

Second site (1837–40)

A second site was selected by the local authorities, in 1837, adjacent to the River Torrens and south of the earlier site (see Figure 2.1). Thomas Allen (1787–1868), an experienced gardener who had previously worked in London's royal parks, established South Australia's first nursery on the second site. He maintained a leasehold occupancy from 1837–40, but did not prosper in the fledgling colony. The site was vacated in c.1840 and Allen migrated to Dunedin in New Zealand 1862 (Jones & Westergaard 2006).

Third site (1839–56)

A third site, later known as the Old Botanic Garden, was chosen in 1839 (see Figure 2.2). This site was on the northern side of a large bend in the River Torrens, opposite the present Botanic Park. The Governor placed the garden under the care of John Bailey (1800–1864), an experienced horticulturist whose father was a nursery proprietor and seed merchant in London. Bailey was optimistically appointed Government Botanist and for a time (1839–40) he maintained the government garden concurrently with Allen's nursery. Although public funds were subscribed for the venture, the financial difficulties of the colony led to Bailey's retrenchment in 1841. Bailey and his sons established what was known as Bailey's Garden, also known as the Hackney Gardens, and his grandson later became director of the Adelaide Botanic Garden (see Section 2.2.5). Editor and horticulturist George Stevenson (1799–1856), rented the Old Botanic Garden during 1842–43, and his gardener George McEwin took take charge of the property. William Haines rented the property during 1844–50 and in 1850 George Francis obtained the lease. Francis was soon to become inaugural superintendent of the Adelaide Botanic Garden (see Section 2.2.2), and he regarded this third site as the 'Adelaide Botanic Garden', giving this as his address during the early 1850s. Francis pressed for a properly funded botanic garden, while working as a local government surveyor and valuator, and recommending plantings for Adelaide's city squares and gardens (Jones 2006).

Fourth site (1853–54)

Following agitation by the Agricultural and Horticultural Society, in 1853 a fourth site at the north-west corner of Frome Road and North Terrace (extending as far north as the Torrens) was approved by the governor. This proposal was influenced by George Francis but the garden was never developed, and the site was soon superseded by the present one, further to the east.

2.2.2 The Francis directorship (1855–65)

Selection of the current site (1855)

The current site of Adelaide Botanic Garden—the fifth to be selected—was formalised in 1855. The earliest known suggestion for a botanic garden in this immediate vicinity—known historically as the north-east park lands (see Section 3.3.1)—was in 1851, when the Agricultural and Horticultural Society sought a grant of 24 acres [9.7 ha] at the north-east corner of Frome Road and North Terrace. This formed part of the Police Paddock, and the application was ultimately overtaken by approval of the (fourth) site on the opposite corner in 1853. The Society reopened the matter in late 1854 by submitting a plan of a 40-acre [16.2 ha] site for the Governor's consideration. This was referred to a Committee of Management for the proposed botanic garden, appointed in March 1855, and upon inspection of the site, the Committee recommended that an area measuring 16 by 25 chains be appropriated from the park lands for the purpose. The competing interest of Adelaide Hospital for the land meant that the current

site of the hospital was excluded from the recommended botanic garden site. Francis was closely involved with selection of the new site, and was appointed secretary of the Committee of Management and superintendent of the botanic garden in April 1855. A field survey of the botanic garden site was undertaken in May 1855 and the boundaries were pegged in readiness for the garden to be established (see Figure 2.3).

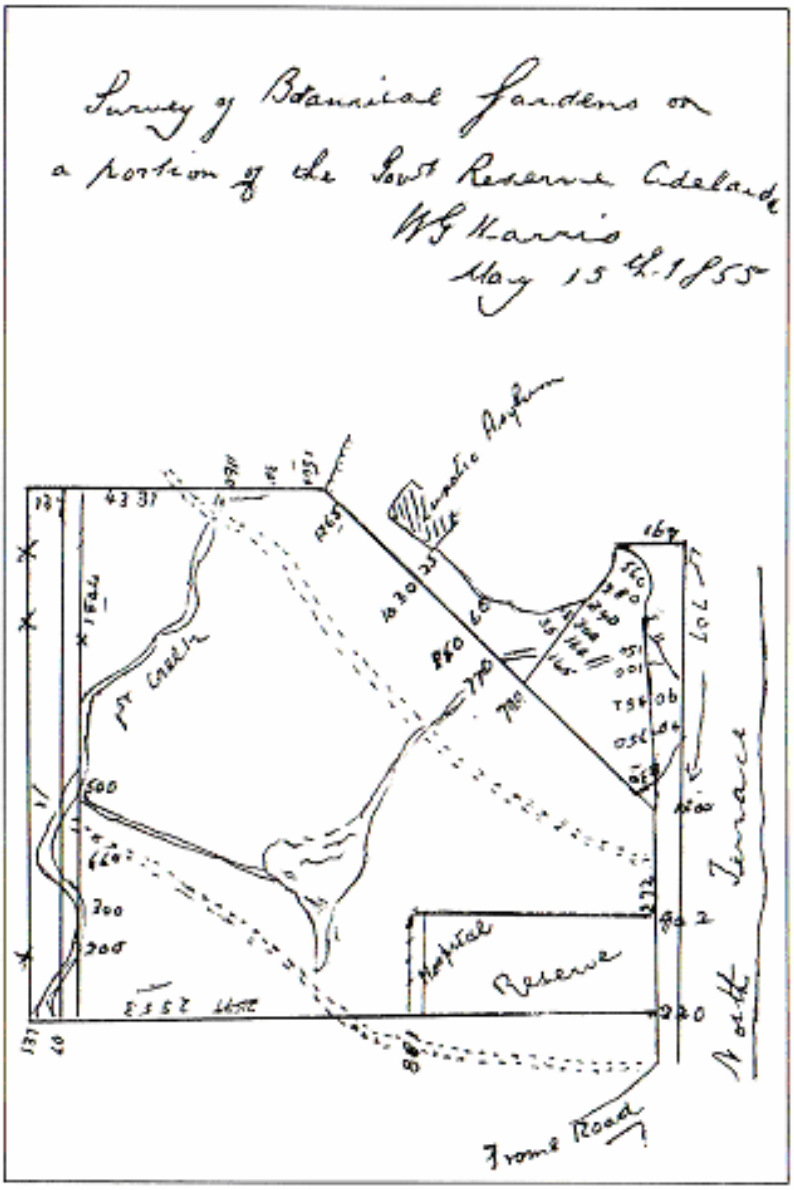

Figure 2.3 *The 15 May 1855 Survey Plan of the new 'Botanical Gardens' prepared by W.G. Harris. North Terrace is at the right and Botanic Park is the left.*

George Francis

George William Francis (1800–1865) was born in London. He later wrote that he could read French and Latin, and had studied botany as a child. In his twenties he travelled to Italy, France, and Spain. Between 1825–44 he lectured on botany and chemistry and worked as a writer and scientific illustrator. His wide-ranging publications included *An Analysis of British Ferns and their Allies* (1837), *The Little English Flora* (1839), *The Grammar of Botany* (1840), *Dictionary of Arts and Sciences* (1840), and a monthly *Magazine of Science and School of Arts* (1839–44). He had lectured on botany to medical students and was a Fellow of the Linnean Society and a member of the Botanical Society of London. After unsuccessfully applying for the chair of botany at King's College, London in 1840, he taught in France and was employed there in surveying new railway lines during 1844–46. In 1849 the Francis family migrated to Adelaide. Apart from his interest in the Old Botanic Garden (see Section 2.2.1), Francis was employed as valuer for the city council. He sought to raise the profile of colonial horticulture through laying-out and

planting of Adelaide's squares, membership of the Agricultural and Horticultural Society, and involvement with Adelaide's other cultural institutions. The claims of Francis to be recognised as a colonial horticultural pioneer have been strongly made by a descendent, Barbara Best, in her closely researched biography (first published in 1965 and greatly expanded in 1986).

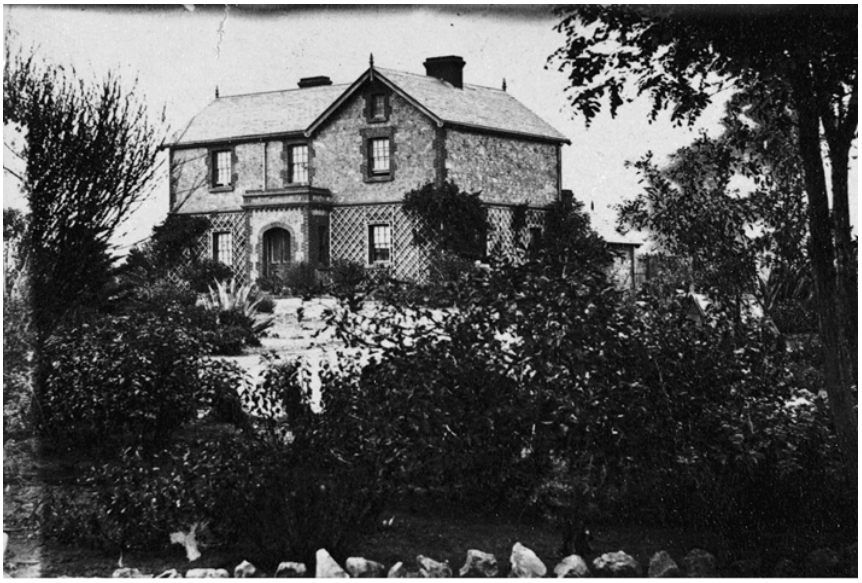

Figure 2.4 *The Directors House in the 1870s..*

Colonial context

Francis began the new garden under advantageous circumstances. The 1850s were a time of great prosperity in South Australia, and the population nearly doubled in that decade from 64,000 to 127,000. The prices of two of the colony's staple products—wool and copper—were high in London, and these important pastoral and mining industries had never been more profitable. The seasons were good; the decade enjoyed a high-rainfall cycle and South Australia was blessed by abundant water, excellent grazing, and high wheat yields for year after year. The increasing population and the markets created by the new river trade to the Victorian goldfields fuelled a booming wheat industry, as new flour mills sprang up at the port and in most country towns. In addition, the gold-rush era provided a sudden increase in Australia's wealth, so the banks could offer abundant finance for development. It was an auspicious time for those bodies seeking government funds for establishing new ventures. Adelaide quickly acquired a civic pride and corporate identity. Self-government was granted to the colony in 1856. The colonial government was greatly concerned with economic development and, with small farmers playing a relatively influential role in the legislature, it could be anticipated that there would be support for research into crop plants suitable for South Australian conditions. The botanic garden committee members represented a group of leading citizens imbued with a commitment to public service who combined fairly liberal ideas, and an interest in natural history, horticulture, and scientific agriculture.

Site conditions

By the date of his appointment, Francis knew what kind of plants would thrive in the trying conditions, based on his experiences in the colony, the location of the site, knowledge about weather conditions, and other environmental factors. The site lacked natural advantages of other Australian botanic gardens that were being established. Those of Brisbane and Melbourne allotted substantial views while Sydney and Hobart had harbour-side settings. Adelaide's site was comparatively small, although larger than that of Hobart, and fairly flat. The soil was quite alkaline and over twenty-five percent of the site was limestone marl over limestone rock. Although there were two creeks flowing through the site, this proved a mixed blessing as they were prone to flooding, particularly in the winter months, while the long dry summers would provide considerable challenges, especially before reticulated water supply. The average annual rainfall of 533 mm compared with that of Hobart (622 mm), Melbourne (660 mm), and Sydney (1216 mm). There was little danger of winter frosts and a wide range of plant material could be grown successfully.

Commencing the work

Francis reported to the Committee through weekly progress reports (June–December 1855), and he also prepared a plan in October 1855 showing progress: these documents now forms crucial evidence of his early design ideas (see Section 3.3.2). The October 1855 plan depicted the extent of the site during the earliest period of the Garden's history, and was also shaded to indicate work already undertaken (see Figure 2.5). This area of development (17½ acres [7.08 ha]) was smaller than the overall site granted, but even so it reflected the enormous challenges Francis faced in establishing the Garden on a new and undeveloped site. The eastern boundary took into account the pre-existing buildings of the Adelaide Lunatic Asylum, which occupied a large site extending to Hackney Road and impinged on the area sought for the Garden in 1854 (see Section 2.4). The buildings of the Asylum, located on a ridge, provided a prominent backdrop to the site and also formed a major generator of the garden design being implemented by Francis (see Section 3.3.1 and 3.3.2). The north-eastern boundary ran parallel to First Creek, a major natural determinant of the site. The site boundaries also reflected the fluid state of negotiations with Adelaide Hospital, whose new buildings were then under construction.

Working with an initial team of 13 men, the land closest to North Terrace and around the boundaries was trenched in readiness for planting. The site was fenced to define the boundaries and, crucially, to exclude horses and cattle. The front gates on North Terrace were sited opposite East Terrace and from this gate Francis laid out a substantial path which formed an important design feature defining the north–south axis. After indecision over the siting of the residence, foundations were commenced close to the western boundary, and here Francis and his family resided from 1856. Marking out the paths and beds soon took over from the mundane work of trenching and levelling the ground, as the elaborate plan devised by Francis was progressively laid out (see Section 3.3.2). The workmen also cut channels 'to let off water from the swamp'. Francis wrote optimistically that 'inundation was no longer to be feared', a decidedly vain hope. A cart bridge was erected over the creek, to facilitate development of the north-eastern portion of the Garden. The Top Lake and Main Lake were soon formalised with small islands (see Sections 4.1.21 and 4.1.42) and the creek formed into a channel (see Section 4.1.8). Willow trees for the banks were presented by Committee member Dr William Wyatt.

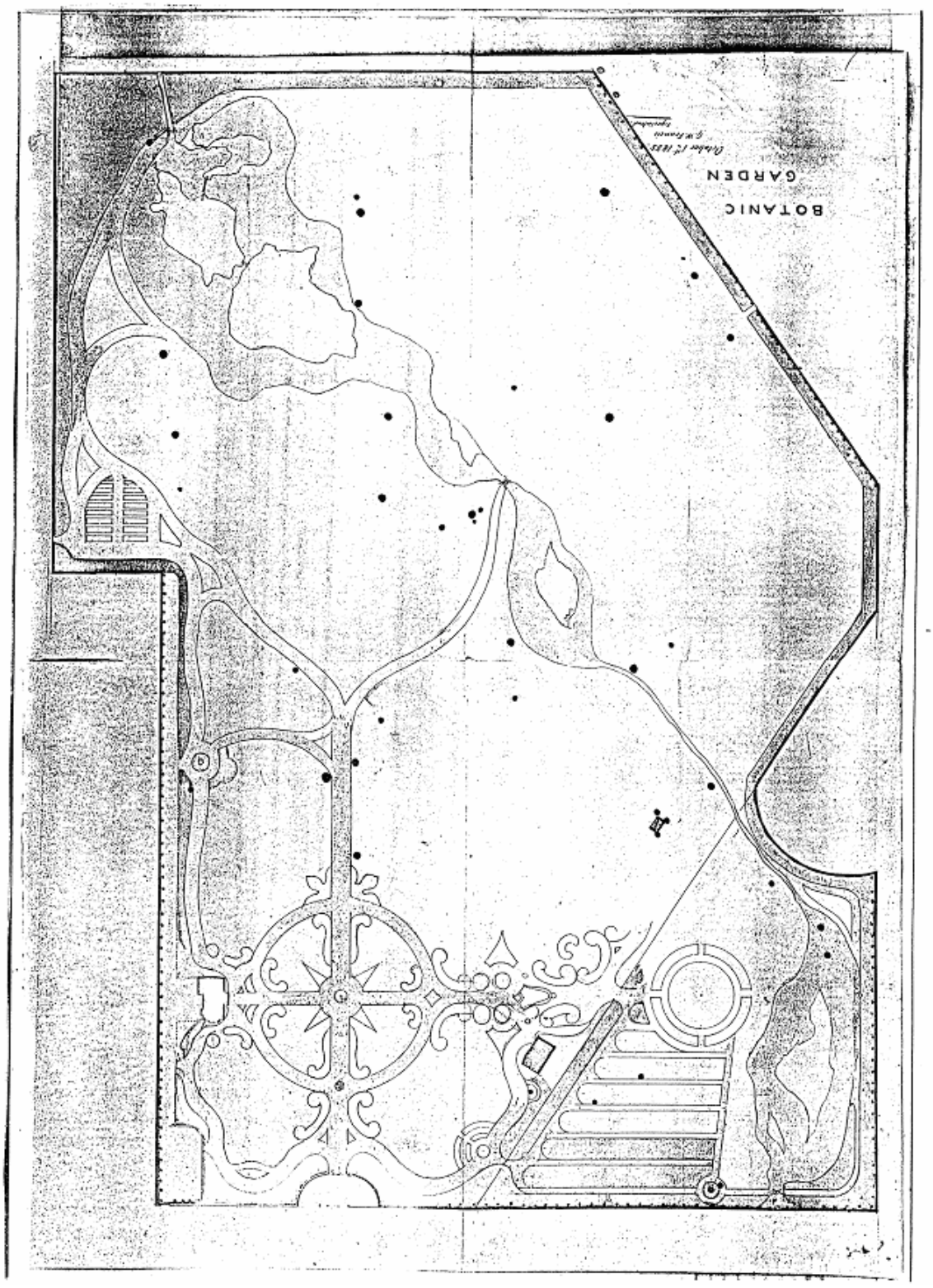

Figure 2.5 *The October 1855 plan of the Garden prepared by Francis depicting the north-south avenue and the intricate gardens near the North Terrace gate. Note: north is located towards the bottom of the original page; so, this plan is inverted to enable the normal north-south 'reading' of a map..*

Figure 2.6 *The north-south promenade in the 1860s. Note the statuary in the centre and along the sides of the promenade, pot plants, and young succulents including Agaves and cycads in the photograph.*

Early plantings

The boundary was hedged using White Thorn, Boursault Rose, Macartney Rose, Sweetbriar, Dog Rose, Spanish Broom, and Prickly Cactus, together with a belt of Lombardy Poplar and the 'common acacia or Robinia'. Although certain 'dead and ugly trees' were removed, Francis retained many specimens of the remnant *Eucalyptus camaldulensis* (River Red Gum) which were carefully plotted on his plan of October 1855. Francis envisaged groupings of plants according to botanical category and geo-botanical group, with plants from the Cape of Good Hope, America, and Europe, one of the features that would make the Garden different from a mere public park or pleasure garden. A greenhouse was erected in the south-eastern portion to shelter plants prior to their planting and Francis also established a 'reserve garden' nearby for specimens awaiting planting in their intended position. He set an example by donating 500 plants for the initial planting, and these were soon joined by material acquired through purchase and donation from the local community. Major supplies were obtained through the nursery trade, including Francis Ferguson, Michael Guilfoyle, William Macleay, and T.W. Shepherd in New South Wales, and J.J. Rule in Victoria, as well as prominent nurseries overseas. As early as October 1855, future director Richard Schomburgk, then living in the Gawler district, was organising the purchase of plant material from Germany for the Garden, his first known involvement with the institution. As was the contemporary custom, plants and seeds were exchanged with other botanic gardens in Australia and overseas, for example Java and the Royal Botanic Gardens, Kew. It was also hoped that seeds and plants could be obtained from the Cape of Good Hope, Mauritius, and Hong Kong. Two acres [0.8ha] were put aside for an experimental and fruit garden.

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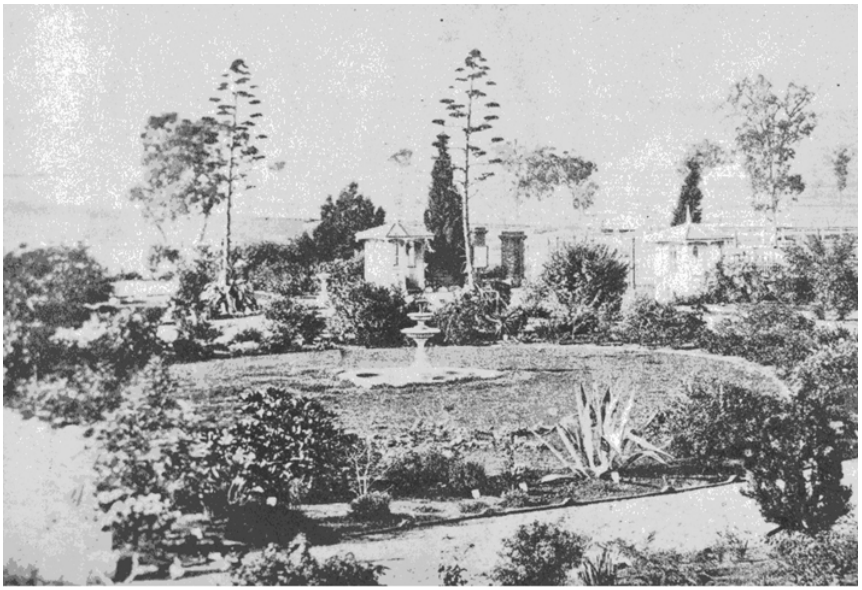

Figure 2.7 *Photograph looking at the North Terrace gates from within the Botanic Garden in the early 1870s. Note the gatehouses, statuary, circular garden beds, and Agaves in flower.*

Official opening

The Garden was opened to the public from 4th October 1857, initially on weekdays and Sunday afternoons (which were exceedingly popular). No charge was levied and this principle of free admission has been consistently maintained. By then, there were iron-framed seats in place, a summer house, a rosary, flower beds along the Main Walk, and compartments for medical plants, textile plants, bulbs, and grapes. Francis was a strong advocate for acclimatisation of plants and animals (see Section 3.3.2). In 1859 he placed advertisements in the local press soliciting donations of animals and birds. He was following the example of Regent's Park in London—which he knew well—where the botanic garden was adjacent to park lands and a zoo. Francis soon had a collection that included native animals such as kangaroos, opossum, wombats and lizards, together with deer and llamas, and aviaries with both native and introduced birds. While Francis and his friends had to privately fund feeding costs, the birds and animals doubtless increased the popularity of the botanic garden.

The first catalogue

A major early achievement for Francis was the publication of the first *Catalogue of the Plants under Cultivation in the Government Botanic Garden* in 1859. This listed 2,878 species, over half of which had a notation indicating that the plant was first introduced into the colony by means of Adelaide Botanic Garden. The catalogue was designed to encourage the exchange of plants within Australia and with overseas colleagues. Regulations for the distribution of plants, often a contentious issue for colonial botanic garden directors, were clearly stated. Plants that were valuable for agriculture and medicine could be given away as could plants for educational, scientific and benevolent purposes. New ornamental plants were not to be given away until they had flowered and there were four good plants growing in the Gardens. Plants could be offered in exchange for those in the catalogue, but recipients might only receive a single specimen, a packet of seeds or two or three cuttings of a plant. Finally as plants became available from propagation, they could be distributed to public institutions. In practice this included places such as parks, hospitals and district cemeteries. Such regulations were designed to encourage donations and exchange of plant material while protecting the interests of local nursery proprietors.

New regulations

A new *Botanic Gardens Act, 1860* came into force in 1860, placing the Gardens under a Board of Governors and upgrading the position of superintendent to director. Although the Gardens were still dependent on its annual grant the new arrangements provided some independence and in practice there was significantly better attendance by members at meetings and more enthusiasm. During the next five years, decorative features were added in the form of fountains, rockwork, vases, statues, 'rustic seats', and a drinking fountain, together with 'new and elegant

front fencing and wall'. A works depot containing utilitarian buildings was established along the boundary with the hospital. Reticulated water from the new Thorndon Park reservoir (1860) provided some measure of seasonal reliability, but necessitated a substantial recurrent expenditure for the Committee (see Section 3.3.7). The new supply was celebrated ornamentally with the installation of the Owen Fountain on the Main Walk in 1861 (see Section 3.3.6). The Nelumbo Pond also had its genesis about this time (see Section 4.1.27).

New horticultural buildings

Following the establishment of the Garden and concurrent with a phase of consolidation in the early 1860s, Francis turned his attention to the development of specialised collections. These required sophisticated horticultural buildings, in particular glazed structures capable of supporting tropical plants (see Section 3.3.4). In 1859 a handsome domed conservatory (with flanking plant houses) was erected on the western boundary. This included provision for a wide range of tender and valuable plants ranging from florists' flowers, succulents, and dwarf plants to orchids and aquatic plants: in the centre were larger tropical foliage plants. A 'rustic temple' was constructed nearby in the early 1860s, sited on a diagonal alignment and so placed to take advantage of sweeping views over the Main Lake. Although built as a shelter, Francis increased the depth of the structure and installed cases to display samples of timber and botanical specimens (leading to the name Wood Pavilion), and in 1863 he added flanking wings for ferns and orchids (see Section 4.1.17). The ornamentation provided by these new horticultural buildings was matched elsewhere in the Garden by installation of urns, statues, and other ornamental buildings including an unusual trellis summerhouse (see Section 4.1.39).

Scientific interests

Francis owned a useful collection of books on botany and horticulture, and these formed the nucleus of a professional library at the Garden. From 1855 periodicals such as the *Gardener's Chronicle*, *Turners's Florist*, and *Paxton's Flower Garden* were ordered, together with books from the London bookseller, William Pamplin. Francis identified these with a bookplate, and many individual titles survive in the library of the Adelaide Botanic Garden, an invaluable record of the early interests of Francis, and of the horticultural world generally. Along with the establishment of a library and the production of a catalogue, an important development in the role of the botanic garden as a scientific institution was the collection from 1859 onwards of dried plant material to form the basis of a herbarium. Francis was dependent on South Australian collectors for indigenous plant material—unlike his colleagues Mueller (in Melbourne) or Moore (in Sydney) he did not go on collecting expeditions.

The 1864 plan

Francis prepared a plan in 1864 showing his design for the Adelaide Botanic Garden. It appears to show existing conditions and depicts an extraordinary ornamental layout unlike any contemporary Australian garden (see Section 3.3.2). By this date Francis had extra land at the south-east corner of the site, which provided a backdrop for the Top Lake. The plan proved to be a worthy finale to the decade-long directorship of Francis, for he died the following year. He had worked long and hard in the Garden. Through his single-minded devotion Francis had laid the foundations of a fine botanic garden and overseen a period of consolidation that ensured poplar support for the institution.

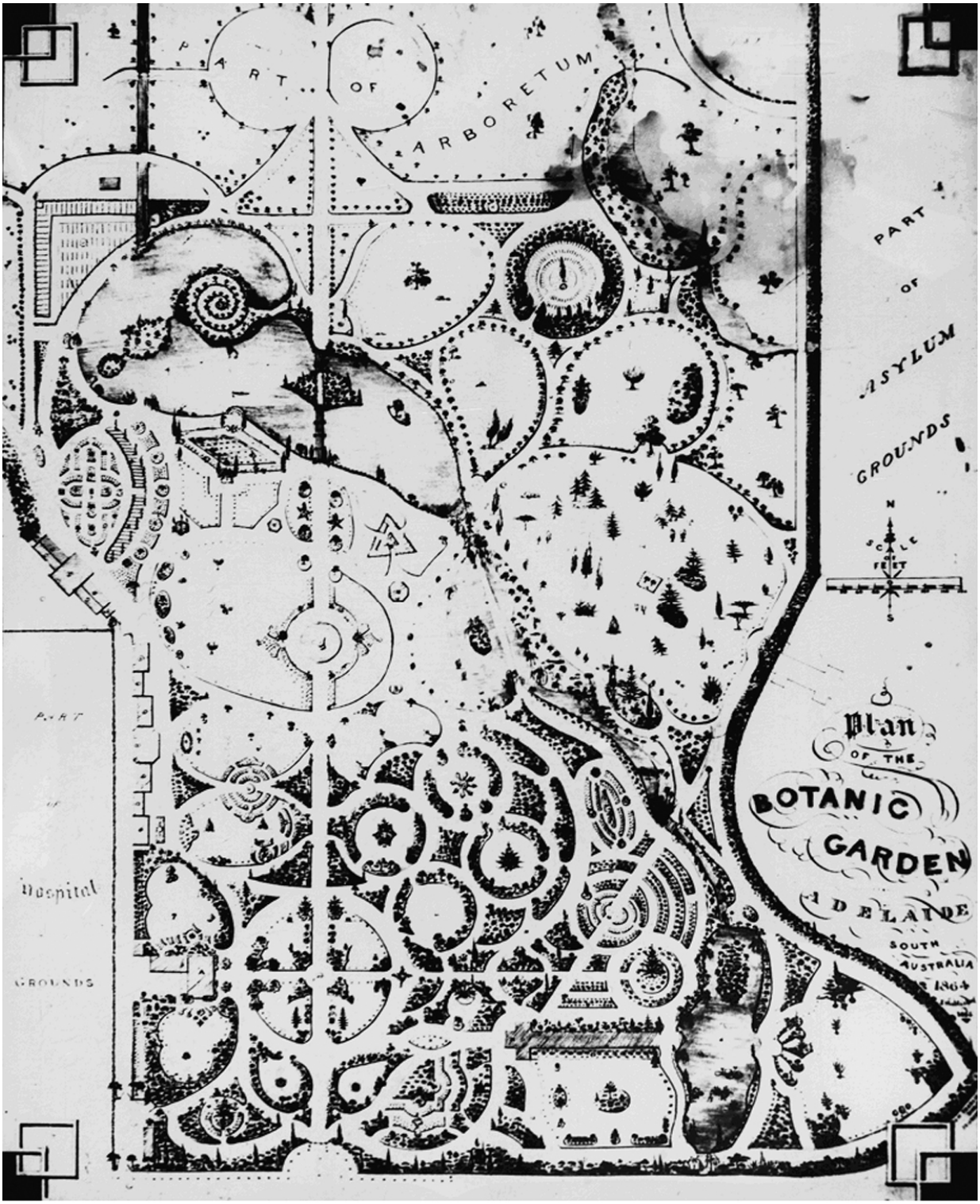

Figure 2.8 *The 1864 design plan of the Garden prepared by Francis depicting an extraordinary ornamental layout, with an 'arboretum' to the north now forming the majority of the Botanic Park area.*

2.2.3 The Schomburgk directorship (1865–91)

Figure 2.9 *Photograph of intricate parterred garden beds in the 1870s.*

Richard Schomburgk

Dr Richard Moritz Schomburgk (1811–1891) was appointed second director of Adelaide Botanic Garden in September 1865. Born at Freyburg, Saxony, he had been apprenticed as a gardener before joining a three-year expedition to British Guiana [now Guyana] led by his older brother Robert Schomburgk. On returning to Berlin, Richard established an international reputation through his account of the expedition, *Reisen in Britisch Guiana* and became a protégé of Alexander von Humboldt. Having supported the liberal cause in the 1848 revolution, however, Schomburgk and another brother, Otto, joined a group of like-minded people who formed a small emigration society and came to South Australia in 1849. The brothers established a farm, orchard, and vineyard at Buchsfelde near Gawler.

Schomburgk was in a strong position when he gained the Botanic Garden directorship. He had an international reputation, a doctorate, and connections with important scientific institutions in Germany. He had a good working knowledge of farming, horticulture, and viticulture under South Australian conditions. His horticultural training and overseas experience had not only given him practical training but the experience of working in a subordinate position and working for clients. People from the Germanic states were on the whole well-regarded in South Australia, especially those with a background in science. In addition, his experience of civic affairs in the Gawler district, giving him familiarity with Anglo-Australian culture and customs, stood him in good stead in his new position, particularly when his connections came to include the Anglican church and the Masonic movement. Schomburgk's life and career is well documented in Pauline Payne's doctoral thesis 'Richard Schomburgk and Adelaide Botanic Garden 1865–1891' (1992), based in part on family sources and also on Schomburgk's comprehensive annual reports.

Colonial context

Much of Schomburgk's directorship spanned a fortunate time, for like the 1850s, the 1870s saw another time of great prosperity in South Australia. There had been a setback in the 1860s, with severe drought, slumping commodity prices, and economic stagnation, but the South Australian economy was transformed by the *Strangways Acts* of 1869–74 which broke up pastoral leases and offered land to wheat farmers on credit. The timing was right; for the colony's population rose by half in the 1870s from 185,000 to 275,000, generating both a growing demand for wheat and a supply of aspiring farmers. The international market was expanding, and most of the wheat grown in South Australia in coming decades would easily find buyers in the northern

hemisphere. The weather also smiled on the region again; the high-rainfall cycle was back, and throughout the 1870s South Australia experienced its best seasons since European settlement. By 1884 the colony's wheat harvest exceeded that of New South Wales and Victoria combined, and South Australia had become one of the world's great wheat producers.

The revenue gained by the colonial Treasury through the sale of millions of acres of farmland (at £2 per acre) made a major contribution to South Australia's great economic boom of the late 1870s. The government poured much of this revenue into infrastructure: new ports to ship the wheat harvest, new dams to provide reticulated water to Adelaide, and new railway lines through the wheat lands extending as far as the River Murray and the Flinders Ranges. But there was more than wheat expansion fuelling the new economic boom. Wool and copper were again fetching high prices in London (until the copper crash of 1877) and the enormous copper mines at Wallaroo and Moonta were in full production. The prosperity of those years was reflected in the greatest building boom South Australia had seen, with many new government offices, banks, and private mansions built. Richard Schomburgk skilfully rode the 1870s wave of prosperity in gaining Treasury support for the development of the Garden.

Schomburgk's initial developments

Schomburgk came to the job with a vision for the site that combined science with pleasure. This was highlighted by his choice of new features and especially the manner in which he developed the space to the north and west of the site that lay outside the Francis landscaping). Schomburgk was adept at exploiting his reputation and his infectious enthusiasm to garner support for proposed improvements. These included enhanced heating for glasshouses; upgraded labelling of plants; rearrangement of the Herbarium; new models of fruit varieties; an increased number of 'florists flowers'; the addition of statuary (not only to enhance the beauty of the gardens but to cultivate 'public taste for the arts'); and the levelling, guttering, and gravelling of walks. Striking displays of flowers were provided in the form of parterres and ribbon borders, some of the earliest documented Australian examples of this style. Both annuals and perennials were used, together with cordylines, yuccas, and agaves as 'dot plants' for contrast. Growth of the lawns was aided by liberal dressings of manure. Major new garden compartments of Schomburgk's initial directorship included the fig tree avenue flanked by grassed enclosures with upgraded cages for the zoological collection; an experimental garden; a rosary; and a pinetum. These projects demonstrated Schomburgk's ability to give attention to the different roles of the Garden—a balanced approach which became a hallmark of his directorship and an important reason for his popular and critical successes as director.

Fig Tree Avenue (1866)

Schomburgk immediately made good use of the land north and west of the existing landscaping. An important early project was the planting in 1866 of the avenue of *Ficus macrophylla* (Moreton Bay Fig) as a northern continuation of the north–south axis created by Francis (see Section 4.1.12). The new northern boundary just beyond the Fig Tree Avenue was marked by a new gate and erection in 1866 of a small residence, now known as North Lodge (see Section 4.1.28). (East Lodge, now part of the Botanic Garden, had been erected in 1865 as a lodge for the Adelaide Lunatic Asylum.) The lawns either side of the avenue were used for additional animal cages and enclosures, forming in effect a new compartment of two halves divided by a dramatic new central feature (albeit one which took many years to mature). The avenue—a feature fast achieving popularity in other public landscapes—was a new addition to the Garden and was soon followed by avenue plantings elsewhere. These assisted in breaking the rather flat site into smaller sections, enhanced visual interest, and provided much-needed shade in summer months.

Figure 2.10 *Photograph of the Garden, looking south in the 1870s, depicting the Moreton Bay Fig (Ficus macrophylla) walk (centre), with the zoological exhibit cages and enclosures to the middle left and right.*

Experimental Garden (1867)

Another of Schomburgk's new garden compartments that occupied the northern flank of the Garden was an experimental garden, developed from 1867 (see Section 4.1.6). The garden, of rectilinear design, was bounded on the west by the new North Lodge, on the east by the boundary with the asylum, and on the north by the future alignment of Plane Tree Drive. The Experimental Garden was used for a wide variety of crops of potential economic value: grasses and fodder plants, legumes, oil and fibre-producing plants, vegetables, fruit-trees, and plants for dyes and other miscellaneous uses.

The Rosary (1867)

Adelaide's climate was a favourable one for roses and Francis had already built up a good collection of roses, listing 24 species and about 100 varieties or cultivated varieties in his 1859 catalogue. The new Rosary was proposed by Schomburgk in his first few months as director and he located it in the north-east of the site, bounded by First Creek on two sides and adjoining the new zoological exhibits. It was in a large, roughly rectangular design using parterre beds and wide pathways. Schomburgk described his rosary as being in 'oriental style' with the roses planted in 'ampitheatrical rows', the colours shading from carmine to white. The design was adapted from books in Schomburgk's rapidly growing library, in particular Meyer's *Lehrbuch der Schöen Gartenkunst* (Berlin, 1862) (see Section 3.3.2). The Rosary was a feature that interested a wide range of people and which provided an attractive display after a fairly short time. Having the rose garden as a separate compartment, detached from other sections of the Garden by a screen of trees and shrubs was thought to be advantageous not only because some shelter was provided from wind but also because the rose garden lacked interest in winter.

Figure 2.11 *Photograph of the new Rosary Garden depicting the intricate 'oriental style' garden beds, located where the former Italianate Garden, now the Mediterranean Garden that is under construction, was situated.*

Arboretum and Pinetum (1867)

During 1867 Schomburgk developed the land between the new rosary and experimental garden as an arboretum of Australian trees (see Section 4.1.2). With the asylum fence forming an eastern boundary, this large triangular compartment remains today as the Australian Forest, perhaps the oldest continuously maintained garden plantings of Australian trees (see 3.3.3). Schomburgk intended the arboretum to be planted with trees from the western, eastern, and north-eastern parts of Australia, and his annual report for 1867 referred to 42 species of *Eucalyptus*, and 70 species of *Acacia*. A photograph of this area, taken circa 1871, shows some very tall trees, the height of which suggests that some pre-existing trees were incorporated.

On the hill bordering the asylum grounds a pinetum was established. Conifers enjoyed great popularity during this period in Britain and in Germany alike, with many exotic conifers being introduced into Europe during the 1820s–40s (including the Douglas fir, the Himalayan deodar, the Atlantic cedar, the monkey puzzle tree, and then Californian conifers including the sequoias). All-season colour and the variety in shape and form of conifers made them especially popular among landscape gardeners. Schomburgk's early plantings of *Pinus radiata* (Monterey Pine) mirrored widespread colonial usage of this resilient species. A feature of the pinetum was the Araucaria Avenue, planted in 1868 and now such a landmark in the Garden (see Section 4.1.1). This ran from the eastern boundary down a small hill to the lake and coincided with an axis established by the placement of a pair of Crimean War cannon by Francis. A gravelled walk led up the hill to a flower parterre and the focal statue of Niobe (framed by the gable end of the asylum building hard against the boundary).

The Victoria House (1868)

Schomburgk had a great interest in tropical plants through his British Guiana collections. Many of these plants required glazed and heated environments, and Adelaide Botanic Garden was already well equipped for gardening under glass (see Section 3.3.4). With the development of the Victoria House in 1868, however, Schomburgk was able to realise the first of his ambitions plans for a series of impressive new horticultural buildings. The *Victoria regia* (now *V. amazonica*) or Giant Waterlily was associated with both Robert and Richard Schomburgk. In 1837 Robert had brought back from British Guiana a description of the plant and seed leading to its botanical classification. A number of attempts were made to grow it in England before a specimen flowered for the first time at Chatsworth in England in 1849. Francis had ambitions to grow the lily in Adelaide Botanic Garden from as early as 1856 and, after many attempts, his colleague Mueller had flowered the lily in Melbourne Botanic Gardens in 1867. Schomburgk and his Board were soon obtaining estimates for a new glasshouse that would enable its propagation. The remarkable growth habits of this waterlily had inspired the idea of a special

glasshouse known as a Victoria House to accommodate a plant which could produce leaves of 1.6 to 2.1 m in diameter. Adelaide's tank was 36 feet by 25 feet and 6 feet deep (10.9 m x 7.9 m x 1.8 m), making it larger than that of the Duke of Devonshire at Chatsworth in England. Three-inch (7.6 mm) pipes were laid at the bottom of the tank under pebbles and soil, with a small waterwheel to provide movement in the water.

The venture was a huge success and the first flowering produced extraordinary public interest. Newspaper reports gave hour-by-hour descriptions of the opening of the flower buds. Some 30,000 visitors were recorded in the five-week period up to November 1868. Success in cultivation was a source of great pride to Schomburgk and his Board. The Victoria House helped to build up the prestige of Adelaide Botanic Garden and with it Schomburgk's own reputation. He was quick to point out that he was able to grow many other tropical plants in the Victoria House, including epiphytic and terrestrial orchids. Orchids—of great interest in the horticultural world of the time—were acquired from Kew, Java, and St Petersburg helping to bring the total of orchid species to 160, with a further 95 species being added in 1870. There was also a fine collection of plants with variegated leaves.

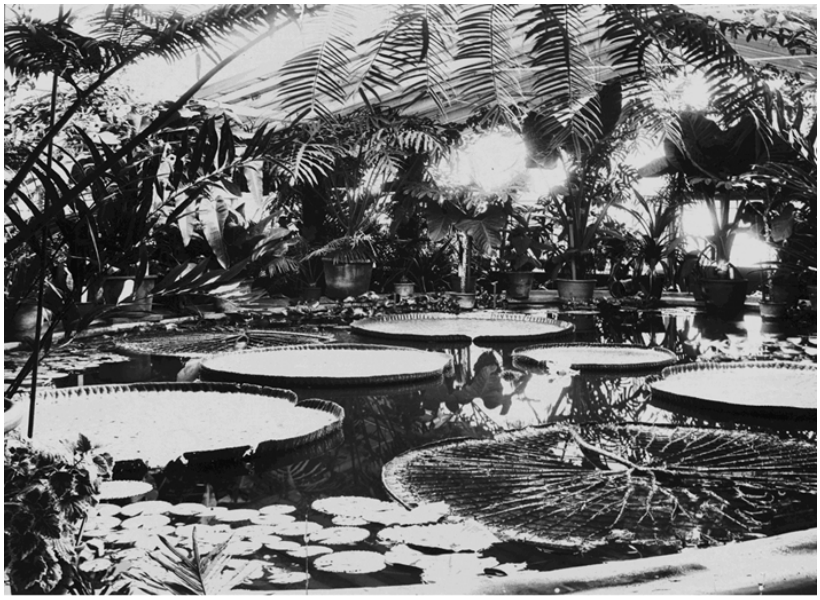

Figure 2.12 *Photograph of the interior of Victoria House in the 1870s depicting the Giant Waterlily (Victoria amazonica).*

First Creek and the Palm Garden (1870)

Schomburgk planted the steep banks of the creek in the north-western portion of the garden with weeping willows and a variety of conifers and other plants. In 1870 he altered and widened the course of First Creek to give it a more picturesque appearance, and with the weir on the boundary retarding its flow, this ornamental sheet of water took on the appearance of a pond. With the spoil, Schomburgk raised the area to the north, which he planted with a mixed group of palms and other tropical and subtropical plants (see Section 4.1.31). By 1872 the palms in this area were reported to be doing well and a year later he added South African plants suited to the local climate. A winding walk beside the pond led to the western boundary of the Exhibition Ground (now Western Entrance). With the planting of the Palm Garden—a dramatic landscaped contrast to the rectilinear experimental garden in the corresponding north-eastern corner of the site—Schomburgk had effectively extended the Garden to its northern boundary.

The border with the Exhibition Ground was Schomburgk's next project in this vicinity. Here he continued the theme of European and North American forest trees with the planting of a second pinetum, balancing his earlier plantings on the eastern side of the Garden (see Section 4.1.43).

The system ground or class garden (1872)

Schomburgk had written at the very beginning of his term of office about the importance of having a system ground or class ground where plants were laid out according to their botanical classification, but it was not until 1872 that a start was made. While Schomburgk long cherished this project, 'notwithstanding that at present very little or no taste for the science of botany seems to exist among our rising generation', he expressed the hope that 'this taste may, perhaps, be more prominent in a future one'. A symmetrical pattern in the shape of a hippodrome was chosen, for the layout, broken with 'two serpentine walks' and a central fountain (see Section 4.1.11). He began plantings for the class ground with 160 families, each represented by five or six genera. Avenues of *Sterculia heterophylla* (now *Brachychiton populneus*) were planted on two sides of the class ground. Avenues of *Tristania conferta* (now *Lophostomon confertus*) (Brush Box), *Eucalyptus calophylla* (Marri), and *Eucalyptus marginata* (Jarrah) were planted on the remaining sides, all selected on the basis of their fine shape and 'dense and verdant foliage'.

The establishment of the class ground is one area of work where we can make a useful comparison between the approach of Ferdinand Mueller in Melbourne and Schomburgk in Adelaide. Mueller was much criticised for arranging plants in Melbourne Botanic Garden in a way that, while demonstrating their relationship, led to an unattractive design. By contrast, Schomburgk made a considerable effort to make the system garden as attractive as possible and the project was delayed while other developments of the Botanic Garden, more attractive to the general public, were developed.

The plantings of the Botanic Garden (including the class ground) were supported by the publication of a catalogue in 1871, which Schomburgk updated annually through supplements to annual reports.

Figure 2.13 *Photograph of the system ground or class ground in the 1870s, looking south, with the central fountain, and the new Palm House beyond.*

Botanic Park (1873–79)

The space available to Schomburgk, especially for tree planting, was greatly increased in 1873 when control of the contiguous land between the Garden and the River Torrens was vested in the Botanic Garden Board. Known as Botanic Park, funds eventually became available to develop this section of 84 acres (34 ha) and Schomburgk planned a landscaped area with an arboretum and a carriage drive lined with shady trees, largely planted during 1873–79 (see Sections 2.3 and 4.2).

Schomburgk's 1874 Plan

There were several instances of self-reflection during Schomburgk's directorship. His 'Sketch of the Botanic Garden and its Progress' (1886) was an important reflective text, but his 1874 plan was an earlier and more ambitious stock taking (see Figure 2.14). The plan reflected the vast new ground of Botanic Park, and also placed Schomburgk's most cherished projects in context. Although too early to show the Museum of Economic Botany, the projected Palm House was shown sitting proudly on its terrace. The detail of this intricate plan was astonishing. Whilst the 1864 plan by Francis had been an outstanding personal achievement, Schomburgk's 1874 plan reflected the overwhelming confidence with which the legislature and the public viewed the Adelaide Botanic Garden. The inclusion of Botanic Park and the ambitious landscape plan depicted, demonstrated the triumph of the Botanic Garden Board in securing the land for its own purposes against the rival claims of the lunatic asylum. The fastidious delineation of even the smallest detail in the Garden reflected the confident hand of Schomburgk as well as the skill of the Surveyor-General's staff in the plan's execution. The tinted copy of the plan held by the Adelaide Botanic Garden clearly demonstrates the contrast between tree and shrub borders, flower beds, water, and lawn - this latter a great concern of Schomburgk, who successfully experimented with couch and buffalo grass in the 1870s.

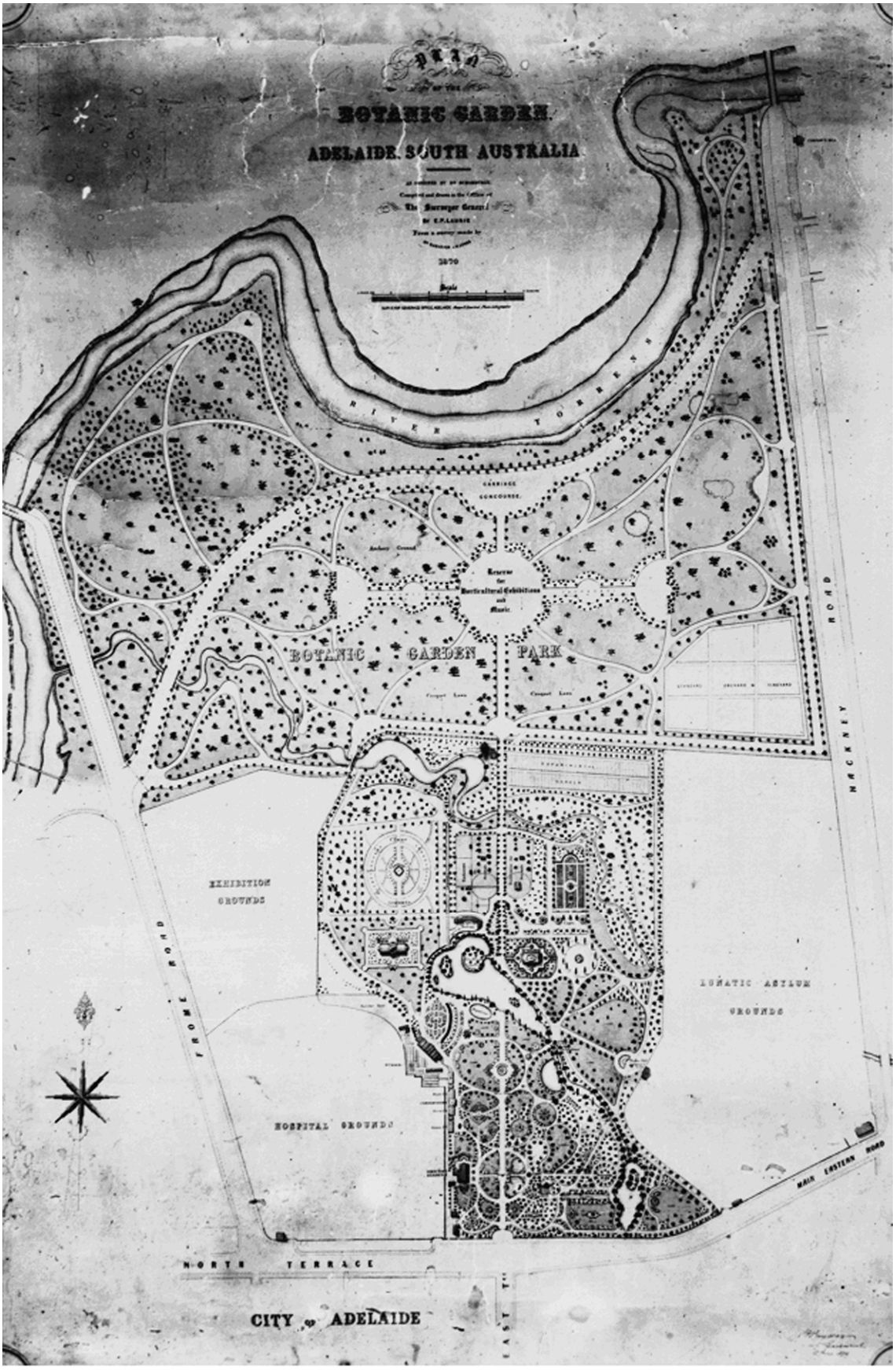

Figure 2.14 *Schomburgk's 1874 master plan for the Adelaide Botanic Garden, including Botanic Park and the present site of the Adelaide Zoological Gardens to the north.*

The Palm House (1877)

A vast increase in the collection of tropical plants and overcrowding in the existing glasshouses led Schomburgk to make an eloquent appeal for a new Tropical House. For years he had been claiming that his collection of tropical plants was 'undoubtedly the most numerous and valuable collection in the Southern hemisphere', but now he was claiming that this collection was at risk. Having made a recommendation for the building of a palm house he went on to observe that he had heard 'very favourable accounts of a palm-house built of iron in Bremen, which is considered one of the finest structures of its kind in Germany, for its tasteful and elegant proportions and general suitableness'. Schomburgk's argument that a palm house would bring further prestige to the colony was a persuasive one. By 1874 the government and legislature had approved the proposal and an order had been placed with the manufacturer, Johann Friedrich Höper of Bremen, under the supervision of Bremen architect Gustav Runge, noted for his work in this field.

A combination of wrought and cast iron was used in construction for the structure which was 30.5 m long, 10.7 m wide, with an 11.3 m high rotunda in the centre and 7 m high wings on the side. Ventilation was provided by two rows of ventilators on the sides and a row on the roof, controlled by pulleys and ropes. Gutters attached to the eaves collected rainwater which then was drained away to a small lake on the eastern side, and could be used to water the adjoining lawns. Heating was provided by a coke-burning tubular boiler placed in an excavated area on the western end of the Palm House. Siting the Palm House on a raised terrace reduced potential problems that were experienced with the Victoria House where problems with the heating system occurred after flooding. Construction of the mound and terrace for the Palm House proved to be more time-consuming and expensive than anticipated, due to the amount of excavation required and the expense of foundations and masonry. A flight of steps on the north and the south side provided access to the terrace. Stone statues in the classical style were placed around the Palm House: Ceres and Clio on the northern side, and Flora and Pomona on the south, originally on pedestals at the top of both stairs. Two decorated urns carved in stone were placed on either side of the staircase.

Schomburgk himself planned and supervised the interior arrangements. The design was symmetrical with a fountain feature at both the eastern and western ends. The central feature was a large palm, a fine specimen of *Lantania borbonica*, (now *L. lontoroides*) planted in a substantial circular planter, surrounded by a low ornamental border worked in painted and gilded cement. Around the base of the palm were ferns and colourful plants such as crotons, marantas, begonias, coleus, maidenhair fern, and *Pandanus veitchii*. A tessellated tiled pathway went from each entrance way around the central bed and through to the apse at one end, providing a symmetrical design. Along the pathway were planted beds with tree ferns interspersed with twenty-eight different species of palms. Climbing plants were trained up the columns. At the western end was a grotto constructed of fossil bearing limestone imported from the Black Forest. At the back of this water flowed over quartz and sandstone rocks into a small basin. The eastern end contained a basin and fountain planted with lycopodium, tree ferns, and other plants.

The Palm House was finally opened in 1877 to great public acclaim. The final cost given freight, commission, the terrace foundations, steps, and statuary was £3,800 (excluding the cost of glazing and painting undertaken by the Garden's own workforce). The rapid growth of the palms, initially a source of pride, meant that by the Jubilee year (1886) a number of the palms had reached the roof. Schomburgk proposed that the roof be raised, and later suggested that a new conservatory be built. However, this proposal did not receive support until a hundred years later when the Bicentennial Conservatory was built.

The Museum of Economic Botany (1879)

Schomburgk was already campaigning for this substantial project when the Palm House was being established. In 1876 he noted that the existing Wood Museum was small and over-crowded, with many interesting objects stored away 'from want of room'. Existing specimens, about 2,000 in number, included samples of timber and wheat. Additions to the collection of artificial specimens of fruit and fungi could not be exhibited and it seemed 'useless' to accept

additions to the museum collection. Useful herbarium specimens received from North America were stored in a small room in the back yard. As early as 1870 Schomburgk had proposed that the museum be 'a kind of technical one' where commercial and economic plants could be exhibited both in their raw state and in various stages of manufacture. He hoped that this would encourage both primary producers and manufacturers to diversify. In 1876 he expressed the hope that a larger building could be erected for 'this highly necessary and instructive project' and in 1877 commented that the existing specimens were 'much injured' by damp and termites. As with the case of the Palm House, the persuasive arguments were received at a time of remarkable economic prosperity for the colony. Approval for the Museum of Economic Botany was given and construction began in 1879.

The building was described as in the 'Greek style' or 'Attic' style, and in both style and arrangement the building appears to have been based on the Museum of Economic Botany at Kew Gardens. The final design for the Museum of Economic Botany in Adelaide was for a structure 104 feet long and 40 feet wide (31.7 m by 12.2 m) with a central portico and a flight of steps leading to the entrance on the southern side. Sixteen windows provided light to the eight-foot high (2.4 m) display cases. These display cases were set out between the windows and at right angles to them to so that the cases would receive a maximum amount of light as was done in the museums at Kew and at the Natural History Museum at South Kensington. In the centre of the room were two rows of showcases in the form of tables with glass lids, and there were others like this under the windows and recesses. At the eastern end of the building he had a separate room set aside to house his herbarium. The cost of the Museum building, fixtures, glazing and decorative painting was £2,900. A terrace—said to be in 'the Greek style'—was created outside the museum with lawns, planted with palms, draecanas, agaves, and flowerbeds. Statues represented the four seasons. The Museum formed an important adjunct to the scientific and educational role of the Botanic Garden, and its development formed the last major project of the Schomburgk era.

Figure 2.15 *Architectural design elevation of the Museum of Economic Botany prepared in 1879.*

Figure 2.16 *Photograph of the interior of the Museum upon construction and collection installation.*

Schomburgk's late developments (1880–91)

The year 1880 can be seen as a peak in the Schomburgk era. There were still some developments to come, but the main work was done. In 1880 came the addition of new entrance gates for the North Terrace entrance, providing a more imposing entrance which enhanced the streetscape of North Terrace as the main boulevarde of Adelaide.

The period 1885–86 saw two of the driest years on record with low harvest yields resulting. Budgetary cuts meant that staff numbers were cut twice. New plants were steadily added so that by the time of Schomburgk's last annual report (1889) 13,603 species were listed (excluding florists' flowers).

Schomburgk's 'Sketch of the Botanic Garden and its Progress' (1886) and his 1890 plan provided a fitting reflective ending to a long and distinguished directorship. Just as the 1878 *Catalogue*, illustrated with engravings (after photographs by Captain Samuel Sweet) had captured

the breadth of the botanic and landscape significance of the Garden, so the 1890 plan provided a snapshot of the Garden with Schomburgk's vision realised (see Figure 2.17).

Schomburgk died in March 1891 while still in office. He was in his eightieth year. His legacy to Adelaide Botanic Garden was vast. He consolidated the work of his predecessor Francis, he added popular and instructive new features (especially on the extra land not developed by Francis and on the large acreage of Botanic Park), he embellished the Garden to reflect popular horticultural tastes, and he sought to consolidate the scientific reputation of the Garden. Schomburgk's extensive contacts with people and institutions overseas were of value in enhancing and increasing exchanges of flora and fauna to increase the Garden's collections. In his work and especially through his published annual reports, Schomburgk considered issues of wide relevance to the colony, and including civic tree-planting; the importance of forest reserves; the value of plantations along railways and roads; and the acclimatisation of useful plants, especially those of economic and ornamental value.

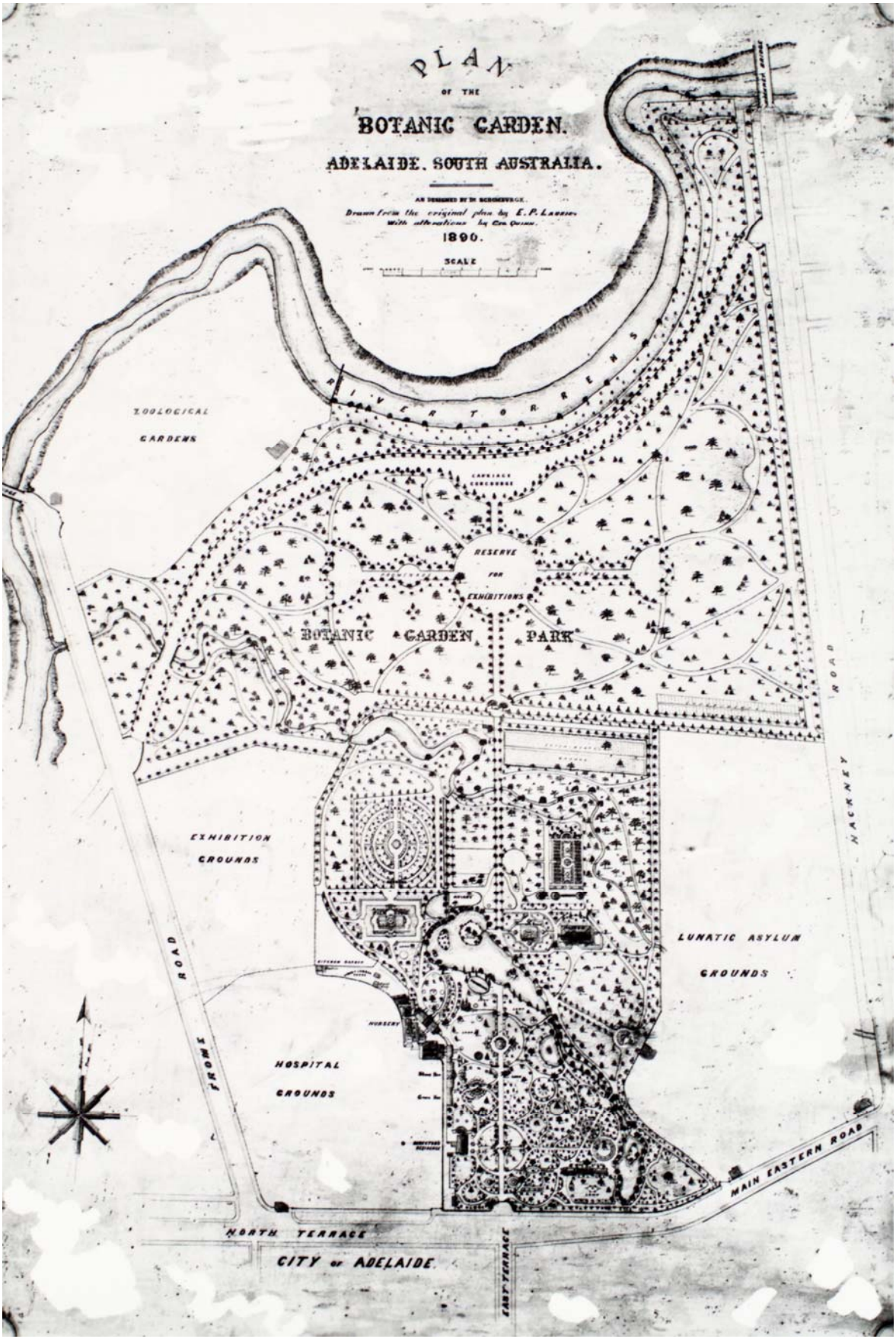

Figure 2.17 *Schomburgk's 1890 master plan for the Adelaide Botanic Garden, depicting the intricately laid-out Botanic Park and the now excised Adelaide Zoological Gardens to the north.*

2.2.4 The Holtze directorship (1891–1916)

Maurice Holtze

Maurice (Waldemar) William Holtze (or Holtz) (1840–1923) was appointed director in 1891. Born in Hanover, Germany, he was apprenticed to a local firm of nurserymen and landscape gardeners. Holtze graduated in botany and horticulture at the Imperial Gardens, St Petersburg, Russia (now known as the Komonov Institute) and served for four years as assistant in the gardens at Hildesheim, then four years in a Hanover nursery. He then served four years as a First Class Assistant at the Royal Gardens of Herrenhausen in Hanover, while studying botany under Professor Johannes Leunis. He married in 1867, and in 1872 the family moved to Australia, landing in Melbourne then travelling to Darwin in the Northern Territory. After working as a gaol warder Holtze was appointed Government Gardener and then Curator of what became Darwin Botanic Gardens. He re-established the Gardens on a new site at Fannie Bay, drawing upon his European horticultural and landscape design experience in the plans for these. The history of his family is related in Wynnis Ruediger's *The Holtze Saga* (1988).

Changing colonial circumstances

A number of functions previously carried out by the Garden were progressively transferred to specialist organisations. The Zoological Gardens were now on a separate site in Botanic Park. The Forestry Board had been established with nurseries for propagation of young trees. The Botany Department of the University of Adelaide took over the scientific role assumed in many botanic gardens. (Schomburgk's great love of the Herbarium, which eventually contained some 18,000 specimens, was not shared by Holtze and the collection was eventually transferred to places such as the University and only a few specimens have survived.) Roseworthy College was also established, providing the foundations on which a government department of agriculture could be established.

There was another way in which circumstances had changed. Many leading citizens had now established houses and gardens in the Adelaide Hills or at one of the seaside resorts as summer retreats. As housing developed further away from the centre of Adelaide it may be that influential people visited the Gardens less frequently, a trend that increased as motor cars became more widely available. It is true that improved public transport meant that there were still large numbers of visitors. But it may be that there were more activities open to influential citizens and that as a result it was more difficult to attract funds for the Garden.

On his appointment to Adelaide Botanic Garden, Holtze was faced with economic conditions that were markedly more depressed than those of the early years of the Schomburgk era. The Garden was now well established and Holtze maintained and consolidated this legacy. He oversaw comparatively few new projects compared with the major developments instituted by his two predecessors and the great flow of new plants into the Garden slowed. Holtze perceived one of his early tasks to be the review of plantings in the Garden, and his early reports indicate that he found that there were plants still in Schomburgk's printed catalogue that had not survived. He set about culling of trees and shrubs that were in poor condition and proceeding with some replanting.

The Veitch visit (1893)

A fine snapshot of the early Holtze years was provided by the visiting James Herbert Veitch in his *A Traveller's Notes* (1896). Following a visit in April 1893 on business for his celebrated family nursery firm, Veitch noted that even though Holtze has 'occupied the position but two years', his directorship had already been marked by decisive action. 'During this period, important alterations have taken place, and that which bore the reputation of being an overgrown wilderness is once more assuming the proportions and aspect of an interesting and tasteful garden.' Holtze was reported to have removed upwards of two hundred big trees, 'and even now in some spots those that remain are undoubtedly too thick'. Despite this thinning, Holtze was careful to safeguarded significant trees such as *Ficus platypoda*, by then already a revered specimen. Veitch's gently critical view of Schomburgk extended to his excessive incorporation of ornamentation in a *botanic* garden: Veitch wrote mockingly of 'plaster-of-Paris goddesses' dotted about, and 'The inevitable Venus ... rising from the waters in orthodox form.'

Holtze's early developments

One component that saw the full force of Holtze's ruthless clean-up was the Moreton Bay Fig Avenue, which he 'pruned mercilessly'. The flanking zoo cages, now obsolete with the establishment of the zoo, were abolished and the area given over to lawns.

Holtze redesigned flower beds to suit the style of the day, substituting 'broad general effects for the intricate flower beds and florid ornamentation of an earlier era'. Some embellishment was provided in the form of rustic seats and railings that were popular in the Edwardian era, a development further pursued by Holtze's successor Bailey. The oriental-influenced pavilion north of the rose garden was erected in 1893. Oriental flowers and shrubs were also introduced at a time when the opening up of Japan and China to outside trade was associated with great interest in their respective floras. Holtze is known to have developed a collection of magnolias and syringas. The initial plantings of the Wisteria Arbor, established by Holtze in a section to the west of the old Rose Garden, became a popular feature of the Gardens, with a dramatic display of flowers in late September and October.

Holtze's experience of tropical horticulture developed his interest in aquatic plants. He built up a collection widely regarded as an outstanding one by international standards. William Guilfoyle, director of the Melbourne Botanic Garden, was one who complimented Holtze on his collection: 'you surprise me with your list of Nymphæas ... Could you give me some of yours you would confer a great favour' Guilfoyle wrote in 1903.

A major piece of landscape design was the completion of the main north–south axis by the formation of a causeway and central linking bridge (1893–96). This linking had been intended by Francis, but the iron bridge which had been purchased in 1860 at great expense, and which had been found to be unsuitable, was sold as old iron, the proceeds paying for the short bridge connecting the two ends of the causeway.

Pomological experimentation

Holtze was a keen pomologist and encouraged experimentation with fruit trees in the Garden. An orchard was proposed in 1895 for the old exhibition ground, but in 1898 the government decided to site this in the Mount Lofty Ranges, where it became known as the Mylor Type Orchard. The venture meant that fruit trees true to type could be planted and labelled and by 1899 there were over 2, 000 varieties of apples and pears.

Holtze was also keen to grow fruit varieties unsuited to the cooler and moister conditions of the Hills, and land became available for an Adelaide Demonstration Orchard on portion of the site of the former Lunatic Asylum that closed in 1902 (see Section 4.3.1). This area, along Hackney Road on the eastern boundary of the Botanic Garden, was also greatly changed by the construction of the tram depot in 1908–09 (see Section 2.4).

Holtze had also been active in experimentation with crops suitable for a tropical climate when he was in Darwin. In Adelaide he does not seem to have played a significant role in experimentation in the agricultural area but he did maintain the collection of pasture grasses.

The Simpson Kiosk and Jubilee (1906–07)

An important amenity was added to the Gardens with the construction of the Simpson Kiosk in 1906. The kiosk was an open structure providing expansive vistas of the Garden. It replaced an older kiosk located in what is now known as the Francis Arbour. Long-serving board member Alfred Muller Simpson (1843–1917) offered to pay for the erection of 'a superior refreshment room' at the north end of the lake in the Gardens in an area previously used for zoological exhibits. A condition of the gift was that the state government would supply the necessary deep drainage.

The Simpson Kiosk was officially opened in March 1907, the jubilee year of Adelaide Botanic Garden. To celebrate the half century since the official opening of the Garden (1857), an illustrated souvenir guide was published, containing a guide and historical sketch. This foreshadowed some of Holtze's plans. The class ground—'Unquestionably ... the weak point of

the Gardens' according to Veitch—was to be transferred to the site of the experimental garden, leading ultimately to the planting of this area as a rosary by Bailey.

The Boy on Swan fountain was installed in the Nelumbo Pond (1904) during Holtze's directorship. The collection of fountains was soon complemented by the Boy and Serpent fountain (1908), symbolic of the increasing ornamentation of Schomburgk's class ground. The Scarfe drinking fountain (1909) and new summer-house (1910–11) also ornamented the Garden.

Holtze's legacy

Maurice Holtze paid attention to the issue of conditions for staff, and introduced some changes that were more in keeping with the times. He developed a training scheme for young people that aimed to provide not only horticultural training but the elements of foreign languages and basic science, this latter one of the strengths of the German apprenticeship. This training initiative was a positive step but was not as successful as Holtze hoped. This may have reflected changes in attitude in South Australian society to a more conservative outlook (that also accompanied the reduction in immigration to South Australia). Holtze was able to win support for some liberalisation of by-laws so that people were allowed on the lawns and smoking was allowed.

Holtze retired in 1917. He had been only the third director of Adelaide Botanic Garden, and with the average span being just over 20 years, this brought much stability to the institution. On his retirement Holtze was commended by the Board: 'your policy of making the Garden popular to the people has conduced to the greatest good for the greatest number'. He moved to American River, Kangaroo Island, where he died in 1923.

2.2.5 The Bailey directorship (1917–32)

Proposals for administrative reorganisation

After Holze's retirement, there was a period when the Board and state government took strongly opposing positions about the conditions of the next appointment. The government proposed that three appointments should be made rather than one: that the Professor of Botany of the University of Adelaide should be appointed Director of the Botanic Garden at a salary of £250 (with use of a house in the Gardens); a Curator appointed at £350 a year; and a keeper of the Herbarium and arboretum at £250. The Board, arguing that having three separate people with authority would cause administrative difficulties and greater expense, suggested that instead applications should be called for a Director with full control of the site at £450 per annum. The Board supported a plan that Professor T.G.B. Osborn be appointed and that he should be Honorary Botanist and Plant Pathologist with control of the Museum and Herbarium. The Board was willing to consider the transfer of the Herbarium to the University if it were convinced it would lead to better work being accomplished and it was seen to be in the public interest. Other points made at this time were the request that when finances permitted, a building be erected housing a boardroom, office, and library, and an arboretum be established. There was also a request for additional land to be made available for the site. The Board noted, probably as a bargaining point, that it would be agreeable to the type orchard at Mylor being transferred to another department if in exchange the Botanic Garden could be provided with ten acres (4.0 ha) of land with river frontage that could be used for shrubs and flowers. The Board was given to understand that funds would not be made available for additional land in the foreseeable future, although the idea of extra land in the foothills was mooted, a proposal that would not come to fruition until the post-war years. A further request was that in such matters as policy, management of the gardens and status of officers there should be direct consultation between the Minister and the Board chairman, a point which underlines problems existing at the time. Negotiations to have Professor Osborn as director were put aside and J.F. Bailey was appointed in April 1917 as fourth director.

Holtze had been appointed as Botanic Gardens director at a time of economic recession and Bailey likewise was appointed when the economy was not buoyant and the community as a

whole was absorbed with the hardships of the First World War. It was certainly not a time when an incoming director could hope to have the Board or state government accept any ambitious programs for expansion. The stand-off between Board and Minister over the appointment did not augur well for the immediate future.

John Frederick Bailey

John Frederick Bailey (1866–1938) came from a family of botanical and horticultural importance in both South Australia and Queensland. He was the grandson of the John Bailey (1800–1864) who had established a fledgling botanic garden on the north bank of the River Torrens (see Section 2.2.1). His father, Frederick Manson Bailey (1827–1915), had helped to run a family business known as Bailey's Garden in Hackney after official support was withdrawn. F.M. Bailey travelled to the Victorian goldfields and New Zealand, eventually moving to Queensland, where he became a botanical collector, and in time Colonial (later Government) Botanist. He published numerous scientific and popular works during a long career. J.F. Bailey held the position of assistant to the Government Botanist for sixteen years, becoming curator of the Brisbane Botanic Garden in 1905 and building a substantial profile in educational and horticultural affairs. After the death of his father in 1915 he was appointed Government Botanist, holding this position until he moved to Adelaide.

Simplification of the Garden

One of the lasting legacies of Bailey's directorship was the creation of new lawn areas, often by the removal of garden beds and shrubberies, and the extension of existing lawns. Much of this activity was concentrated in the older (southern) portions of the Garden, especially where the elaborate bed layout of Francis was dramatically simplified. During 1920–21 the wide path in the centre of the Araucaria Avenue, which had been asphalted, was dug up and replaced with lawn. In 1925 gravel paths and small grass plots around the Victoria House were removed and replaced by a shrubbery with small winding paths leading in from each corner. Again this was a move away from more formal design of a previous era. Bailey presented this as a move that enabled a large new collection of shrubs to be planted and suitably labelled for educational value.

Bailey also removed several old, unsafe, and unsightly trees. These included some very old specimens of 'Eucalyptus rostrata' (*E. camaldulensis*) which he removed with regret as he believed they were a considerable age when the Botanic Garden and Park were laid out. An 85-foot (25.9 m) high Lombardy poplar, thought to be part of the original Francis planting, crashed down in 1924, and two old willows from the same period were removed because of their poor conditions. In 1927 Bailey reported the removal of 'several unsightly specimens' of *Pittosporum undulatum* and elms at the rear of the Museum of Economic Botany and their replacement with varieties of *Hibiscus rosa-sinensis*. A heavy storm in September 1928 caused much damage to trees, including an *Araucaria cookii* in the Araucaria Avenue.

Alterations to the main walk

In 1924 Bailey made a dramatic alteration to the main southern entrance by replacing the asphalt of the first 75 yards (68 m) of the Main Walk with an oval lawn, and directing pedestrians to new side paths. The stated reason was to improve the appearance of the entrance and to provide a larger lawn area for the many visitors who came. A side path was constructed on the eastern side of the lawn and nearby paths reduced so that seasonal displays of flowering plants could be provided. It was a significant change from the original Francis plan and reduced the formality of the entrance area. More small asphalted paths had been removed in this section of the Garden by 1925. Even with the addition of extra lawn areas, Bailey reported in 1926 that lawns were 'taxed to the utmost' in holiday periods. Where asphalted paths remained there are periodical accounts of these being given a top dressing of sand and tar. In 1928, at time when cement paths were much in vogue, Bailey noted that coloured cement would be brighter and more attractive but was too expensive.

Bailey's emphasis on floriculture

In assessing the history of the Adelaide Botanic Garden, the consensus amongst contemporary observers was that Bailey placed an emphasis on floriculture, where landscape effects could be achieved on relatively modest budgets. Displays of bedding flowers were developed, using plants such as zinnias, chrysanthemums, salvias, sweet peas, Iceland poppies, cinerarias, penstemons, African and French marigolds, delphiniums, antirrhinums, zonal pelargoniums, and cannas. He moved the rose garden to the site of Schomburgk's class ground and replaced 'older and little known' varieties of roses with new varieties so that the Garden had 'nearly all the recent introductions of note'. Dahlias were planted in some of the area previously used for roses and also in part of the experimental ground, a popular choice. The Wisteria pergola was extended to a total length of 200 feet [60.9 m] by 1920, partially enclosing the garden now known as the Italianate Garden

New buildings

During 1917–18 funds were made available for the erection of ladies lavatories ('a long-needed want') and an up-to-date building was provided. In 1918–19 the wife and daughter of A.M. Simpson provided funds for the provision of a shade house in memory of this former board member. For the rockeries in the interior 120 tons of stone was obtained from the type orchard at Mylor. F H Snow, who had an important garden in the Adelaide Hills (originally 'St Wilfred's' and now called 'Beechwood'), provided advice on planting the rockeries and some plant material. The shade house, costing £530, could be used for plants that did not need glasshouse conditions but which could not easily be cultivated outside. A rock border was made 'from the northern side of the [shade] house to the Asylum bridge'. This was then filled with 'showy' plants to brighten up this section of the gardens, with wattles planted to provide a backdrop.

Figure 2.18 *The opening of the Simpson Shadehouse in 1918..*

Rustic work and rockeries

Rustic-work fences and bridges were popular during Bailey's directorship. In 1917–18 a rustic bridge was built across the lake to connect the path near the kiosk with Diana's Island. The Simpson Shadehouse had a small bridge and railing at its entrance and Bailey's 1920–21 report describes the wire fence around the Lotus Pond being replaced with a fence of a rustic design.

Various rockery areas were established during the Bailey era, including one near the North Terrace entrance gate. A major new rockery was developed around the Palm House during 1921–22, and with 'gay displays' of flowers and foliage it was described in the 1923 report as one of the Garden's chief attractions. The 1929–30 report refers to the prevailing public interest in succulents. Helped by co-operation from the Sydney Botanic Garden, two small houses were

established for species such as Cactaceae, Liliaceae, Euphorbiaceae, and Asclepiadaceae on the western boundary.

Australian plants

Referring to Australian trees in his 1917–18 report, Bailey wrote that: 'it is gratifying to note an enhanced estimate of their value among those persons interested in tree-planting, and we look forward to a time—not too far distant—when they will receive even greater attention and appreciation, and take the place of those exotics which have not in many cases the same claims either for usefulness or beauty'. Bailey wrote with enthusiasm in his annual reports about suitable Australian species and gave talks on this topic. This particular year he wrote of the profuse flowering of the Coral Bush (*Templetonia retusa*), the Geraldton Wax Flower (*Chamaelaucium uncinatum*), and the various species of bottle brush (*Callistemon*). A visit to Melbourne helped him to obtain extra Australian species for Adelaide Botanic Garden. For a number of years annual reports had photographs of fine specimens growing in the Botanic Garden that could be considered for civic planting. Bailey also developed small areas with Australian species. One was in the newly developed area near the front entrance. Another was in a section that was developed by the Palm House in 1921–22. This was reported in 1930 to be growing very successfully.

1928 plan

The plan of the Garden produced by Bailey in 1928 was the first issued since 1890. It clearly demonstrated the major simplification of garden beds (many dating from the Francis directorship) and the radical changes to the southern end of the main path undertaken by Bailey, yet also the extent to which the strong overall layout of Francis and Schomburgk had survived.

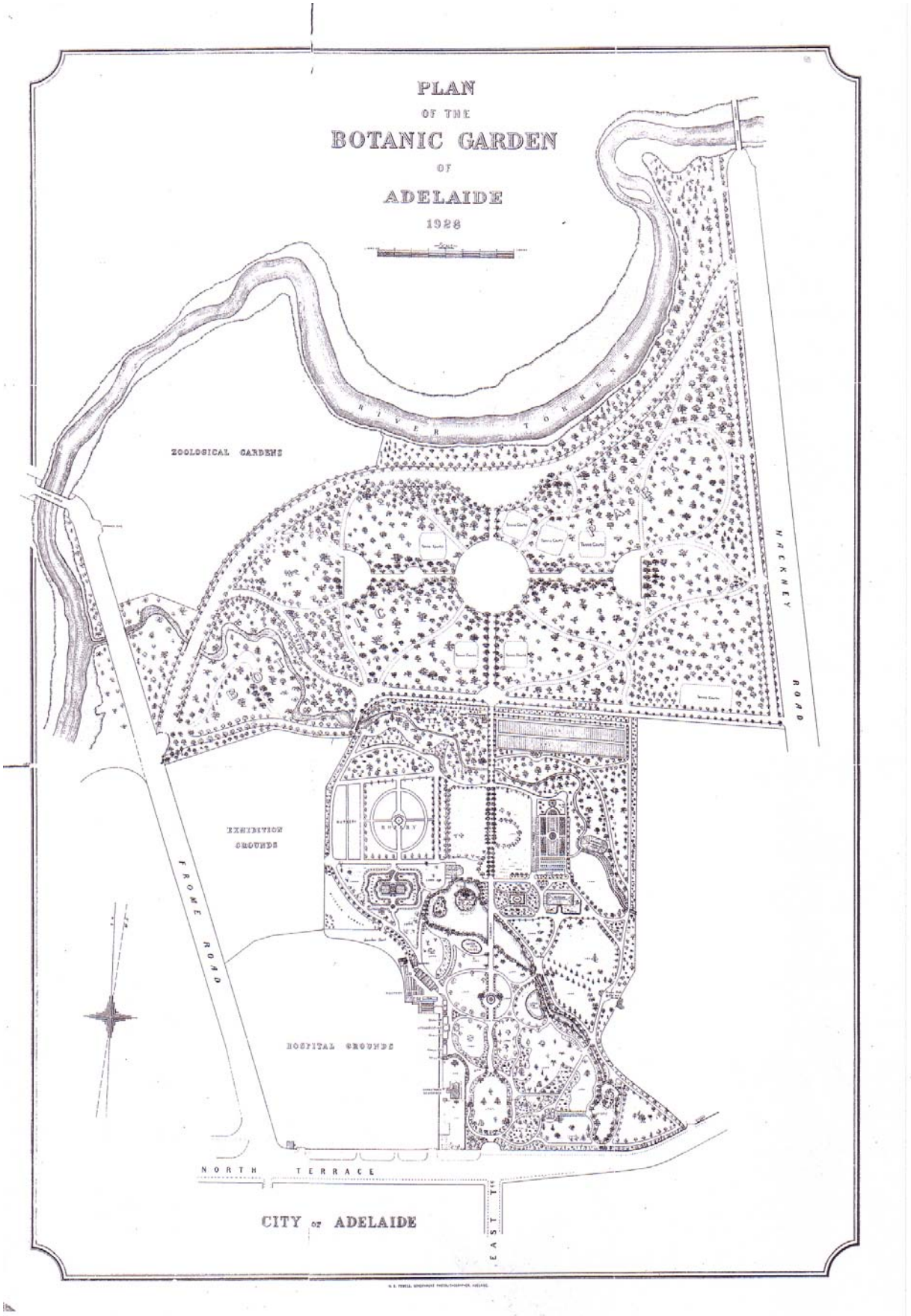

Figure 2.19 *Bailey's 1928 master plan of the Adelaide Botanic Garden.*

Research

Agricultural and horticultural research was largely handled by the Department of Agriculture, aided by Roseworthy College and, after 1924, the Waite Institute.

There was still an educational role for the Botanic Garden but the emphasis of the work done was horticultural rather than botanical. For example, in 1923 it was recorded that the foreman of the Mylor Type Orchard had spoken at two national conferences of fruit-growers. There was always a section on the Type Orchard in the annual reports, referring to varieties that had been acquired, and often methods of pest control. The experimental garden was maintained, and annual reports—resumed by Bailey after many years when they were not produced—refer to plantings of species such as sorghums and fodder maize. Tobacco plants were trialled and surprisingly cotton was still considered as a crop. Some experimental plantings of different types of sweet potatoes were recorded in 1923. Medicinal plants and culinary herbs continued to be grown.

The library was maintained during these years. There is regular acknowledgment of publications from kindred organisations. In 1925 it was recorded that twenty-eight parts had been added to *Das Pflanzenreich*, and that as it was the only copy in the state, access to it had been much appreciated. When eight volumes of the periodical *The Flowering Plants of South Africa* were obtained in 1928–29 Bailey noted the importance of South African plants for South Australian horticulture. E.H. Wilson's *China: the Mother of Gardens* was obtained the same year. Similarly the Museum of Economic Botany was maintained, and enhanced by donations.

External work

Bailey was at pains to record in his annual reports that a significant percentage of his time was taken up by answering inquiries, both from visitors and from correspondence, on botanical and horticultural matters. He also offered seeds of popular trees to the public. He referred in 1924 to the importance of providing information and advice to representatives of local government. This also extended to projects of state significance: for example the Botanic Garden was able provide sixty specimens of Norfolk Island Pine for planting along Anzac Highway. Bailey frequently gave talks to horticultural and other interest groups during the year and also mentioned visits made by such groups. In 1929 the Board agreed to take over the control of the gardens attached to Government House, an increased responsibility.

An Arboretum was established at the Mylor Type Orchard as well as a plantation of *Pinus insignis* (now *Pinus radiata*), an important tree for forestry in South Australia. Bailey regularly referred to interstate visits to conferences, particularly those concerned with tree-planting. When the Empire Forestry conference was held in Adelaide in August 1929, delegates visited the Gardens and Bailey probably made some good contacts at this time. As well as enthusiastically supporting the promotion of tree-planting in South Australia, Bailey gave steady supported to those who taught in the Nature Study and garden culture courses in primary schools. There were regular visits from teachers, course coordinators, particularly A.D. Edquist, and students.

Bailey's retirement

When Bailey reached the age of compulsory retirement at 65 provision was made in the 1931–32 estimates for him to stay on as Technical Adviser and as Secretary of the Board, apparently until 30 June 1932. Bailey returned to Brisbane where he died on 19 May 1938. Bailey had inherited a landscape that was largely completed, and his opportunities for new design initiatives were limited. His directorship also spanned the early years of the Great Depression, where modest budgets yet heightened public appreciation of the Garden for recreation necessitated rationalisation of maintenance and detailed landscape design.

2.2.6 The Greaves Directorship (1932–48)

Harold Greaves

The Greaves directorship was characterised by mixed economic circumstances in South Australia. It was a period when Greaves, lacking political standing in the state's public service, had to grapple creatively with increasingly frugal budgets, the state's centennial celebrations in 1936, dramatic changes to the boundaries and living collection nurseries of the Garden, and four different state political administrations. It was an interregnum in the state's economic growth and prosperity. During the last decade of his directorship, however, the fortunes of the state progressively accelerated under the Playford administration (1938–65), which drove many initiatives and enabled funding to support a broader vision in the Garden and beyond.

Harold Stamp Greaves (1882-1959) had a life-long association with Adelaide Botanic Garden. Born in North Adelaide, he commenced as an apprentice at the Garden in 1894 (aged 12 years) and progressed through the organisation to become Curator and then Director from 1932 to 1948. Notwithstanding a depressed economy, he was active in assisting planting programs along Anzac Highway (SA), at Mildura (Vic.), and Strathalbyn Soldiers' Memorial Gardens. Greaves planned floral arrangements for the state's centenary celebrations (1936), and served as a Commissioner for the National Park at Belair.

Changes to the boundary

Immediately upon gaining the directorship Greaves was faced with a pre-existing political decision to excise an eastern portion of the Garden (including the director's residence and numerous nursery buildings, stove houses, and glasshouses) for the Adelaide Hospital. The backdrop was a scenario, first proposed in 1908 by Mr Ponder MP, for the transfer of land to the Garden from the disused Lunatic Asylum and Consumptive Home. The former became a clear political decision as ideas were floated for state centennial projects, the Hospital sought to deal with growth and expansion needs, and the progressive shift of the Lunatic Asylum to the Glenside complex. A government inquiry eventually announced in 1937 a comprehensive plan to excise a strip of about three acres [1.2 ha] at the western side of the Garden to be divided between the Adelaide Hospital and the Education Department. The Garden, in its turn, received the former Consumptive Home grounds, increasing its area from about 40 to 46 acres [16 to 19 ha]. The cost of developing the new areas was estimated at between £7,000 to £10,000, and it was announced that the Government would increase the grant to the Garden 'when and where required'. The exchange of land reveals much about the tenacity, both of Greaves and the Board, in convincingly arguing for additional land and funds. Unfortunately much of the funding was not forthcoming, and Greaves had to be creative and opportunistic in erecting new stove and glasshouses, and nursery structures.

A major change to the path layout was made by Greaves when in 1944-45 he reinstated the southern portion of the Main Walk (altered by Bailey in 1923).

The new eastern lawns

The new ground to the east gave Greaves an opportunity to develop a large new works depot, behind Yarrabee House, the former asylum director's residence (see Section 4.3.6). It also created a new entrance using the pre-existing East Lodge and Gates (see Section 4.1.10), that led to the greatly extended lawn area contiguous with the Conifer Lawns (see Section 4.1.7). These changes are most clearly seen in an aerial photograph of 1952 and the 1953 plan (see Figure 2.23). The new eastern lawns (see Section 4.1.9), crossed by two main paths, were planted with specimen trees, but were otherwise little ornamented or exploited for separate living collections. The most detailed new garden design was in the corridor along the upper section of First Creek (see Section 4.1.13). On the slope overlooking the creek valley, Greaves constructed a formal sunken garden, his most ambitious piece of detailed garden design (see Section 4.1.40). Catering for family use of the Botanic Garden in the new area—perhaps deliberately remote from the intensive horticultural displays of the established section of the Garden—Greaves installed a children's wading pool.

Figure 2.20 *Photograph of the newly developed sunken garden, looking north-west towards the Museum of Economic Botany and the old Morgue building.*

Economic constraints

Despite the frugality of the period, and the state's economic depression, Greaves pressed ahead on several projects while maintaining the living collections of the Garden. He renovated the palm house structure and re-arranged much of its internal and external collection. He renovated several of the bridges over the small creek. He obtained and planted specimens of conifers (mainly *Cupressus* and *Juniperus* species) and extended the Garden's living collection in these genera. Paving works were also undertaken throughout the Botanic Garden and Park.

Water was an important factor. Exceedingly dry summers in the 1940s prompted the Garden to devise alternative water supply sources than mains supplies. Greaves re-opened old bores, monitored their mineral content, and undertook a renewal of all mains and irrigation water lines throughout the Garden and Park.

Economic botany was given an enhanced place in the Garden by Greaves. Greaves exploited educational linkages with the University of Adelaide and South Australian Museum to increase displays of grasses, cereals, and other economic crops. He also oversaw internal renovation of the Museum of Economic Botany displays, display cases and timber detailing. Because of the war years and depression, the nursery also had to address overseas seed shortages.

Economic times were the major constraint upon Greaves' activities. He commenced his directorship when the Garden faced excision uncertainties and monetary promises. He steered the Garden through a declining budgetary allocation by the state government in a state that was markedly affected by the depression and the collapse of many of its economic generators. Then, just as budgetary grants started to increase, the onslaught of Second World War deprived the Garden of funds. Despite handing over to his successor a Garden requiring much rejuvenation, he held the Garden together during an economic crisis in the state, weathering land excisions, war, and drought. He had also implemented a policy that encouraged greater public access to and understanding of the Garden and its collections.

2.2.7 The Lothian directorship (1948–80)

Noel Lothian

Thomas Robert Noel Lothian (1915-2004) was appointed as director in 1948. Born in Melbourne, he was the eldest son of publisher Thomas Carlyle Lothian. He had horticultural training at Burnley College (1933–35) before working for Melbourne City Council. Lothian gained work experience in Christchurch, New Zealand, before horticultural training at the Royal Botanic Gardens, Kew, and in Germany. During World War Two he spent time organising army farms in New Guinea. In 1945 he established a horticultural course at Lincoln College, Christchurch, before the Adelaide appointment. Aged 33, he was then the youngest director of any Australian botanic garden.

Lothian possessed much broader experience than his predecessor and was appointed when there was a very positive attitude to post-war reconstruction, even if resources were initially limited. Like Francis and Schomburgk he came with a plan of goals to be achieved and some strategies for achieving them. Among these were a technical advisory service, improved staff training, publications, re-establishment of the herbarium and library, re-establishment of international seed exchanges, improvements to landscaping and labelling, work on Botanic Park, establishment of regional tree plantations, and the possible expansion to a new site, together with an increased public profile for the Gardens.

Revaluing botany

Lothian gave new impetus to the Botanic Garden as a scientific institution. The State Herbarium became a separate entity in 1954, and in 1955 Dr H.J. Eichler (1916–92) was appointed Keeper of the Herbarium. Initially the Herbarium, along with administration, was housed in a former hospital ward but acquisitions grew at a rapid rate and facilities were inadequate. A new two-storey building located to the north of the existing administrative building was proposed during 1958–59 and new accommodation for the Herbarium was constructed during 1964–66. The area in front of the Administration building was gradually developed with paving slabs (used under the Jacaranda trees), planting boxes, and a shrub border. During 1968–69 approval was given to replace the old administrative block and the second stage of the new Administration building was opened in 1974, thus enabling the staff to come together in a single building. The need for additional space in the Herbarium building led to plans for a new wing on which construction began during 1980.

Seed exchange was introduced as an organised work unit at the Gardens in 1948. It developed steadily with seeds being sent to botanic gardens, scientific institutions, horticultural establishments, and individuals who offered facilities for exchange. By 1961 it was reported that almost 70,000 packets had been sent to correspondents, with nearly half of these in the previous five years, and with about 400 individuals and groups listed as correspondents.

In re-establishing the library, Lothian found that some volumes had been left in poor physical state, suffering from damp and pest damage. He worked hard to rebuild the collection, ordering material from Australia and overseas to replace lost material and build up a reference collection. Gradually the collection was increased and properly catalogued. Expansion of library facilities continued during the 1960s and 1970s with better arrangements for staffing, a considerable expansion of the collection, and expansion of services. The collection became an important specialist collection for South Australia and its development was a significant feature of the Lothian directorship.

Garden annexes

Early in Lothian's directorship there was discussion about the possibility of acquiring an additional site. By early 1949 Lothian had permission to look at government holdings in the Mount Lofty Ranges that might be suitable. A parcel of land of some 100 acres [40 ha] became available on the eastern slopes of the Mount Lofty Ranges in Piccadilly Valley. During 1958–59 additional land was purchased and a master plan (1961) prepared by landscape architect Allan Correy provided a blueprint for the new site. Mount Lofty Botanic Garden was officially

opened in 1977. (Mount Lofty Botanic Garden is the subject of a complementary Conservation Study, to which the reader is referred for a full account of the site).

Giles Corner Experimental Plantation, officially the 'John Gould Kelly Memorial Plantation', a 0.42 ha allotment in the mid-north region near Tarlee, was also used as a site for tree planting following an offer of the land by J.G. Kelly.

In 1965 Keith Ashby of Blackwood advised the Board that he intended to bequeath his house 'Wittunga' and adjoining land to Adelaide Botanic Garden. 'Wittunga' had been established by Ashby's father, Edwin Ashby, who cultivated a fine collection of Australian and South African plants. The gift was especially valuable because of the climate and soils—it would be possible to grown a number of species, including many from Western Australia, that could not be grown satisfactorily at Mount Lofty, because of its high rainfall, or at Adelaide because of its alkaline soil. Keith Ashby died in 1971 and Wittunga Botanic Garden was officially opened in 1976.

Loss of land to hospital (1952)

During Lothian's directorship, the loss of land (west of the Main Walk) for new hospital buildings became a reality. Negotiated in 1937, the land was resumed in stages during 1951–52. This necessitated complete demolition of the glasshouses and the director's residence.

Elsewhere, Lothian turned his attention to renewal of the Garden. Buildings were repaired, aging structures (such as bridges) were replaced, and modernist landscaping touches were introduced (see Section 3.3.2). Many changes were made to beds and the living collections, and—especially after appointment of a Tree Advisory Officer (J.A.E. Whitehill) in 1960–61—many old and diseased trees were removed.

Figure 2.21 *Aerial photograph of the Adelaide Botanic Garden in c.1960 with the Royal Adelaide Hospital in the foreground.*

Figure 2.22 *Aerial photograph of the Adelaide Botanic Garden in c.1960 depicting the north-south Main Walk and the bridge across the Main Lake, and former exhibition buildings and oval on the western approach land adjacent to Kintore Avenue.*

The 1953 plan

One consequence of the loss of land to the Royal Adelaide Hospital was the preparation in 1953 of a new published plan of the Garden. To mark the centenary of the Garden (1955), a history, catalogue, and descriptive guide was prepared, the catalogue being the first for 80 years and listing about 9,000 specimens. The key to the catalogue was provided by reference to the plan published in 1953.

The 1953 plan showed several important features, including the newly established plantings of 'Mallee Eucalypts', the nucleus of the current Mallee Garden (see Section 4.1.24). These ornamental trees were valued for their colourful flowers, compact growth habits, and tolerance of limestone soils. It was a collection intended to benefit home gardeners and those planning public plantings.

With the impending demolition of the glasshouses, the decision was made in 1951–52 to erect a new range of glasshouses, designed to adjoin the Victoria House. A large central glasshouse and four smaller ones were planned to house the orchid, bromeliad, and sub-tropical collections. The new buildings, shown on the 1953 plan and later named the Schomburgk Range, were expected to cost £21,000 (of which £1,000 was donated by the South Australian Orchid Club).

New landscape designs

The appointment of landscape architect Allan Correy as landscape officer in 1961 provided professional design skills to an institution that had previously relied on the director or outside practitioners for this advice. Aside from his master plan for Mount Lofty Botanic Garden, Correy's first major project in Adelaide Botanic Garden was the Western Wild Garden, for which he prepared a concept plan in 1964 (see Section 4.1.44). Bold drifts of coloured foliage (using low-growing perennials) were used to create a modernist pattern. Correy was also involved in a landscape design concept plan for the Mallee Garden during 1963–64. Here the turf was removed and almond shells used to mark pathways. Plants that were not Australian in origin were removed and the Mallee section continued to be developed in ensuing years with expansion northwards. During 1960–61 a government grant enabled the undergrounding of all overhead wires. Lothian wrote with satisfaction: 'for the second time in the history of the Gardens there are no overhead wires or poles to disfigure the general vistas'.

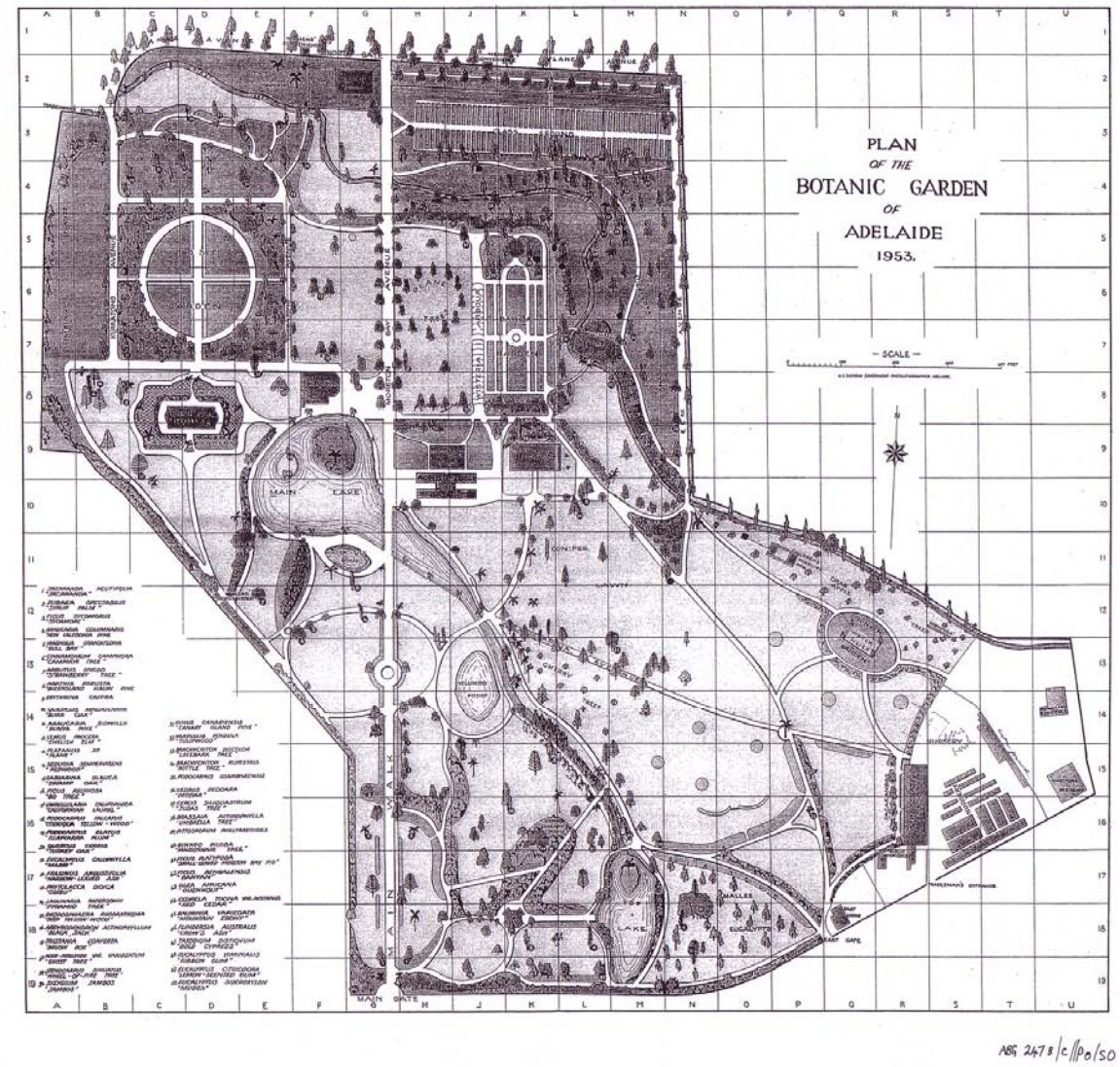

Figure 2.23 *Lothian's 1953 plan of the Adelaide Botanic Garden, including a list of his favourite significant trees in the Garden.*

In 1965 Lothian removed the bridge and causeway on the Main Walk (see Section 4.1.23) so that the main lake became a single unit. This truncation of the Main Walk was compounded by the screening of the axial north–south vista. Lothian had previously (1949–50) removed the bridge to Diana's Island. The period 1970–71 saw considerable work on redesigning the Main Lake area after there had been problems associated with leakage. New Zealand-borne landscape architect Doug Field had been appointed landscape officer in 1966 and his design work during 1970–73 on the main lake area followed an overall plan of action for this and adjacent areas prepared by Lothian in 1967. This 'called for considerable alterations to existing pathways and plantings, affecting almost every aspect of the garden activities, such as vehicular and pedestrian circulation, water reticulation, maintenance as well as visual aspects of the garden'. Contractors demolished one of the main islands, the perimeter wall, and the waterlily pond on the southern side of the lake (involving destruction of the former Nymphaea Pond). As part of the plan for the east bank and conifer lawn, one of the paths that ran between the Museum and the stream was eliminated so that the lawn carried straight through to the new pathway near the lake. A large paved concourse in front of the Schomburgk Range was also created.

Another of Field's designs was the scheme to overcome damage caused by flooding of First Creek, especially in the lower section (see Section 4.1.15). This involved concreting the bed and banks and some changes to the Western Wild Garden to help the new landscape merge into the surrounding area, including some screening plants.

Lothian made few comments in his annual reports of a general nature on design principles. An exception was in 1970, possibly at the instigation of Field, when Lothian wrote 'it is a common fallacy to believe that a garden must continually find means of attracting more and more visitors to justify its existence, but it must not be forgotten that one fundamental purpose of any garden is to provide relative peace and solitude, although the Adelaide garden is very small by any Botanic Garden standards'.

A new Horticultural Garden was planned by Field to provide a site for public horticultural education (see Section 4.1.18). Previously there had been beds displaying uses of particular plants with wire fencing planted with climbers. The scale of the site was domestic, and the new design incorporated brick walls and flanking pergolas to define a courtyard. By 1970 much of the development work was completed and planting displays demonstrated how particular species could be used for specific purposes in garden design.

When Field resigned in 1971 it was difficult to fill the position. The Board made several appointments for the position of Landscape Draftsman during the 1970s but with administrative re-organisation in the late 1970s, a pool of landscape architects under the Public Buildings Department became available and the position of Landscape Officer at the Botanic Gardens was abolished.

Lothian's *Annual Report* for 1973 reported that design plans had been prepared by landscape architect Graham Jones for the redevelopment of the former rosary (by this date planted with dahlias). His design introduced an informal geometric design, with low walled beds, 'with the emphasis on vistas, foliage effect and art form rather than garish colour'. A central pool led to the naming of this redesigned area as the Water Garden. Subsequent planting of *Cupressus sempervirens* var. *stricta* in rows led to the renaming of this area as the Italianate Garden. In 1979 a second wisteria arbour (to the east) was constructed to mirror the earlier arbour along the western side.

The Class Ground (sited on Schomburgk's former experimental garden) was a valuable area for educational work, and landscaping undertaken during 1975–78 was designed to make the area more attractive and accessible to visitors. A new plan of informal geometric beds and paths (of red bricks and paving slabs) incorporated pergolas, a pool, seating, and ornamentation. The project sought to remove the 'grave-yard bed appearance and to produce a better sequence of exhibits which will be planted to demonstrate botanical associations'.

Retirement of Noel Lothian

Noel Lothian maintained a wide range of professional affiliations. In 1961 he was awarded an OBE in recognition of his reorganisation of Adelaide Botanic Garden and associated activities. In 1975 he was elected President of the International Association of Botanic Gardens and that same year was awarded the prestigious Veitch Memorial Gold Medal of the Royal Horticultural Society for his work in the horticulture through writing, radio, and television. Towards the end of Lothian's directorship the Friends of the Botanic Garden was formed, acknowledging the considerable public support and goodwill towards Adelaide Botanic Garden.

When Lothian retired in 1980 he had achieved the goals he had set at the time of his appointment with the public profile of the Gardens and range of services greatly enhanced. The herbarium, library, and seed exchange were re-established, there was a training scheme for staff, technical and advisory services were well established, and a range of publications had been achieved. The 'Botanic Gardens of Adelaide' had been expanded to three sites, greatly increasing the range of the plant collection.

Lothian died on 24 September 2004 in Townsville, and a public memorial service was held in the Mount Lofty Botanic Garden on 4 October 2004.

2.2.8 The Morley directorship (1981–2000)

Brian Morley

The seventh director of Adelaide Botanic Garden, Brian Morley, joined the staff as a horticultural botanist in 1975. An English-born taxonomist, with qualifications from Wales and the West Indies, he had worked in Ireland for many years, extensively re-planting the National Botanic Gardens at Glasnevin in Dublin. Morley became assistant director of Adelaide Botanic Garden in 1978, and was appointed director in April 1981.

Morley's directorship saw one of the most turbulent episodes of change in the Garden's history. Whereas Francis and Schomburgk had enjoyed prosperous times, and Bailey and Greaves had suffered years of economic depression, Morley's directorship experienced both. It began with South Australia in a period of financial affluence, abruptly followed by the worst economic catastrophe since the 1930s depression. In that period the Garden also achieved its greatest increase in land area as the State Transport Authority site was vacated and subsequently incorporated into the garden. It was also a period in which Beechwood garden came under the Board's control, and Lothian's work in creating Mount Lofty and developing Wittunga was being consolidated. In the 1980s, planning was already underway for the Arid Lands Botanic Garden at Port Augusta, opened in 1996. Adelaide Botanic Garden provided advice and guidance on the development and operation of the Arid Lands Botanic Garden and the Black Hill Flora Centre. At the beginning of Lothian's term there had been only one Botanic Garden; at the end of Morley's there were five in the state.

Morley's appointment ended a 63-year period in which three successive directors had all had a background in horticulture. However, the operation of the gardens during Morley's directorship was by no means characterised by an exclusive focus on the botanical sciences. Instead, it saw the Garden take on new functions, dramatically opening it up to an unprecedented range of social and cultural activities. Despite his formal training in plant taxonomy, Morley had a broad vision of the role of public gardens.

Conserving the fabric

Morley initiated a range of works to upgrade infrastructure and buildings in the Garden. The North Terrace Gates were cleaned and conserved, their iron blacked and gilded, and restored to their original impressive appearance. The Simpson Kiosk was upgraded from a tearoom to a prestigious restaurant. North Lodge, which still housed a gardener in 1980, was refurbished for use as a gift shop by the Friends, who moved their offices into Yarrabee. Over the first few

years of Morley's regime, fountains were repaired, footbridges were upgraded, paths were paved, the motley collection of seating was replaced by new park benches, litter bins replaced the old petrol drums, and directional and information signs were standardised in size and colours.

Some of the major buildings from the Schomburgk era had been neglected for decades and were sadly in need of repair. The Museum of Economic Botany was closed to visitors because its roof leaked; it was re-roofed in 1981. The Palm House was in even worse shape, its glazing bars corroded by a century of enclosing warm moist air, allowing glass panes to fall out. Eventually an unprecedented $1.1 million was obtained from the Commonwealth for the Palm House restoration, completed in 1995. To reduce future corrosion of the building, the new plantings were arid-zone Madagascan flora.

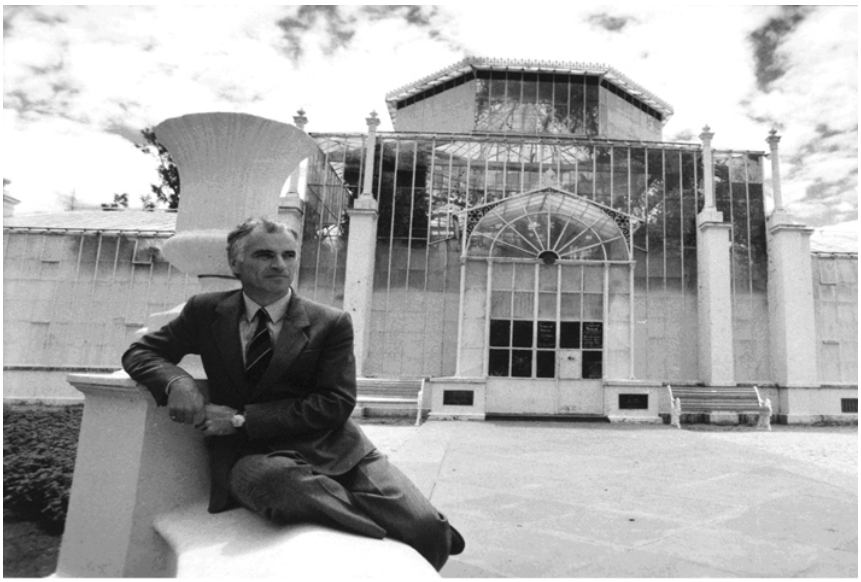

Figure 2.24 *A dilapidated Palm House, prior to restoration, with Dr Brian Morley in the foreground.*

New developments

Besides funding, restoration of the Palm House—which necessitated relocating its plants for several years—had been made possible by the independent project to build a Tropical Conservatory. The Conservatory had been a dream for some years. In 1984 plans for a visually spectacular half-paraboloid steel-framed glass structure sited in Botanic Park were prepared. Opposition to encroachment on the Parklands led the Board to consider the under-utilised STA depot as a suitable site. This plan began to seem feasible in September 1985 when the State government announced that the Botanic Gardens Board would administer the former STA site when it became vacant.

After a long wait, a strip of land at the western side of the STA depot was transferred to the Board and architects Raffen Maron re-designed the Conservatory proposal for the new north-south elongated site, settling on two segments of a sphere joined to form a symmetrical structure nearly semi-circular in side elevation. The shell of the building was substantially complete in Australia's bicentennial year of 1988 (to satisfy funding requirements), with planting of the Bicentennial Tropical Conservatory to a landscape design by Land Systems Pty Ltd assisted by the herbarium staff completed in the following year.

Changed economic circumstances

Morley was appointed at the very end of the long period in which public cultural institutions were seen as instruments of social improvement and demonstrated civic prestige. In the 1980s, economic rationalism re-shaped government thinking into a more brutal concern for monetary values at the expense of all others. Increasingly, decisions about the future of Adelaide Botanic Garden were being made by the Department of Environment (established 1972), and the bureaucrats making those decisions did not share the vision of the Adelaide Botanic Garden being a cultural and scientific institution, one of a community of about 1,600 botanic gardens around the world.

The early 1990s were a time of severe financial stringency in South Australia, with drastically reduced State spending, amid general economic recession because of the effects of State Bank collapse. In was in this atmosphere that the Botanic Garden's greatest physical expansion was to take place.

Developments along Hackney Road

The Board finally took control of the Hackney Road frontage in 1997 and the re-design of this area commenced (see Section 2.4). The most radical proposal affecting the management of the Garden was to relocate the herbarium in the old Metropolitan Tramways Trust (MTT) Car Depot (see Section 4.3.5). Refurbishment of it and the Goodman Building (for administration) began in 1998, and they both opened in November 1999, with the administrative offices and the Plant Biodiversity Centre relocated facing Hackney Road in freshly-landscaped surroundings and flanking the Garden's new eastern entrance. The empty administration and Herbarium complex was demolished almost immediately to allow work to start on the National Wine Centre (see Section 4.3.4).

Brian Morley retired as Director in October 2000 after a term that had been a roller coaster ride of prosperity and recession. In addition to consolidating the impressive gains of the Lothian directorship, his term saw achievements across a broad spectrum of the Garden's activities. Morley believed that he had left the Adelaide Botanic Garden 'culturally enhanced'. The new eastern approach, in particular, had been the most radical change to the Garden's public face since its inception.

2.2.9 The Forbes directorship (2001–present)

Stephen Forbes was appointed director in October 2001. A botanist and ecologist, he had studied in England, and had experience in the botanic gardens of Sydney, Melbourne, and Perth, and had undertaken botanical field surveys in Australia, Guyana and Tanzania.

When Forbes arrived, the politics of the Garden was dominated by issues associated with the National Wine Centre. Intended to function commercially as a restaurant and wine museum and sales complex, it was awkwardly positioned, neither in an attractive wine-growing area nor in the restaurant-friendly environment of the city centre, and had failed to capture the public imagination. Struggling financially, the Wine Centre was leased in 2003 by the state Government to the University of Adelaide to be operated primarily as an education and training facility.

Forbes has concentrated on the consolidation of a complex institution and has astutely anticipated new developments by the adoption of a Strategic Plan (2002) and the commissioning of the current Conservation Study by Adelaide Research & Innovation Ltd (Aitken, Jones & Morris) and concurrent Master Plan by Taylor Cullity Lethlean in the lead-up to the Garden's sesqui-centenary (2005-07) in conjunction with a Conservation Study by Adelaide Research & Innovation Ltd (Jones, Aitken & Morris) and Master Plan (Taylor Cullity Lethlean) for the Mount Lofty Botanic Garden. He has also set in train the design and construction of the Schomburgk Pavilion by Flightpath Architects, the re-construction of the Italianate Garden as the Mediterranean Garden by Taylor Cullity Lethlean, the opening of the Lothian Auditorium to the rear of the State Herbarium complex, and actions in conjunction with the City of Adelaide Council and the University of Adelaide to enable the creation of the Western Entrance to a design by Taylor Cullity Lethlean.

2.3 BOTANIC PARK

Early colonial uses

An early but short-lived use for the Botanic Park site was as a brickworks. Established for the South Australian Company, the works were described in July 1837 as being located in 'the extreme east corner of the parklands where it is intersected by the Torrens'. Across the road, in the suburb of Hackney, the Company built a flour mill in 1842. Advertisements in the *South Australian Gazette* during 1838 and 1839 also refer to lime kilns operating in the Adelaide Parklands and 'on the bank of the river', but do not identify specific locations. These were small opportunistic industries and there is no visible trace of their presence today.

Francis

When the boundary of Adelaide Botanic Garden was formalised in 1855, the Botanic Park site was separated from it by a boundary line bisecting First Creek. Francis had no control over the land north of the Garden, and indeed was hard pressed to cope with the land he had at his disposal, and confined his developments to slightly reduced area focussed on the southern portion of the site. Perhaps the best indication of his views on possible uses of the future Botanic Park were his careful retention of remnant eucalypts and his designation of the northern portion of the Botanic Garden as 'part of arboretum', a designation that implies an extension beyond the northern boundary of his 1864 plan for Adelaide Botanic Garden.

Schomburgk

The land north of the Garden was placed under the care of the Botanic Gardens Committee in 1866, doubling the area available to the new director Richard Schomburgk. Planting the additional land was not an immediate priority for Schomburgk, although funds eventually became available to develop this section. Schomburgk planned a landscaped area with an arboretum and a carriage drive lined with shady trees, outlined in detail in his 1873 *Report*. There were to be grassed areas 'with scattered clumps or single trees, conspicuous to the eye by their fine foliage or form'. His vision was depicted on the 1874 plan, that formed a master plan for the area (see Figure 2.14).

Schomburgk's account of the early planting of Botanic Park makes remarkable reading. The summer of 1873–74 was particularly hot and dry with shade temperatures reaching 43° C and only 25 mm (one inch) of rain between September and February. Yet he reported only 3% losses to the 4,000 trees that were planted in Botanic Park. He had planted as many varieties as possible of European and North American forest trees: ash, oak, birch, lime, and pine, as well as the 'finest indigenous Australian trees' (presumably those of most horticultural potential). There were avenues of cork elm, Moreton Bay Fig, and Oriental Plane. In his report Schomburgk said he had demonstrated that by early planting and assiduous attention to how they were watered, young trees could survive under very difficult conditions. He watered only twice after the trees were planted employing a deep watering technique. Watering might occupy several men with a horse and dray for weeks on end. The remainder of the 9,000 trees had been planted by the beginning of 1877. By this time the European and American forest trees were said to be growing 'luxuriantly'. Towards Hackney Road, where the soil was fairly stony, conifers such as *Pinus halepensis* (Aleppo Pine) and *Pinus pinaster* (Maritime or Cluster Pine) were planted.

The Park was laid out to provide views to St Peter's Cathedral and the Congregational Church in Brougham Place, North Adelaide, from an elevated vantage point where a half circle was planted with shady trees and seats provided. The drive intended for carriages was planted with two rows of avenue trees on either side. Some 200 Oriental Plane trees formed the outside rows and the inside rows planted alternately with native *Lagunaria patersonii* (Pyramid Tree or Norfolk Island Hibiscus) and *Sterculia diversifolia* (now *Brachychiton populneus*).

When the Botanic Park planting was completed attention was paid to the problems of maintaining the bank of the Torrens, in places 10.3 metres high and prone to being undermined. The Legislature voted an initial £600 for this 'tedious and dangerous work', making the slope more-gentle and planting with trees and rushes. Willows and fast-growing bamboos were

planted to stabilise the earth. Water flow could be very heavy and in 1883 the River Torrens water level rose 2.4 metres in a few hours. About 900 trees were planted but the soil was brackish and some species such as conifers and some of the willows proved unsuitable and were replaced with *Tamarix gallica*. The total cost for sloping the banks of the Torrens came to £1,500 making this an expensive project, on a par with the purchase of the Palm House.

In time the pedestrian walk along the River Torrens provided a useful recreation area. A further £300 was provided for two entrance gates, one from Frome Road and one from Hackney Road, each with a lodge for a man in attendance. The carriage drive, one and a half miles long (2.4 km), was officially opened on 20 June 1884. Park regulations excluded heavy vehicles and the drive was open during daylight hours excluding Sunday mornings. There were some problems with unwanted visitors. There was concern about 'disorderly persons of both sexes' who slept in hollow gum trees or under the pine trees along Hackney Road. A more serious problem arose from vandalism. Trees were uprooted and trees as high as two metres were snapped in two or twisted. These problems also arose in the North Terrace plantation and in the Bowden plantation (a tree plantation in the centre of Port Road) for which Schomburgk was responsible.

In 1882, the Zoological Society was successful in obtaining a 16 acre (6.47 ha) site for a zoological garden. This land had been part of Botanic Park and the zoo retained the inheritance of Schomburgk's main path layout in the redevelopment of the area. A smaller strip of land, about 1 acre (0.4 ha), between the zoo and the drive was further ceded to the zoo in 1957-58.

In 1894 Botanic Park was dedicated to the Board of the Adelaide Botanic Garden under *Botanic Garden Act*.

Figure 2.25 *Photograph of the Hackney Road flank of the Botanic Park, looking south, depicting the pine plantation, fencing, and Plane Tree Drive entry gates.*

Bailey

Botanic Park had become a popular venue for open-air meetings, and the Salvation Army was perhaps the best-known organisation that first met here. During 1926–27 Bailey enabled the Salvation Army to place an inscribed stone slab to mark the place in Botanic Park where the first Salvation Army meeting in Australia was held on the 5th September 1880. During the 1920s the drive through Botanic Park was increasingly used by people in cars. Thousands of visitors were reported on Sundays and holidays. As a recreational facility the Botanic Park was much loved and greatly used, especially during the Great Depression, and Bailey added tennis courts at the eastern end of the Park in 1929 to assist this activity.

While religious doctrine was being spoken aloud in the Botanic in the 1880s, this central position in the Park also became a venue for political doctrine. This area, within a ring of Moreton Bay Figs, *Ficus macrophylla*, became known as 'Speaker's Corner' mimicking Hyde Park

in London as a venue for political expressions by the Labor Regulation League, the forerunner to the Australian Labor Party, and personalities like Alf Roberts, Gregor McGregor, Tom Price, Crawford Vaughan, and John Abel McPherson, together with the political-rhetoric of lone crusaders such as 'Redwing', female rationalists, the 1893 meeting of the 'New Australia' movement on the eve of their departure to Paraguay, the Workers Industrial Union, and conscriptionists and anti-conscriptionists during World War I with a riot occurring following an anti-war meeting in 1915; all spoke in the venue subject to permits being issued by the Board. In 1950 the Board determined to shift 'Speaker's Corner' from its central position to a location in 'The Dell' surrounded by First Creek, Frome Road and the former Exhibition Grounds. This activity declined following the 1950s and both places are forgotten spaces of social meaning in the Park today.

Thinning out of trees was carried out in Botanic Park during 1924, especially of dying trees and poor specimens affected by overcrowding. Writing in 1926–27 Bailey noted the need to remove trees that had been infested by termites, particularly old specimens of *Pinus insignis* (now *Pinus radiata*) and *Pinus halepensis*, elms, planes, poplars, Moreton Bay figs (*Ficus macrophylla*), Murray red gums (*Eucalyptus camaldulensis*), and Tasmanian blue gums (*Eucalyptus globulus*).

Lothian

In 1947, Lothian and the Board were keen to review plantings in Botanic Park to 'establish an arboretum'. Attention was paid to the Hackney Road boundary where new species of both deciduous and evergreen trees were planted. Vandalism slowed progress and led to a proposal that the gates of Botanic Park be closed in the evenings. Lothian undertook much tree removal and replanting, although overall Botanic Park assumed a more open appearance than previously. In 1969 alternate specimens were thinned out from Plane Tree Drive, Lothian writing at the time that it was unfortunate that when they were planted (which he gave as over 70 years earlier) the distance between them had been set at 25 feet (7.6 m).

The 1965 Report records that the Board were successful in resisting an application from the Municipal Tramways Trust to relinquish a strip of land about 25 feet (7.6 m) deep on the Hackney Road boundary, and also in rejecting an application from the Royal Zoological Society for permission to use a section of the Park as a car park. However in 1968 it was reported that after negotiations with the state Government a narrow strip of land would be relinquished on the eastern boundary of Botanic Park to enable Hackney Road to be widened.

In 1966 it was reported that it was possible to bring to fruition a long-standing plan to make the drive through Botanic Park more of a scenic drive along a private road. This came about when after advice from the Police Department and the City of Adelaide Council it was decided to close the entrance from Frome Road to traffic, making it just a pedestrian entrance. Vehicles would now gain entrance from Hackney Road via Plane Tree Avenue and leave via an exit near the Hackney Bridge. Plans were also made by the Highways Department to widen Hackney Road, and to move the exit gate about 200 yards south, re-erecting the pillars and gates.

The 1967 Report has photographs of work being done to aid erosion control along the River Torrens bank in Botanic Park. Agreement had been reached between the City of Adelaide Council and the state Government to take measures to deal with this long-standing problem.

Botanic Park became a very popular place as a venue for Christmas parties and picnics for children in the 1960s, especially those given by commercial firms for their employees and their families. It was noted in the 1971 report that while periodically requests were made for use of all or part of the Park for other purposes, the Board was mindful of the importance of the Park as a large open space close to the centre of the city and would not allow permanent alteration of the Park in any way other than its use as an arboretum and open space.

Morley

The 1990s were also a period in which public uses of the Park expanded. In 1992 the Adelaide Botanic Garden hosted the first ethnic music festival, which would grow into the biennial Womadelaide. Open air cultural events increased in the following years, including evening

cinema and performances by the Adelaide Symphony Orchestra. Incursion of cars into Botanic Park had been a persistent problem for successive directors, and a balance between vehicular access and sound horticultural management appears to have been reached enabling an equilibrium that balances revenues from parking with environmental intrusion.

Forbes

Forbes has not proposed changes and alterations to the Park, deferring to the need to complete the Conservation Study and Master Plan, and to prioritise cultural and horticultural improvements in the Garden first before attending to the Park.

2.4 EASTERN APPROACH

Royal Adelaide Hospital

The eastern approach to Adelaide Botanic Garden has only been managed by the institution since 1999, yet earlier developments have profoundly affected the layout and form of this strip of land along Hackney Road. The earliest of these developments was Adelaide Hospital. In 1840 colonial Governor Gawler funded a hospital located in the Parklands at the corner of North Terrace (now Botanic Road) and Company Mill Road (now Hackney Road). This hospital, built at a cost of £2,600, was opened in 1845. In 1852 the much larger Adelaide Lunatic Asylum was built immediately to the west of the hospital. Three years later a new hospital was built on a site at the corner of North Terrace and Frome Road, and the original hospital buildings were absorbed into the Asylum complex.

Thus when the Adelaide Botanic Garden was established in 1855, it already had neighbours to the east (Adelaide Lunatic Asylum) and west (the new hospital). Apparently no boundary had ever been drawn for the Asylum or its predecessor hospital; the buildings were simply erected on the abundant Parklands that were regarded as a reserve for government purposes, and while there were no adjacent buildings, there was no need for a boundary. It was the act of surveying the new Botanic Garden that defined for the first time the land available to the Asylum and the Hospital

Adelaide Lunatic Asylum

Planning for an Asylum on North Terrace immediately west of the original hospital began in 1849, and it opened in 1852. Costing £4,000, the handsome two-storey masonry neo-Tudor building was designed to accommodate 60 inmates. In 1855 the original hospital was relocated and the Asylum took over its buildings, forming a substantial complex. The Asylum grounds extended north along Hackney Road as far as present Plane Tree Drive, and this extensive area was planted with orchards and vegetable gardens, and tended by the patients. In 1865 a masonry wall was built between the Asylum and the Garden, and a two-storey residence for the Resident Medical Officer, now known as Yarrabee, was built at the corner of North Terrace and Hackney Road. The following year the Asylum buildings were screened from view when a stone wall was built along the North Terrace frontage, and a gatehouse (East Lodge) erected as the public entrance to the Asylum.

Figure 2.26 *The Adelaide Lunatic Asylum, looking from the Main Walk in the Garden. The image depicts garden beds in the foreground, a Wardian case to the front left, and the large Asylum building complex to the rear.*

When these developments were made in the 1860s the Asylum was already becoming too small for its purpose, and new psychiatric theories were changing the treatment of the insane. An inquiry in 1864 recommended that a larger Asylum be built on a site outside the city, although the North Terrace Asylum continued to be extended after this recommendation, with new dormitories and a women's ward added. In 1867 work began on a new Asylum at Parkside large

enough to house 500 inmates (now Glenside Hospital), and when it opened in 1870 a large proportion of the Asylum's patients were transferred there.

The last patients were removed to Parkside in 1902, and the Asylum was taken over by the Royal Adelaide Hospital for the next 30 years. The former Asylum was known as the Infectious Diseases Hospital, while the original Hospital buildings became the Consumptive Home and Cancer Block.

The use of the former Asylum complex for hospital functions continued until 1932, when a purpose-built Infectious Diseases Hospital opened at Northfield, and the buildings on the North Terrace site fell into disuse. In 1937 a land exchange was negotiated, wherein the Hospital gained a strip of the western side of the Garden, and the Garden gained the much larger area of the entire Lunatic Asylum site.

Early in 1938 the Botanic Garden took over the site, and almost all of the early Hospital and Lunatic Asylum buildings and walls were demolished within the next few months. Yarrabee became the residence of the Director of the Botanic Garden until 1972. The North Terrace wall and East Lodge were retained, as were the Morgue and Stables, which were used as sheds. Apart from these elements around the perimeter, the Asylum complex has now vanished with very little trace.

Metropolitan Tramways Trust

Following the closure of the Lunatic Asylum on North Terrace in 1902, the extensive gardens and orchards to the north along Hackney Road were no longer tended. Within a few years this space was occupied by the Metropolitan Tramways Trust (MTT) as part of its project to electrify Adelaide's public transport system. The first tram services had been established in Adelaide in 1878, and in 1901 Thomas Roberts, Chief Mechanical Engineer of the South Australian Railways, recommended the adoption of electric trams using the overhead trolley wire system for power distribution. In 1906 the state Government purchased all the private tramway companies in Adelaide under the *Tramways Electric Traction Act 1904* and established the Metropolitan Tramways Trust, which commenced the process of electrifying the system. The site chosen for the hub of the network and its administrative offices was the abandoned Asylum gardens fronting Hackney Road. Construction on site began in 1908, with 24 parallel tramlines running into the Car Depot, built in four bays housing six tracks each. Architects Garlick Sibley & Woodridge designed the Depot and the administrative building alongside, a complex Edwardian design later named the Goodman Building after Tramway Engineer and later MTT General Manager, William Goodman. The electric service was officially opened in 1909.

The tramway system operated with little alteration until after the Second World War, when motor vehicles began to dominate, and the tram service ceased in 1958. Almost immediately, more than half of the Car Depot was demolished to make room for parking buses on the site. The MTT became the State Transport Authority, and proposals to vacate the Hackney Road site were publicly aired as early as 1984. The STA finally moved its operations to suburban Morphettville and vacated the Hackney Road site in 1992.

The new Eastern Entrance

The MTT complex sat vacant for several years, and there was strong community pressure to remove the buildings from the site and incorporate the land into the Adelaide Botanic Garden. The Goodman Building and one remnant of the Car Depot (which had become popularly known as the Tram Barn) had been added to the State Heritage Register, and in 1992 the state Government made a commitment that they would be retained amid new developments on the site. New plans incorporating the Depot building were drawn up in 1993.

Decisions on the future use of the Hackney Road land were out of the hands of the Board. In 1997 the state Government committed part of the land to the National Rose Trial Garden, later re-named the International Rose Garden. Roses were planted, but the rest of the site sat vacant. Then in 1998 came an announcement of the state Government's unexpected multiple decisions: the existing Botanic Garden administration building and herbarium, built in the 1960s, would be

demolished to make way for the National Wine Centre; a new major entrance to the Garden would be established on Hackney Road; and the administrative offices and herbarium would be relocated into the former STA buildings. The most radical proposal affecting the management of the Garden was to relocate the Herbarium (renamed the Plant Biodiversity Centre) into the old Car Depot structure, completely refitted for the purpose (see Section 4.3.5).

Plans for a new National Wine Centre were completed in 1998 by Philip Cox in association with Steve Grieve, and the complex was opened in 2001. The National Wine Centre proved financially troublesome, and in 2003 it was leased by the state Government to the University of Adelaide for use as teaching facility in addition to continuing its public educational and commercial roles.

2.5 WESTERN APPROACH

In 1844 the South Australian Agricultural and Horticultural Society held their first show in 'the extensive, beautiful and umbrageous paddock between North Terrace and Frome Bridge', following use of an open space in the north-eastern Parklands. Agricultural shows continued to be held in the paddock east of Frome Road for the next 80 years. In the early years, exhibitions were held in the open or in temporary pavilions, but in 1859–60 a permanent masonry Exhibition Building was erected. It was a large and elaborate building for its time, and was extended in 1868.

By this date, the exhibition ground shared its southern boundary with the hospital and its eastern boundary with the Botanic Garden. The site originally proposed in 1851 for Adelaide Botanic Garden had extended west along North Terrace as far as Frome Road. The new hospital was erected within this land, necessitating the re-positioning of the eventual 1855 Garden reservation further east. Recognising the need for a western entrance to the garden, a gate was installed to provide access through the exhibition grounds.

The Exhibition Building remained in use for over 60 years, but within 30 years had ceased to be the main focus for exhibitions. A much larger and more conspicuous building was erected for the Adelaide Jubilee International Exhibition in 1887. Fronting North Terrace (west of Frome Road), and served by a branch line from Adelaide railway station, it was in the grand exhibition tradition with a spacious hall and a central dome, upstaging the old Exhibition Building that now looked more like the venue for a country show. Agricultural shows continued to be held in the old building until 1895, when they moved to the new North Terrace site.

Use of the old Exhibition Building as an isolation hospital was proposed in 1919 during the great influenza epidemic, but the suggestion was strongly opposed by the Botanic Garden Board, which was hoping to acquire the land fronting Frome Road. The boundary of the hospital with the Botanic Garden also constrained the hospital's eastward growth, forcing it to expand northwards along Frome Road into the former Exhibition Grounds.

The land fronting Frome Road was proposed as a site for the Adelaide Boys High School in 1936. The land was earmarked for the school, but no action was ever taken except the creation of a football oval, and the school was subsequently built on West Terrace in the 1950s. Despite this, the site and its structures were used for secondary and technical training purposes, including technical automotive training, for many years. The subsequent history of the old Exhibition Building is poorly documented, but oblique aerial photographs of *c.*1952 depict a building on the same footprint, possibly incorporating the early structure. In recent decades, the former Exhibition Ground has been as developed with car parking and new buildings to cater for adjoining institutions. In 2005 the City of Adelaide, then the owner of the land, successfully proposed in conjunction with the Garden and the University of Adelaide, the creation of a Western Entrance parkland in the space necessitating the removal of contaminated soil from the former training functions, before the space could be developed in accordance with a landscape design by Taylor Cullity Lethlean.