

## Section 2.0

# DEVELOPMENT OF MOUNT LOFTY BOTANIC GARDEN



*Figure 2.1 Photo: Construction of the Lower Car Park in 1977. Source: Noel Lothian.*

## 2.0 DEVELOPMENT OF MOUNT LOFTY BOTANIC GARDEN

This chapter sets out the history of the landscape that is now embraced by the Mount Lofty Botanic Garden.

### 2.1 ABORIGINAL (PRE-EUROPEAN) HISTORY OF THE SITE

Prior to European settlement the land to the west of the Mount Lofty Range was the country of the Kurna and to the east the Peramangk. To the Kurna, *Yurrebilla* (*Yurr-ee-billa*) or *Urebilla* is a name that identifies the area comprising Mt Lofty and Mt Bonython (*Yurreidla*) as the 'two ears' of the Kurna ancestral being *Nganno*, *Nar-na*, or *Nga:no*. Nganno travelled across this landscape, and lay down to die following a battle; his body formed the Mount Lofty Ranges. A variant of 'Yurrebilla' or 'Yureidla' has been historically ascribed as being the origins of the nomenclature of the settlement of Uraidla (Martin 1996: 9-10) but it has more recently been associated with Kurna nomenclature for Mt Bonython (Hemming 1998: 19; Clarke 1991: 63; Tindale 1974: 64; Wyatt 1879: 178-179).

More recently the term *Yurrebilla* has been used to define the Greater Mt Lofty Park Lands that has been created along the Mount Lofty Range ridgeline reaching from Cox Scrub Conservation Park and Kuitpo Forest in the south to Para Wirra Recreation Park and Mt Crawford Forest Reserve in the north. *Ngangkai parringa* and *yulti* have also been used to describe the Onkaparinga Valley and stringybark trees respectively.

Notwithstanding this nomenclature and associative meanings, there is no specific evidence of Kurna or Peramangk occupancy of the Piccadilly Valley. There is also no known Kurna or Peramangk site within the Mt Lofty Botanic Garden. It is however known that the Peramangk frequented the Onkaparinga River valley, and it is believed that there were traverse routes used by the Peramangk to access *Yurrebilla* for communication and trade (Martin 1998: 10; Skipper 1837; *Register* 2 March 1839; Dunn 1980: 103).

## 2.2 MOUNT LOFTY BOTANIC GARDEN

### 2.2.1 European Settlement Prior to the Garden Proposal

In late 1855 Arthur Hardy commenced construction of 'Mount Lofty House' as a family summer residence. Hardy was a wealthy land-owner and developer with a keen interest in weather, acclimatization of commercial and decorative plants including vines, walnuts, cork oaks, rhododendrons and azaleas. Stephen Castle worked for Hardy as the first gardener at 'Mount Lofty House'. Hardy selected the site because of its views but also to facilitate his passion in meteorological recordings and botanical collecting (Martin 1998: 66, 67, 118, 126; Ward 1862: 57, 58).

During 1856-1857 Hardy was a proponent of the establishment of the Crafers District Council that was proclaimed in February 1858, with the objective of gaining better services and roads. Established, Hardy found the Council ineffectual in meeting his objective of a quality road along Ridge Road so in 1859 he gained election to the Council and pushed ahead this objective as well as providing a school for the Crafers village. By 1863 'Mount Lofty House' had become the permanent residence of Hardy. He sold his 'plains' residence, 'Birksgate' in Glen Osmond, to Thomas Elder. The extravagances of the Hardy lifestyle however forced the sale of 'Mount Lofty House' to businessman Alfred Watts in 1867; a residence where Mrs Watts composed parts of her *Family Life in South Australia* (1837). Notwithstanding this sale, Hardy retained extensive hectareage surrounding the 'House' and a few years later returned to the ridgeline and erected a summer-house residence called 'Number Seven'. 'Mount Lofty House' passed to Watts' brother-in-law, Frank Stokes, and by the early twentieth century the residence was owned

## 2.0 DEVELOPMENT OF MOUNT LOFTY BOTANIC GARDEN

by the Arthur Waterhouse family and later by the Richardson family. The 'House' was just occupied by the James Morgan family when the Ash Wednesday fires of 1983 extensively destroyed the residence and its gardens. The majority of other summer-houses and their gardens including 'Number 7' were also effectively burnt or destroyed in the Ash Wednesday fires (Martin 1998: 66, 67, 118, 126; Watts 1837: 81, 82).

Frederick William Lampert (1838-1928) acquired most the land in the lower reaches of the site (part Section 837) in 1863 at £10 per acre. He undertook tree clearing, horticulture activities, and also established an irrigation system linked to the springs in the upper reaches of the Garden today. In time he owned some 17.8 hectares, with a two-room stone house, a four-room *pisé* house, and about 3.2 hectares of market gardens (Martin 1998: 139; Hallack 1987: 63).

Journalist for the *Adelaide Observer*, Edward Headly Hallack (1846-1916), recorded, in detail, a remarkable irrigation system that Lampert progressively established on his property:

*The large amount bestowed upon it does credit to its owner. The land is undulating, and of a lighter character than that on the flat or old swamp. The system of irrigation employed is extensive, and the perfecting of it has in the past entailed a considerable amount of time and money. On the rise leading up to the road there are several springs running from beneath a growth of bracken and timber. The opening up of some of these served to supply the original portion of the garden and the homestead, water being conveyed by means of iron piping. On the extension of cultivation of the southern slopes an increased supply was necessary, and a more extensive opening up of the springs was resorted to. A hole was sunk higher up to tap the water which supplied the springs, and at a depth of 15 feet [4.5m] it was struck. From that level a tunnel 5 ft x 3 ft [1.5 x 0.3m] was driven into the hill for a distance of 270 feet [82.2m], and there are five small shafts sunk on its course for use as manholes and for hauling purposes. The depth of the hole at the head of the tunnel is 50 feet [15.24m], the country being traversed being of rotten sandstone, sufficient dense, however, not to require timbering. At the lower end of the tunneling are two curved dams or reservoirs, 9 feet [2.7m] wide and 132 feet [40.2m] long, and from them the water is conveyed in open trenches to plots on both sides of the reservoirs. A flume on stilts also carries a stream across the dip of a blind gully, when around other slopes below which most of the vegetables are now growing it is taken in an open drain. This work cost Mr Lampert £150 ...*

*Mr Lampert's work in this connection is not, however, ended, as a bar of quartz met with at the head of the tunnel will have to be pierced before he can obtain a further supply of the precious element (Hallack 1987: 61, 63).*

Edward James Curtis (1863-1943) undertook little market gardening or orchard activities on this land, which was part of the larger Curtis family land holdings in the Piccadilly Valley. The Curtis land comprised the upper reaches of the Garden. Curtis was one of two sons to William (c.1836-1916) and Theresa Curtis. Development on the land comprised a slab house and 1.2ha of market garden (Hallack 1987: 61, 63).

The relatively undeveloped and cultivated Curtis land formed the foundations of the Garden that was later acquired from the estate of Tom Backhouse. Progressively, portions of the former Lampert landholdings were acquired in successive years.

During the 1880-1890s the Garden area was subject to mining exploration. The Mt Lofty Park Silver-Lead Mine was established on the lower slopes in about 1889. This mine operation was abandoned between 1890-93:

*... owing to the large quantity of zinc blende in the lode and a lack of capital on the part of the small company working the mine. [This was despite the fact that mining] ... revealed 'a solid lode of cubical galena 2½ ft (0.8m) thick' in Woolshed Flat Shale and at depth probably 20 to 30 ft (6.1 to 9.1m) below the surface. One or two other shallow shafts are in the area but no record was found of these, which were all in probability exploratory.*

The name of the mine was later changed to the Adelaide Hill Syndicate Silver Lead Mine (Hallack 1987: 60, 63; Correy 1965: 47; Winton 1925: 67-70; Wright 1973: 7-8).

In 1893 Hallack reported that it was “the site of a silver lode, which was until recently worked successfully by a small Syndicate” (Hallack 1987: 60). Hallack also reported in detail about the Lampert (part Section 837) and Curtis (part Section 840) properties, quoted in part above, that were undertaking market gardening activities on land now comprising the Garden.

Thomas (Tom) Backhouse was an Adelaide stockbroker, promoter of companies, and mining agent, who believed in architectural eccentricities. While he never constructed a residence on the Piccadilly Valley land, he did construct a residence on Milan Terrace in Stirling called ‘The Shay’. This house, modeled upon Indian and South Australian summer-house principles, comprised “an Indian bungalow: a design less suited to Mount Lofty’s cold climate could hardly be imagined.” It was a residence that he retreated to in summer, and one that hosted numerous residents including the Cheadle family and young Italian garden affectionate Frances who returned with her husband author Paul McGuire (McGuire 1964).

Tom Backhouse undertook little work on his Piccadilly Valley property. *Eucalypt* spp timber was however extensively felled on this land for use at the Broken Hill mines in 1900-1920 except around the swampy areas. Timber was also cut by the Kanmantoo Copper Mine, on their leasehold, for kindling at a jam factory in Adelaide. As a consequence much of the upper slopes, and the Mt Lofty ridgelines, were effectively denuded by the clear felling activities of the ‘tiersmen’ up to the Second World War (Whittenbury 1987: 1; Wright 1973: 8; Martin 1998: 118, 130, 134, 169-170, 191, 222, 240, 241).

During 1937 Lindsay Gordon Bonython established his vegetable garden on the lower portion of the present Garden. Prior to this activity, Bonython recalled that the land was relatively cleared, used “for natural pasture for a few years until cropping, mainly potatoes, was commenced.” Due to the dearth of reliable water the upper cultivated slopes were only sown in potatoes a few times between 1920 and 1940. Bonython, in establishing his market gardens, finished the clear felling, constructed drains and channels, erected the original dams, and planted beds of potatoes, cabbages, lettuces, peas, beans, swedes, turnips, triambles, rhubarb, onions, broad beans, and sweet corn. He planted tick beans and field peas as a green manure cover crop, but undertook no rotational cropping as he simply shifted the root crops from bed to bed annually and undertook moderate depth ploughing (20-30cm). Bonython used horse manure as a fertiliser until about 1960 whereupon nitrogen and fowl manure were used (Wright 1973: 8).

In January 1939 Ethel Barton and Felix Barton, descendants of Arthur Hardy, proposed the gift to the state government of Section 459 (6.17ha). The mixed open and forested land, colloquially known as the ‘Walnut Paddock’, was part of the original Arthur Hardy family holdings of ‘Mt Lofty House’. The Barton’s proposed the donation as part of a gesture associated with the 1938 Crafers Centenary activities, and for it to be “held as a bird sanctuary in perpetuity.” The donation was accepted, and the land transferred to the Woods & Forests Department to manage. Management works associated with the donation comprised the erection of a “plain and barbed 5-wire fence” and occasional “thinning of the forest and the felling of over-mature trees.” The Reserve was proclaimed on 11 July 1940 (Letter, Isling 1939; Minutes 6/39; Letter, Barton 1972a: 1; Letter, Barton 1972b; Letter, Hardy 1985). The exotic specimens, at the time, included Sycamore (*Acer pseudoplatanus*), English Hawthorn (*Crataegus monogyna*), English Holly (*Ilex aquifolium*), Blackberries (*Rubus fruticosus*), and Olives (*Ulex europaea*), and natives including Blackwood (*Acacia melanoxylon*), Myrtle Wattle (*A myrtifolia*), *Acrotriche fasciculiflora*, Silver Banksia (*Banksia marginata*), Broom (*Cytisus canariensis*), Heath (*Erica stricta*), Messmate (*Eucalyptus oblique*), Cherry Ballart (*Exocarpos cupressiformis*), Manuka (*Leptospermum scoparium*), and *Pteridium aquilinum* (Minutes 124/1939).

## 2.2.2 The Proposal for a Garden

The proposal to create a Hills botanic garden arose from a perceived need by Noel Lothian. In assessing his living collections in 1948 having been recently appointed director, Lothian perceived that there was a need to diversify the living collections of the Adelaide Botanic

## 2.0 DEVELOPMENT OF MOUNT LOFTY BOTANIC GARDEN

Garden to address major living collection deficiencies that would otherwise not be grown on the Mediterranean landscape of the Adelaide Plains. In part Lothian capitalized on thoughts and aspirations already held by several Board members. His belief was that:

*Adelaide was unique among the Australian capital cities in that it had two or three really distinct climate zones and at least three distinct soil zones. Having an alternative site would allow a greater variety of plants to be grown than those that could be grown at ABG which was three quarters on limestone. It was only the river flats and Botanic Park that had non-limestone soils (Lothian 1999: 16).*

Lothian summarized this scenario in June 1948 when writing to the Board:

*The suggestion has already been made by some of you, that an area, preferably in the Hills district should be obtained, and planting made which would not be supplementary to those in these [Adelaide] Gardens. The area should be less than 100 acres [40ha], and within reason, the larger the better. The procuring and the establishment of such an area, appears to be a suitable method of celebrating our centenary (Letter, Lothian 1948: 5; Lothian 1994: 1).*

With this objective in mind Lothian successfully proposed to the Board in early 1948 that investigations be entertained to identify, and acquire if necessary, appropriate land to enable a Garden to be established. Associated reasons for this recommendation was the desire by Lothian to extend the living collection into cool temperate and sub-alpine plants of the world; due recognition that a significant *ad hoc* cool temperate collection existed in the Hills on a scatter of old private estates and newer garden properties; and a desire to extend the ‘territory’ and jurisdiction of the overall Garden engagement in South Australia. This need was reinforced through research visits by Lothian, prior to his arrival in Adelaide, to several satellite botanic gardens (in particular Schachen, c.1930, for Munich, and Younger, 1928, for Edinburgh) that enabled the development of plant collections of major groups not easily grown at their main gardens (Lothian 1994: 1-2). There was also a recognition, given his New Zealand training and experience, of the numerous regional botanic gardens around the North and South Islands of New Zealand that foster regional collections and botanical knowledge.

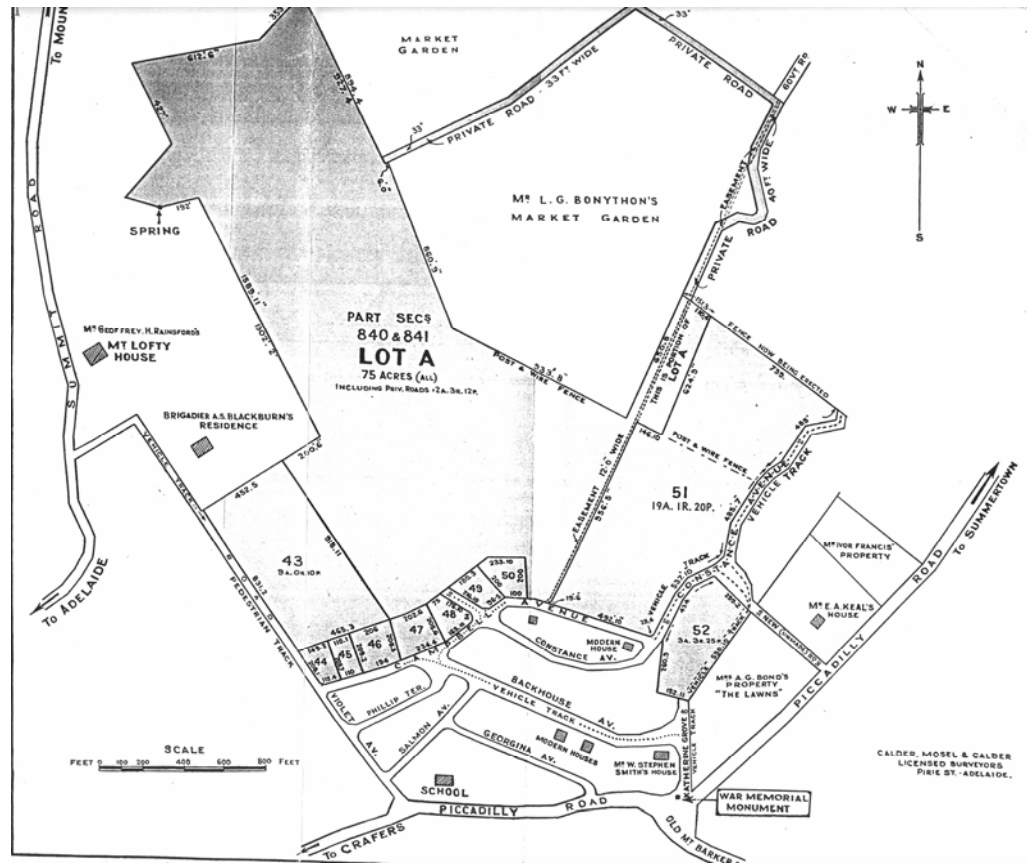
In December 1950 Lothian sent the Minister of Lands a proposal for land to be re-designated or acquired in the Adelaide Hills for a ‘Botanic Garden Annex’. By the end of 1951 feasibility investigations had considered a range of existing Crown land properties but found that they all lacked suitable soils and a high rainfall catchment. The assessors were part of a special state Government sub-committee including Sir Lavington Bonython as chair, Finnis, Peters and Lothian. Land holdings considered included Morialta Falls Reserve (221ha), land west of Ashton (125ha), the current Cleland Conservation Park landholdings (719ha), Belair National Park (829ha), as well as several smaller land holdings in the Hills. The conclusion of the sub-committee was that land needed to be acquired to meet this objective, and Lothian obtained the Board’s support for this recommendation. As part of these investigations Lothian sought the advice “of the ‘oldest local inhabitants’ as to when fires had come through” the Ranges (Correy 1965: 30; Lothian 1994: 1).

The Board’s conclusion was that:

*... none of the Crown Lands held in the Adelaide Hills was suitable for the purpose. It was decided that an investigation should now be made to discover if there were any particular properties in this region which would serve this purpose (BABG Minutes 2 November 1950: 1, sic.).*

Fortuitously, the estate of the late Thomas S Backhouse was listed for public auction on 30 September 1952 by auctioneers FW Bullock & Co and Keith Wilkinson. Comprising 43.35ha (106 acres) the land was positioned on the eastern slopes of the Mt Lofty Ranges immediately below ‘Mount Lofty House’. The property afforded all the ingredients to create a Hills Garden in addition to outstanding panoramas from its upper slopes. The larger allotment was described as comprising “hillside slopes and gullies, mostly stringy bark, a proportion of which is suitable for orchards, an excellent spring, on the boundary near the North-west corner, reliable supply

of good water throughout the year” (Anon 1952). In late 1952, the land was extensively covered in regrowth Messmate stringybark (*E. obliqua*), a Radiata Pine plantation (*Pinus radiata*), and patches of open land positioned on top of acid soils and in the centre of one of the highest rainfall regions in the State



**Figure 2.2:**  
*FW Bullock & Co and Keith Wilkinson real estate brochure map for the Backhouse Estate. Source: Botanic Gardens Archive*

The Board acted quickly on this proposition, making representations to the State Government for its speedy acquisition. The government, informed by a Land Board inspection recommendation, agreed with this initiative and acquired 3 of the 4 lots offered, comprising some 43.35ha, and the Tourist Bureau acquired the fourth allotment of 1.58ha. The fourth, Lot 52, became to be known as Sunset Rocks, because of its scenic qualities, although initially it was known by a number of colloquial names. Eventually this latter allotment was transferred to the Garden. The Director of the Tourist Bureau, PY Pollnitz, claimed that the Sunset Rocks allotment was “acquired as a National Pleasure Resort to retain for public enjoyment the magnificent view from the Summit, and this could be kept in mind in the preparation of any developmental plans.” The reserve was dedicated as a National Pleasure Resort on 2 April 1953 (Correy 1962a: 1; Pollnitz 1962). Confusingly, in government correspondence, the Bureau maintained the nomenclature of Sunset Rocks over this allotment, however the Board often referred to it inter-changeably as either the Sunset Rocks or the Somerset Rocks allotment. The nomenclature confusion was resolved in 1965 with the designation of the allotment as the Somerset Rock by the state Nomenclature Committee.

### 2.2.3 Establishment of a Garden

## 2.0 DEVELOPMENT OF MOUNT LOFTY BOTANIC GARDEN

With the property acquisition resolved, preliminary survey work commenced on proper mapping and assessing the attributes and potential of the land. This involved, notwithstanding a lack of funds, activities over several years to enable a solid evaluation. Lothian received offers for horticultural assistance and immediately started contacting colleagues around the world for specimens, seeds, cuttings and exchange possibilities. The Consul of Austria in Adelaide, JA Nelson, for example, offered assistance in obtaining alpine plants from Austria (Minutes ABG 7 June 1957).

In April 1958 Lothian formally recommended to the Board that works be first started at the Garden. He proposed the clear-felling of trees along the southern boundary at 15-30m width to enable the creating of a firebreak (Minutes ABG 11 April 1958)

Lothian also sought advice from the Mines Department concerning the condition of the former mine sites on the property. Their report concluded that they “were a danger and should be filled in.” No action was taken on this recommendation substantially until the late 1980s when most of the exit holes were blasted and subsided (Correy 1965: 33; Minutes ABG 6 February 1959).

In establishing an on-site management team for the Garden Lothian sought to appoint staff from people living in the Hills, conscious of the need for local enthusiasm and their familiarity with local conditions. This strategy was deliberate to enable stability of staffing but also to capture local knowledge and expertise. Accordingly SW Mason was appointed as the first Gardener-in-Charge assisted by Ron Walters and Bert Fuller in 1959. Ron Carbis, Max Smith, Doug Gray, Gordon Richardson, Jack Arden and Abe Ketedomo followed these appointments. Mason, in charge of the Greaves Sunken Garden area at the Adelaide Botanic Garden was transferred into this newly created position, and continuous operations at Mount Lofty Botanic Garden officially started on 20 July 1959 (Lothian 1979: 4-5; Lothian 1959: 1).

With staff appointed Lothian sought immediate works to clear suitable fire-breaks, erect fencing, and to clear and establish nursery sites. A fire-break was extensively cleared along the Campbell Avenue boundary and by December 1959 2.5km of chain wire mesh fencing had also been erected. In conjunction with this clearing Lothian instructed the initial plantings of *Pinus* spp which prospered for many years albeit their lack of regular or reticulated watering. These first plantings included specimens of Chinese Red Pine (*P. tabulaeformis*), Coulteri Pine (*P. coulteri*), *P. massoniana*, Scots Pine (*P. sylvestris*), Armand Pine (*P. armandii*), Bhutan Pine / Himalayan Pine (*P. griffithii*; syn *P. wallichiana*), “*P. insignis* (ex. N.Z.?)”, Radiata Pine (*P. radiata*), Patula Pine / Spreading-leaved Pine (*P. patula*), Japanese Red Pine (*P. densifolia*), Limber Pine (*P. flexilis*), Swiss Mountain Pine (*P. mugo* var *mughus*), White Pine (*P. strobes*), Scots Pine (*P. sylvestris* var *fastigiata*), Mexican White Pine (*P. ayacahuite*), Torrey Pine (*P. torreyana*), Canary Island Pine (*P. canariensis*) and Spanish Fir (*Abies pinsapo*) (sic) (Anon 1959: 1-2).

From 1959 to the mid 1970s Lothian orchestrated a planting program initially without a master plan. Later his directions and activities were undertaken in a manner that respected the spirit if not the intent of the 1965 adopted Master Plan. Plants and specimens were obtained from a myriad of places and gardens, but also from overseas contacts and through collecting trips undertaken by Garden staff and unfortunately the provenance details on many are unclear today.

With the advent of forward planning for the South Eastern Freeway by the SA Highways Department the Board was invited to evaluate and remove specimens in any of the properties being compulsorily acquired. This included a former nursery of the ‘father of horticulture’ in South Australia, George Stevenson, and later fashionable tea garden called ‘Leawood Gardens’ at the Devils Elbow. Also, parts of ‘Arbroath’, Sir Alexander and Lady Mary Downer’s property ‘Arbury Park’, David Whibley’s ‘Primrose Gardens’ property, and “valuable trees and shrubs” from the Isling Tea Garden, etc.

The substantial destruction of the Whibley property was controversial in the Hills given the horticultural standing of Whibley and the extant collection on his property including a 40-50

year old specimen of a Californian Redwood (*Sequoia sempervirens*). Much of the tree and shrub identification, assessment and removal work was undertaken in an unsuitably dry late summer and in the autumn of 1960. Whibley had previously donated plants to the Garden in July 1960 that forms the Whibley Rhododendron Collection today. Whibley also had enabled access to 'St Vigeans' for *Rhododendron* cv cuttings to be obtained from the former Sir Edward Stirling garden and also the 'Wairoa' property of the Sir Thomas and Lady Gosse's.

The overall works involved staff identifying and selecting, digging, removing and relocating specimens including nearly 300 *Rhododendron*, *Camellia*, *Acer*, *Picea*, *Prunus* spp, together with a variety of shrubs and bulbous plants that were all shifted into Nursery No 2. These plants were later planted on the southeastern flanks of the Garden. Specimens and cuttings of the Claret or Raywood Ash (*Fraxinus oxycarpa* 'Raywoodii') were also retrieved from the Downer property, 'Arbury Park', near Bridgewater; the specimens that Wollaston first propagated creating the present stock of Claret Ash (Lothian 1999: 17, 21; Minutes ABG 8 July 1960; Downer pers comm. 2001; Hatcher pers comm. 2003; Anon 21 March 1964; Memorandum, SW Mason to Lothian; Sendy 1995; Mason 1963: 1; Lothian 1994: 1; Letter, Morley to Beswick 27 March 1995; Morley pers comm. 2003; Dolling nd: 1).

During this period, Lothian recalled:

*On one famous occasion the Botanic Gardens staff were told in December that they had two months to get any plants they liked out of land that was being resumed, including one or two very important gardens. They dug out about 100 of these plants and lost only about three. ... That was the foundation planting of Mount Lofty Botanic Gardens. It was a varied collection: 300 camellias and rhododendron, piceas, various plums, a protea or two and numerous shrubs and bulbs (Lothian 1999: 17).*

During 1959 to 1960 Lothian also commenced the first plantings of Australian species in an area adjacent to Constance Avenue. These species included some 100-200 plants and included genera from *Eucalyptus*, *Callitris*, *Callistemon*, *Melaleuca*, *Banksia*, *Beaufortia*, *Goodenia*, *Hovea*, *Chamaelaucium*, *Verticordia*, *Leschenaultia*, *Correa*, *Acacia* and *Anygozanthus* spp that were planted in September 1960 (Anon 1960: 1). Additional plantings also occurred around the banks and perimeter of the Spring Dam to camouflage the prospective nursery that Lothian proposed just downstream near the Dam. This land, a gradual sloped site, was later developed as both a nursery and the present Administration Building complex.

Two tool storage sheds were also erected in this period; one near the corner of Constance and Campbell Avenues, and a second near the northern boundary on the nursery site. The latter area, fiercely overgrown with blackberries, upon being cleared revealed stands of the rare Coral Fern (*Gleichenia microphylla*) and *Blechnum* spp that were immediately protected. This nursery site, again selected by Lothian prior to the Master Plan, grew progressively to accommodate the new seedlings required and which also arrived from elsewhere. A gravity flow pipe fed this nursery from the Spring Dam (Minutes ABG 20 March 1959: 1-2).

Water has proved to be an essential design and planting issue with the Garden. Initially the internal streams were all found to be ephemeral less the Spring Dam creek that was fed by mountain springs. As part of the Bonython land holdings, the Garden acquired a small pond and larger farm dam together with a bore. In mid 1959 it was discovered that the larger dam wall was leaking from the western-wall that was constructed of Aldgate sandstone. The need to provide a permanent reticulated water system, as well as to provide water for fire protection, were addressed in the formulation of the Master Plan by Correy. Within the Backhouse land holdings the Spring Dam provided an important asset, and in 1960 its bank height was increased and the dam excavated to increase its water retention capacity (Mount Lofty Annex 8 June 1959).

In 1960 the Board was successful in a grant application to establish much of the water reticulation network in the Garden. Importantly this work would enable the establishment of a permanent water supply, as it included the construction of two 113,500 litre and one 136,200



## 2.0 DEVELOPMENT OF MOUNT LOFTY BOTANIC GARDEN

litre concrete water tanks on land which is now the Lothian Lookout. An electric pump and pipe was also linked to the Spring Dam to draw from its reserves.

In December 1960 Lothian spoke about his dream for the Hills garden at a Rotary dinner. The *Advertiser* cheekily reported:

*The Botanic Garden keeps the secret of its annexe in the Hills pretty close, rather like a gardener who says that he is pottering "round the back" and putting in a few things but does not like to be pressed. The annexe—it has a delightful Edwardian sound—is somewhere on the southern slopes below Mt. Lofty, runs to 28 acres in what is still largely scrub country and is coming along slowly (Anon 9 December 1960; Anon 8 December 1960).*

A second criteria in Master Plan formulation was fire. The hot dry summer of 1961 foreshadowed the need for fire breaks as fires ravaged parts of the western slopes of Mt Lofty (now Cleland Wildlife Park) and a section of Somerset Rocks, scorching the western side although not entering the Garden. Fire retardation measures and existing fire breaks appear to have prevented the spread of fires into the Garden in early 1961. These two incidents hastened the need to cut additional firebreaks, which was the major task during 1961. Firebreaks of an average of 2-5 metres (1-4 chains) were established around much of the northern, western and southern flanks of the Garden (Minutes ABG 3 February 1961).

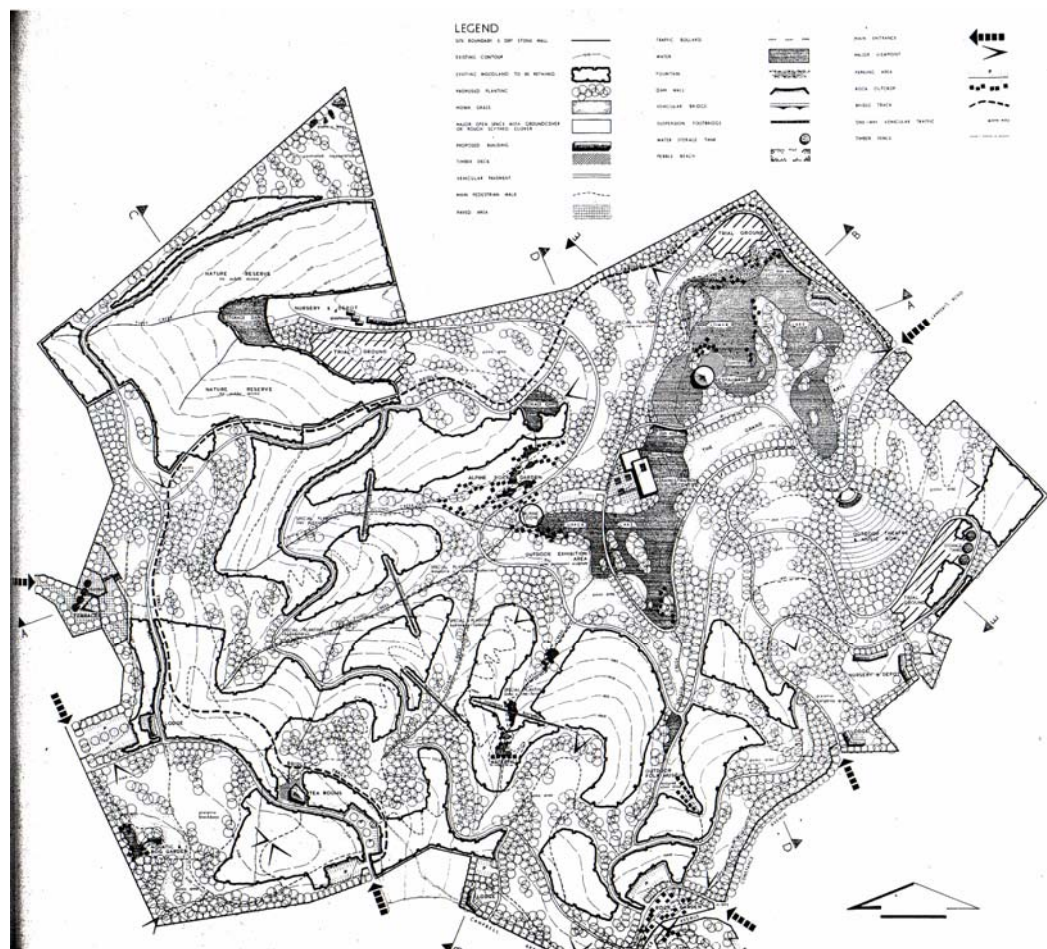
In February 1961 the state Premier, Sir Thomas Playford, announced the acquisition of 6.0ha of market gardens from LG Bonython bringing the Garden to 54.6ha. Playford also reported that Lothian had been active in plant gathering for the Garden, "obtaining seeds for planting from the Royal Botanic Gardens, Kew, Edinburgh Botanic Gardens, Arnold Arboretum, and New York Botanic Gardens, and plants from California, South Africa, and other parts of Australia." At this time, Lothian perceived, through Playford, that "it would be 12 to 15 years before" the Garden would be opened to the public (Lothian 1999: 21; Minutes ABG 10 March 1961; Anon 25 October 1961; Anon 25 February 1961).

Once infrastructure and planting works started in the Garden the use of seed exchange was greatly increased:

*... because they now had a garden 'in the temperate zone as in the warm tropics or dry tropics ... and we imported dozens, hundreds of packets of seeds which formed the basis for the Mount Lofty plantings. At one stage we had four nurseries lined out with hundreds of plants growing ...' Initially the plants were grown at Adelaide but then they moved all the nursery equipment to Mount Lofty – 'at one stage we had dozens, almost hundreds of pots of seedlings, trees and shrubs, four and five inches high which had to be dealt with so the following winter we established these nurseries' (Lothian 1999: 18).*

As these planting and clearing activities increased so did rabbit populations. Despite trapping and the use of 1080 considerable damage occurred in the nurseries. In the middle of 1961 a workshop, storage shed, garage and change rooms, now the present 'Regional Headquarters', was erected. A graded track was cleared from Constance Avenue and plant and equipment was stationed there. A series of Tasmanian *Eucalypt* spp with other Australian species were also established in the valley around this structure (Correy 1965: 32).

## 2.2.4 Designing the Garden



**Figure 2.3**

*Master Plan for Mount Lofty Botanic Garden prepared by Allan Correy. Source: 'Report on the Proposed Development for Mount Lofty Botanic Garden' (1965); Botanic Gardens Archive.*

Realising that the Garden was becoming a major project, Lothian proposed to the Board in early 1961 that they should employ “a properly trained landscape architect to look at the whole matter” (Lothian 1999: 17). In mid 1961 the Board gained funds to employ a person to specifically design and prepare a master plan for the ‘Mount Lofty Annex’. Newly qualified landscape architect Allan Correy applied, and was successful in obtaining the position in November 1961 following interviews with Lothian in Adelaide. Correy commenced in earnest in January 1962, collecting all available historical, geological, soil, topographical, ecological and climatic information to record and holistically understand the landscape. As part of his work, he undertook extensive site surveys, and the Board commissioned a special aerial photomap of the site to a scale 1:1200 including 5 foot (1.5m) contours (Board of the Adelaide Botanic Garden, Report of a Visit to Mt Lofty Annex, 8 March 1962). This orthophotographic work was hampered due to the difficulties of the dense secondary re-growth vegetation and lack of clear visual makers.

In the course of his engagement at the Garden Correy prepared the following reports pertaining to the Garden:

1962, ‘Botanic Garden Annex, Mount Lofty, S.A.: Sunset Rocks or Piccadilly Crest Reserve, Interim Landscape Report’.

## 2.0 DEVELOPMENT OF MOUNT LOFTY BOTANIC GARDEN

1963a, 'Botanic Gardens Annex, Mount Lofty, S.A. Report on areas suitable for consideration as future purchases'.

1963b, 'Interim Report on the Proposed Development for Mount Lofty Botanic Garden'.

1965, 'Report on the Proposed Development for Mount Lofty Botanic Garden'.

Notwithstanding master plan preparation in 1965, water supply works, nursery growth and expansion, additional land acquisitions, more plantings and initial roadworks were proceeded with albeit in consultation with Correy during 1962.

Correy, who had served an apprenticeship in the Royal Botanic Gardens, Sydney, had recently completed undergraduate and postgraduate degrees in landscape architecture at Durham and Illinois under Brian Hackett and Phil Lewis respectively. Correy, following completion of the Plan commenced a private practice in Adelaide before being appointed as Landscape Architect to the NSW Public Works Department.

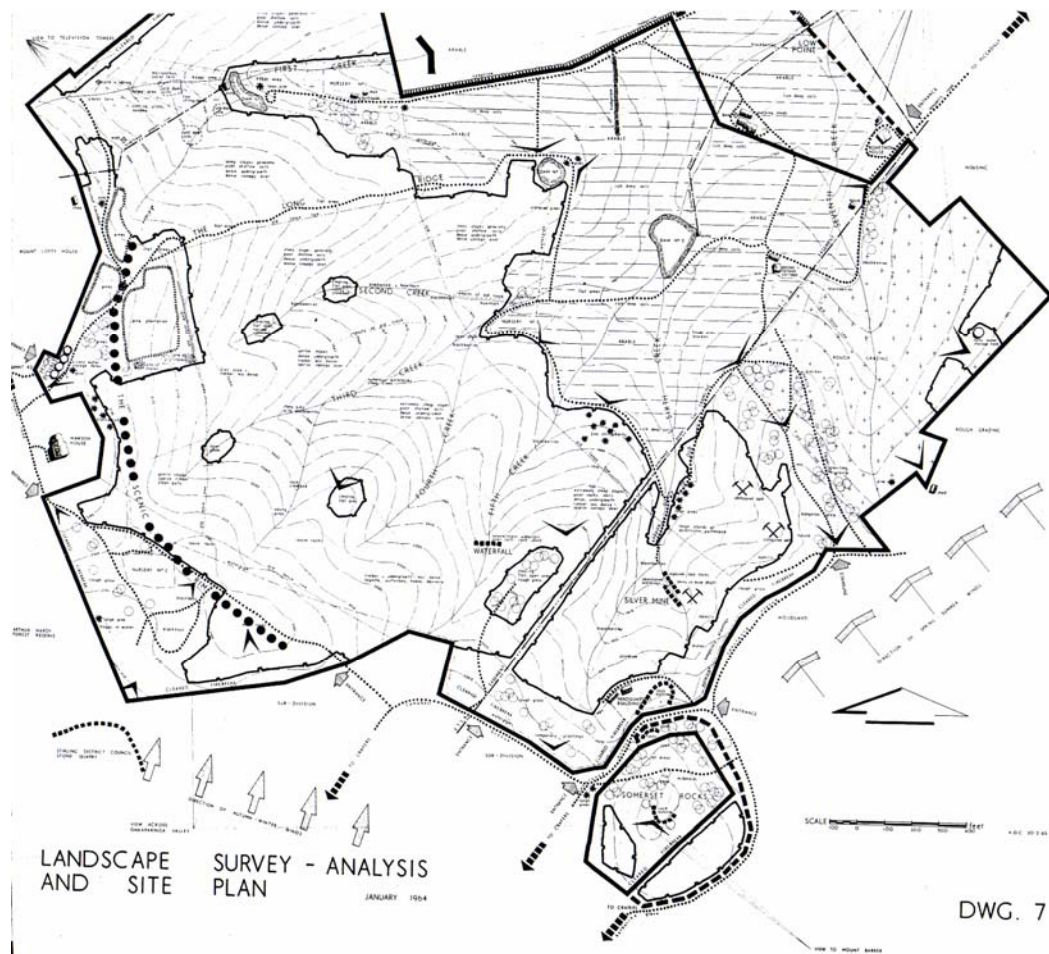


Figure 2.4: Landscape survey and site analysis plan of Mount Lofty Botanic Garden as prepared by AD Correy in 1965. Source: 'Report on the Proposed Development for Mount Lofty Botanic Garden' (1965); Botanic Gardens Archive.

Because of the hot prolonged summer of 1962 it was found that 909,000 litres of water was used to maintain the existing planting. This situation prompted extensions to the water connections. Weeds, particularly Blackberries (*Rubus* spp) and Cape Tulip (*Homeria* spp) were systematically removed along the northern boundary as the chain wire fence was extended. During the winter season Nursery No 3 was established to allow continued growth of plants prior to their relocation to permanent sites. At its peak, before it was closed, this nursery fostered more than 4,000 young shrubs and trees. Nursery practice during the 1960s was to

sow seeds in frames or glasshouses in the Adelaide Botanic Garden and, following germination, shift them to Mt Lofty. Seedlings and cuttings specially propagated included *Rhododendron*, *Magnolia*, *Hamamelis*, and *Prunus* spp. As seed propagation escalated, Nursery No 1 became full prompting the need to establish additional nurseries albeit for a temporary period (Lothian 1994: 2).

During 1962-1963 the Board regularly inspected progress at the Garden. It endorsed action to acquire further lands. This action accorded with the Interim Master Plan recommendations, prepared by Correy, that proposed that an area of 84ha should be ultimately acquired to enable growth and the realization of the Master Plan vision. The Board agreed with the Nomenclature Committee recommendation for the epithet Somerset Rocks to be applied to the hillock (Correy 1965: 32; Correy 1962: 1). A 68,100 litre water tank was also erected next to the existing 3 tanks near 'Mount Lofty House'. In addition, road works commenced to upgrade and widen several internal access roads together with the construction of Rocky Ridge Road up to the proposed upper car park site. A further Interim Master Plan recommendation was that the 'Mt Lofty Annex', which the Garden had been effectively known as, be changed to the "Mount Lofty Botanic Garden". The Board agreed with this recommendation.

In August 1962 the Sunset Rocks / Somerset Rocks allotment, originally acquired by the Tourist Bureau from the Backhouse Estate, was transferred to the Board. It "was decided that the area should be added to the Botanic Garden Annex, but that any development should endeavour to preserve and enhance the existing natural qualities and character of the site and surrounding environment" (Correy 1962: 2). Correy prepared an Interim Landscape Report for 'Sunset Rocks or Piccadilly Crest Reserve' in October 1962. His conclusion was that:

*The site was originally preserved as an area of natural beauty, but no attempts have ever been made to develop it as a tourist reserve. At present the area appears to be little used, and this is obviously because of its inaccessibility and obscurity from main traffic ways. These factors, of course, have also helped in preserving the natural character of the site, and there is little evidence of vandalism on rocks or vegetation.*

*The site has tremendous recreational potential as an area for passive recreation, but the usual problems of vandalism, excessive wear, access, parking for vehicles etc. will, of course, arise as soon as any scheme for putting the area to great use by the public is carried out. These are always problems to be solved ...* (Correy 1962a: 2-3).



2.0 DEVELOPMENT OF MOUNT LOFTY BOTANIC GARDEN

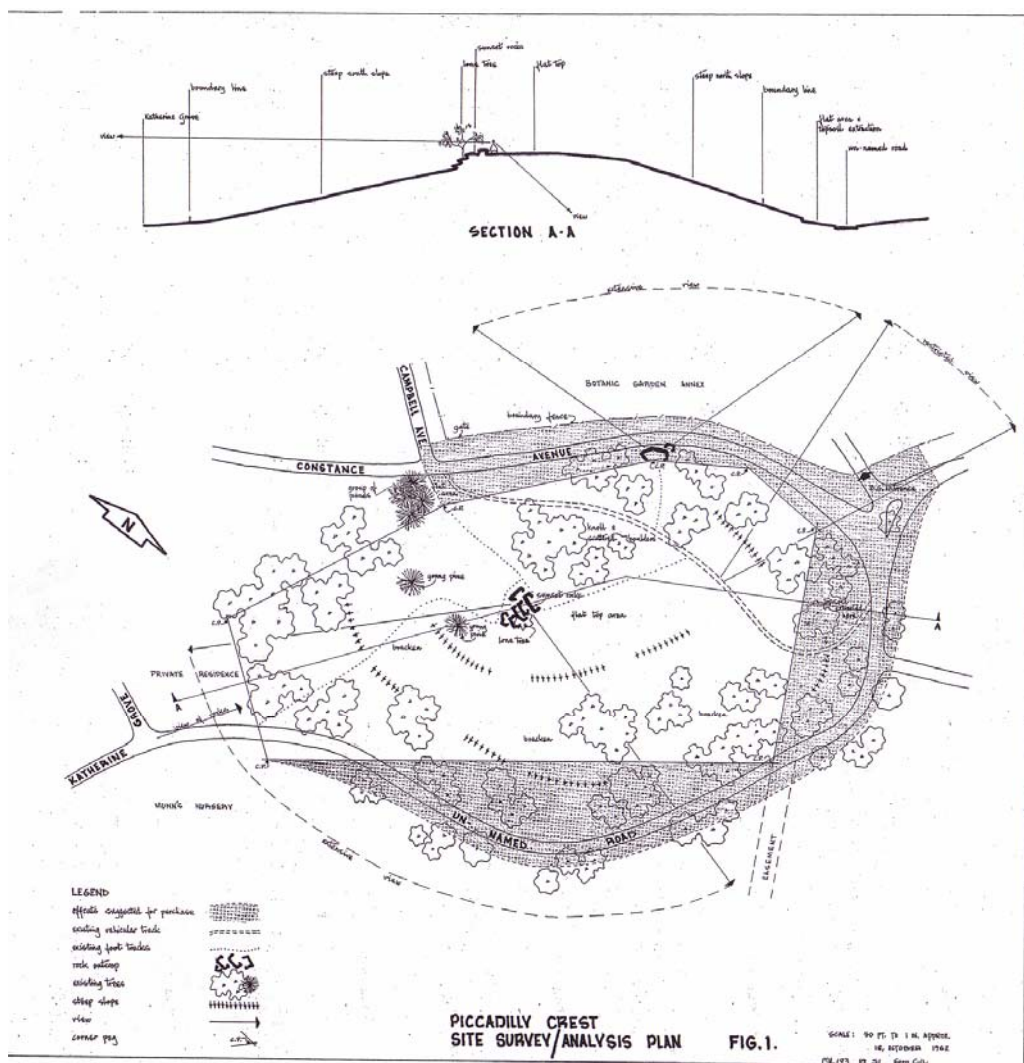
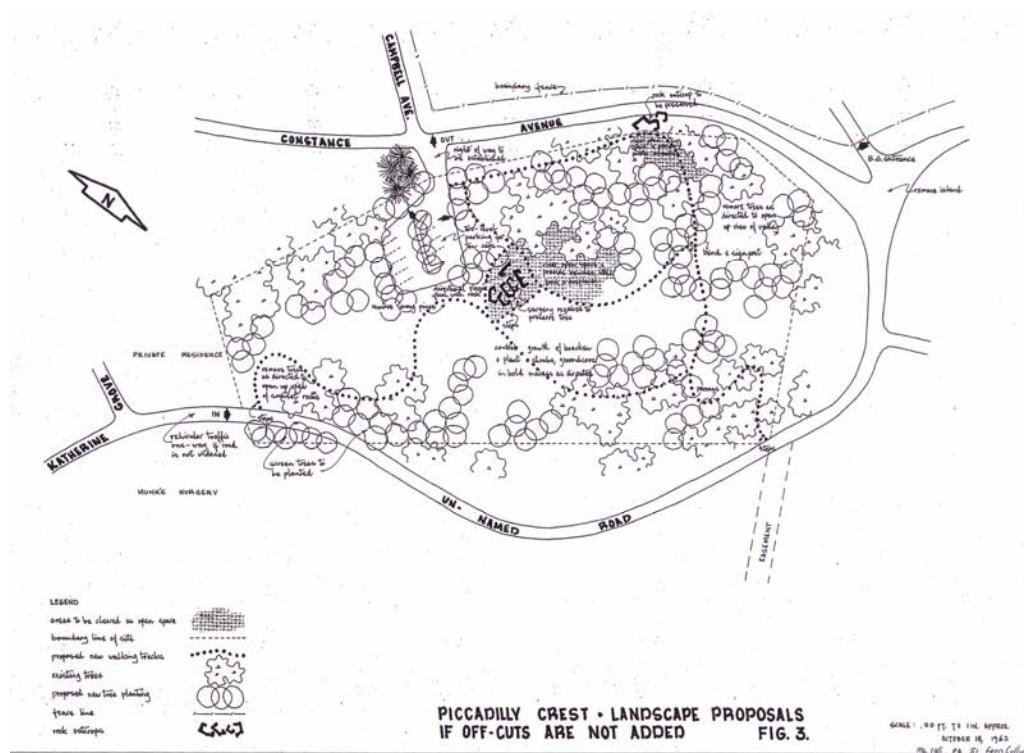


Figure 2.5: Site analysis plan of Sunset Rocks / Somerset Rocks as prepared by AD Correy in 1962. Source: Gardens Archive.



**Figure 2.6:** Design plan for Sunset Rocks / Somerset Rocks as prepared by AD Correy in 1962. Source: Gardens Archive.

Planting and pest plant eradication pre-occupied the Garden staff activities during 1962-1965. Planting and tree clearance activities continued during 1962. Radiata Pine (*Pinus radiata*) seedlings and trees, “foreign elements” that Lothian observed, were effectively removed from the Garden at the same time as a systematic eradication program on the South African Daisy (*Senecio pterphorus*) occurred. Correy’s deliberations, and other research, continued parallel to these actions. The Board also commissioned a detailed soil survey of the area, to assist Correy, but also to guide the selection of areas for particular plantings (Wright 1973: 1-26; Mason 1962: 1). A 1963 visit by the Executive of the Australian Camellia Research Society noted the growing *Camellia* spp collection being established in the Garden.

A change of direction, towards exotic plants away from native, occurred in 1964 when the Ashby family, through Keith Ashby, proposed the bequest of ‘Wittunga’ to the Board. This bequest thus enabled a magnificent established collection of Australian and South African species to come to the Board’s living collections.

Lothian perceived in early 1964, prior to the Ashby bequest, that the aim of the Garden was to:

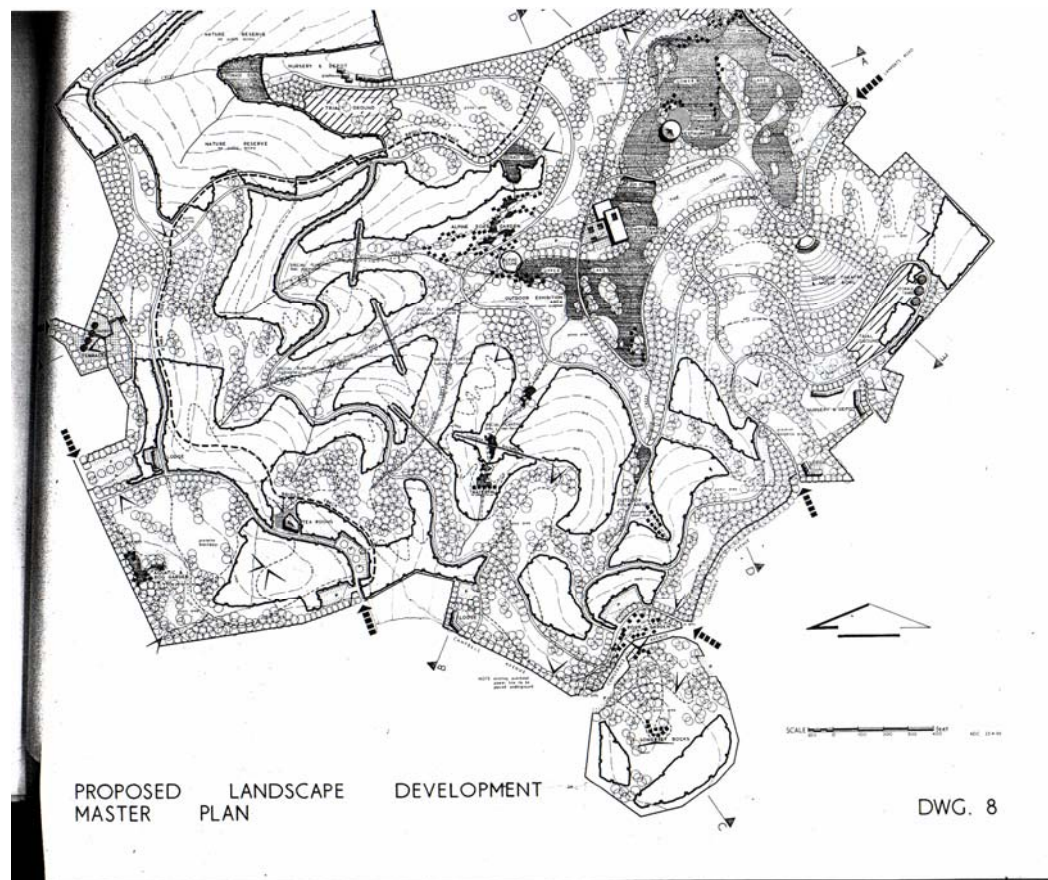
*... establish a Botanic Garden containing sub-alpine and cool temperate plants, together with specialised plantings from the Orient, Western Australia, California, South Africa and the southern states of South America (Lothian Memorandum, 9 March 1964).*

During 1964-1965 the Board completed the acquisition of LG Bonython’s remaining land holdings bringing the Garden to 79.2ha. The Board also commenced investigations to acquire allotments from TM Burke, LG Bonython’s house allotment, land from the Mitchell family, consideration of a land donation from SH Allen, and proposed a transfer of unused closed road reserves from the District Council of Stirling. The Mitchell family comprised the brothers Thomas John and William, and their sister Mabel Agnes *née* Bonython. In terms of Mitchell’s and Bonython lands, newly appointed landscape architect ‘Mick’ Field argued the merits of acquiring this land as venues for arboreous species, and to prevent its potential subdivision for housing which would “despoil the appearance of the Garden.” Field had only recently been

## 2.0 DEVELOPMENT OF MOUNT LOFTY BOTANIC GARDEN

appointed in 1966 following Correy's resignation in 1965, and read Correy's reports before drawing conclusions as to how to proceed with activities in the Garden (Minutes ABG 5 July 1957; Field pers comm., 2003; Field 1966: 1; Anon 1966: 1, 2).

The focus of plantings during these years was simply upon establishing collections and foundational specimens without specific regard to spatial or taxonomic 'design' intentions. Accordingly large numbers of *Rhododendron*, *Camellia*, *Ulmus*, *Quercus*, *Fraxinus*, and *Populus* spp juvenile and semi-mature specimens, were planted or relocated in the south-western areas of the Garden mainly from Nursery No 2. As gaps in the Nursery occurred they were quickly filled by specimens retrieved from the South-Eastern Freeway path. During this period Lothian also transplanted a Golden Cedar (*Cedrus deodar* var 'Aurea') from the Government House grounds into the Garden. This specimen, originally planted by Queen Elizabeth II in 1954 as part of her Royal Visit, struggled in its poor alkaline limestone soils, comprised "about 3' high with a handful of leaves and a very crooked trunk." It was successfully relocated, was blown over in a storm in 2000, and in its Government House stead was planted a *Cedrus atlantica* to match the Golden Elm (*Ulmus aurea*) planted by the Duke of Edinburgh in the House grounds (Anon 1966: 2; Lothian 1994: 5-6).



**Figure 2.7:** Landscape Development Plan for Mount Lofty Botanic Garden as prepared by AD Correy in 1965. Source: 'Report on the Proposed Development for Mount Lofty Botanic Garden' (1965).

In early 1965 Correy tabled to the Board the proposed Master Plan. The Board adopted this Plan in principle. The Plan enabled a period of consolidation but also provided a co-ordinated vision. With plan adoption Correy resigned and established a private practice in Adelaide. Lothian thereupon sought out the service of Doug 'Mick' Field to fill the landscape architect position and to carry forward the plan. Field recalls that the Master Plan

*... concept was powerful and bold. ... While I followed Allan's concept plan as best I could, there wasn't any detail, so I had to provide it myself or interpret from the concept plan* (Field 2003: 2).

As part of the tabling, the Board made a special guided inspection of the Garden on 22 October 1965 with Lothian and Correy. A report of this visit, supporting the Master Plan, written by Lothian, recorded design debates about colour and the water tanks, that:

*Members considered the plan proposed by Mr. A.D. Correy, former Landscape Architect, highly imaginative and most ambitious. The feature of the suspension bridges was thought to be most exciting and should remain in any final plan. ...*

Unfortunately the suspension bridge proposal has never been realised and remains as one of the contributing flaws behind the complex circulation system extant at the Garden. It was also agreed by the Board that cars would be excluded from the entire area, except in car parks. ...

*It was agreed that all proposals must be practical and undoubtedly would be controlled by the finance available. For this reason some modifications may be required.*

*It was submitted by Correy that most of the colour should be confined to the gulleys lower slopes. It was pointed out that colour elsewhere was necessary and Correy stated that his statement did not exclude colour being elsewhere. He felt, however, that most colour should be in the gulleys. The Director felt that this was not entirely satisfactory. ... (Anon 1965: 1-2).*

The debate about colour appears to be a misunderstanding of the strategic stratification of the landscape by Correy to conserve fingers of secondary regrowth forest along ridgelines, and to enable exotic plantings in the acid rich and well-watered and sheltered gullies.

*A visit was made to the water storage area. Correy suggested a single plume of water as a fountain arising in the centre of each tank. Members felt that these [tanks] should be used for observing the introduction of active water in the form of fountains right on the top of hills. Such activity should be confined to the natural occurrence of water, i.e. in the valleys.*

*Correy considered that this area should be terraced, the top terrace being about 3 ft. [0.9m] below the top of the tanks. Further, that the whole area should remain a pedestrian area and traffic should be excluded (Anon 1965: 1-2).*

In the meantime plantings and acquisitions continued. The Board gained improved access to Campbell Avenue, laid bitumen on the Rocky Ridge Road, and continued planting activities albeit in mixed sympathy with the Master Plan.

In February 1965 about 0.4ha of the Arthur Hardy Sanctuary was severely burnt with *Acer* and *Crateagus* spp being scorched together with a selection of other exotic and native specimens. Over January 1966 a bushfire ravaged the western slopes of Mt Lofty Ranges but luckily only burning embers fell into the Garden. At the same time, the 1966-1967 period experienced a drought in the locality with nearly 30% rainfall below average. Only 609mm fell compared to the average of 1250mm. The situation was also not helped by chance vandalism where a water tank containing some 56,000 to 75,000 litres was deliberately emptied (Memorandum, Lothian 14 February 1966; Anon 22 February 1967; Anon 25 October 1967; Minutes Forming Enclosure to W&F124/1939). "Considerable stone and rubble [was] taken from [the] mine shaft" and used in internal road construction. The activities during 1965-1966 also included extensive actions to remove Broom, Salvation Jane, Cape Tulip and bracken along the boundaries and around the dams. The site for Nursery No 2 was also cleared of secondary *Eucalypt* spp regrowth, and some 260 trees were moved into the Nursery from Mrs Roberts' property on Mt Barker Road (Smith 1966: 1-2).

The dearth of rainfall was the only hindrance to planting activities. It affected recently established plantings and forced a curtailment of new plantings. At the same time major plant seed importations from Hillier & Son in England commenced, together with large seed collections from overseas botanic gardens. In successive years, between 2000-3000 packets of seedlings were annually sown, prompting the establishment of two small nurseries on the



## 2.0 DEVELOPMENT OF MOUNT LOFTY BOTANIC GARDEN

northern flank of Tarn Hill to accommodate this burgeoning expansion. Fear of fire entering the Garden remained a topic of discussion amongst the Board. The Master Plan proposed an integrated reticulation system but more importantly planting strategies that would work as firebreaks and two large aesthetically designed retention basin lakes.

During the winter of 1966 some 250 *Rhododendron* cv were planted in the present Rhododendron Valley. This commenced the creation of a major living collection strength, on the slopes of Third Creek. The upper and lower slopes in this valley were thinned and cleared respectively, and specimens of *Magnolia*, *Acer*, *Ilex*, *Prunus*, *Forsythia*, *Azalea*, and *Betula* spp, were introduced to provide a canopy and context for the Rhododendrons (Smith 1965: 1; Smith 1967: 1-2).

Field orchestrated these activities, seeking to accord with the Master Plan and its principles while at the same time attempting to execute Lothian's directions. Importantly Field ensured the creation of a new major access road, of approximately 1.2km, along the contour connecting the Regional Headquarters to Nursery No 1. The Board designated, upon Field's suggestion, the 'Allan Correy Drive' to honour the work that Correy achieved in the formulation of the Master Plan. Lothian has observed, retrospectively, that "when the garden was laid out, trees were marked where roads were to go. Unfortunately two trees were marked to identify another factor, which were not on the road, but the bulldozer driver accepted these as the road alignment route above Magnolia Gully" (Lothian 1994: 4). Clear felling of the last Radiata Pines (*Pinus radiata*), below the water tanks, enabled the cleared slopes to be extensively planted with *Quercus*, *Acer*, *Pyrus* and *Ulmus* spp.

One of the Master Plan recommendations was the construction of a scale model of the design. In October 1966 Hyde Model Constructions at Blackwood were approached and were commissioned to construct a 1":60' (2.5cm:18.3m) scale model, approximately 2 x 2 x 1.27 high, on a polished timber base, with a glass case. The tender was \$519 for the model and \$171 for the case (Letter, Lothian to Hyde Model Constructions 12 October 1966).

By 1967 some 50% of the Rhododendron Valley had been planted, and over the winter of 1968 a further 700 specimens were planted in the lower valley in addition to more *Magnolia*, *Malus*, *Betula*, *Pyrus*, *Camellia* and *Ericaceae* species. The year was extremely dry and rabbits were noted as troublesome over summer (Carbis 1968: 1; Carbis 1969: 1).

During 1968-1969 Field supervised the clearing of some 5ha of secondary regrowth stringybark on Tarn Hill and varied the shape of Tarn Hill Pond to take on the appearance of a mountain tarn. Water from the Pond was "supplied from a spring in back gully." At the same time Nursery No 3 was closed, because of its position on the proposed main service access road, and the Tarn Hill Nursery extended. Nursery No 3 was the largest of the original four nurseries (Field 2003: 3; Carbis 1969: 1; Smith 1969: 1; Carbis 1970: 1). Of Nursery No 3 Lothian has reflected,

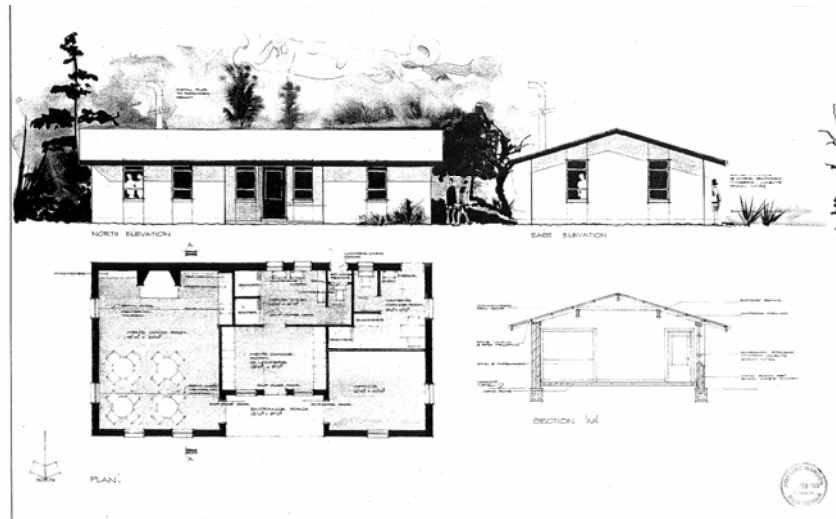
*... the remnants ... are still to be found between the small ornamental lake and the large lake. 'All those trees that were too big for us to move outside were simply left – there is a fair bit of overcrowding but I don't think that is going to hurt at all'* (Lothian 1999: 18).

Field, reflecting upon these works, recalls,

*I had a dam built above Rhododendron Gully that I called Tarn Hill. This was to supply water to the plants in the Gully. It was supplied from a spring in back gully. A road was put through from Allan Correy Drive down the spur that led to Tarn Hill. The plantings around the little dam was mainly iris, I extended the roading system quite a lot to other areas for planting. ... The main extension of planting for trees was below Tarn Hill on the broad slopes above where the lakes would eventually go, and the cleared area directly below the tanks. The need to use the plants from the nursery was a strong driving force I recall* (Field 2003: 3).

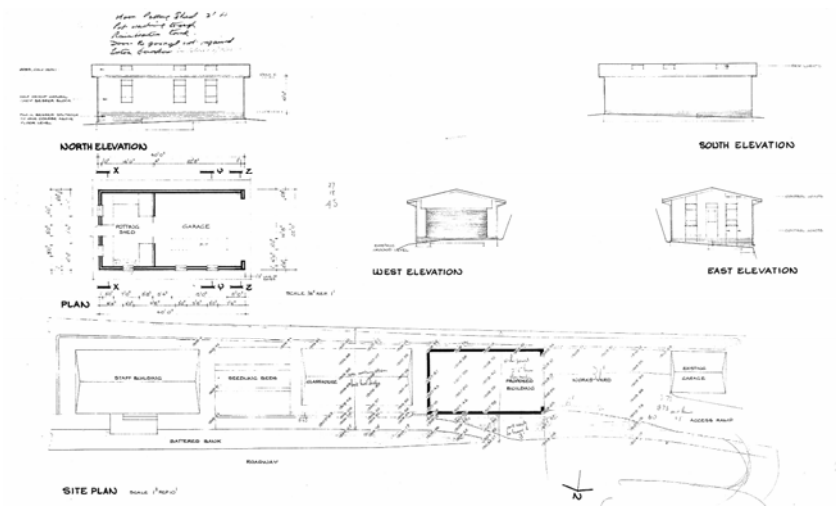
In 1969 the headquarters of the Garden was also shifted from the sheds immediately below Campbell Avenue to its present location adjoining Nursery No 1. With this shift, plans for an

office building were prepared in addition to a complex comprising shadehouse, glasshouse, garages, and workshop and seedling beds. This building complex was officially opened by the Chair of the Board, AH Peters, at the end of 1969, to a design by architect Dean Berry of the practice Berry Gilbert Barker & Polomka. Electricity and telephone cables were also placed underground, connecting the new complex, and to “prevent them marking the views.” At this time construction and consolidated gravel surfacing of Rocky Ridge Road and the eastern length of Allan Correy Drive were completed (Smith 1970: 1; Field 1970: 1-2). The Board also considered scenarios for more land acquisition and vehicle access, including 15ha from TM Burke that Field perceived as “important ...[to] ultimately to prevent unsightly buildings from being constructed on the periphery of the Botanic Garden” (Anon 1969: 1).



**Figure 2.8:**  
 Design for the Administration Centre as prepared by Berry, Gilbert Barker & Polomka in 1969. Source: Botanic Gardens Archives

Apart from dry summers, the most serious threat to planting activities was the discovery of the presence of *Phytophthora cinnamomi* in Nursery No 1. Carbis recorded it as “a serious setback” resulting in the “subsequent destroyal of many plants including all those destined for ground cover ... Another setback was the pillaging of all seed pots on hand by rats one weekend.” This led to a sudden change in propagation practices, the quarantine of Nursery No 1, and urgent cutting, grafting or budding actions to retrieve any important or rare plants from the Nursery (Carbis 1970: 1). The existence of *Phytophthora cinnamomi* also prompted a careful survey of the Garden to map and restrict access to identified affected areas. Some 2 areas were designated with restrictive access, and much of the quarantined significant species were successfully propagated and not lost.



**Figure 2.9:**  
 Plans for a new Potting Shed in November 1970. Source: Botanic Gardens Archives

Water, or rather a permanent reliable irrigation system, continued to be a concern. Water and fire remained key management issues, and they were themes addressed in the Master Plan and

## 2.0 DEVELOPMENT OF MOUNT LOFTY BOTANIC GARDEN

concerns tackled by Field and Lothian with the Board. Investigations by the Department of Civil Engineering at the University of Adelaide pointed to the need to establish the two ornamental lakes proposed in the Master Plan but also new bores that could each enable a supply of 38,000 litres per hour to support the “insufficient existing supply.”

Over 1970-1971 plantings continued. It was a prosperous year with over 1588mm of rain, especially during winter, and the first significant flowerings of *Azalea*, *Rhododendron* and *Camellia* spp in the lower reaches of the Rhododendron Valley occurred. Autumn foliage colour, a feature of the Garden today, was also first expressed “indicating that the program of planting [directed by Lothian] for dual purpose displays, ie. Spring and autumn”, had been successful. Some 700 trees and shrubs and 2,000 *Narcissus* spp bulbs were planted. In planning the *Narcissus* spp collection imported bulbs were considered unsatisfactory, so the Victorian firm JH Hancock & Co was contracted to supply cultivars. An additional 285 *Rhododendron* cv were added to the Rhododendron Valley, comprising many of the cultivars and specimens retrieved from the South-Eastern Freeway path that had been nurtured in Nursery No 3. Tarn Hill was transformed with numerous *Iris* spp cultivars, around the dam, together with 10 large Western Red Cedars (*Thuja plicata* ‘Aurea’) specimens (Duvergier 1973: 1-4; Duvergier 1972: 1-3; Flint: 4; Anon 1969: 1). Lothian also applied a policy of enabling the reversion of former vegetable market gardens to grasslands or grassy meadows with upper storey canopy ornamental trees. He also instructed the clearing of Fourth Creek valley, leaving a random selection of regrowth stringybarks.

The first survey of native birds by the South Australian Ornithological Association in 1971, resulted in a list of nearly 30 species, most of whom appeared to be permanent residents (Lothian 1999: 19).

In 1972 Field resigned and joined the City of Dunedin’s Department of Parks & Gardens. Lothian thereupon engaged landscape architect Graham Jones to continue the supervision, designs and works established in Correy’s Master Plan and largely carried forth by Mason and Field. Jones supervised planting activities in several of the gullies, supervised the construction of the upper car park, designed and supervised an *Ilex* spp garden, and assisted David Thomson in the transferal and replanting of his dwarf conifer collection (Jones pers comm. 2003).

With the flowering of the dream happening the Board sought special fund assistance from the state government to commence works for two large car parks as a precursor for the opening of the Garden to the general public. A grant of \$20,000 was forthcoming enabling excavations and grading of both the present upper (eastern portion) and lower (southern portion) car parks together with a set of toilets for each. The Board also acquired a further 2.3ha comprising several small vacant residential allotments on the southern edge of the Garden. The seasons of 1972 enabled good flower displays and autumn foliage again. But the rainfall dropped to just under 1000mm reinforcing the need to obtain a reliable water supply. A small spot fire on a vacant allotment to the east, over summer, also verified this need. By the middle of 1973 two car parks, the present staff car park and a portion of the lower car park, were formed, and their flanks matted out in straw and wire netting (Duvergier 1973: 1-2).

During 1972-1973 walking tracks were constructed through the Rhododendron Valley with several treated pine foot-bridges. A program of foot track and foot bridge establishment also occurred in several other recently cleared valleys (Duvergier 1973: 1).

In 1973 the Woods & Forest Department proposed the transfer of the Arthur Hardy Sanctuary Reserve to the Board. Originally the ‘Walnut Paddock’ for the Hardy’s ‘Mount Lofty House’, the now stringybark forested reserves still contained remnants of the mid to late 1800 plantings of English Laurel (*Prunus laurocerasus*) hedge, Cork Oak (*Quercus suber*), Chestnuts (*Castanea sativa*) and other exotic specimens albeit in poor condition. It also hosted infestations of pine (*Pinus* spp) seedlings and Sycamore (*Acer pseudoplatanus*) that greatly controlled the local ecosystem (Letter, Barton, 18 February 1972; Letter, Barton 15 February 1972). Notwithstanding the latter detractors, the Board eagerly accepted this transfer as well as

successfully negotiating for the purchase of the Crafers Quarry (3.23ha) from the District Council of Stirling at a cost of \$11,250.

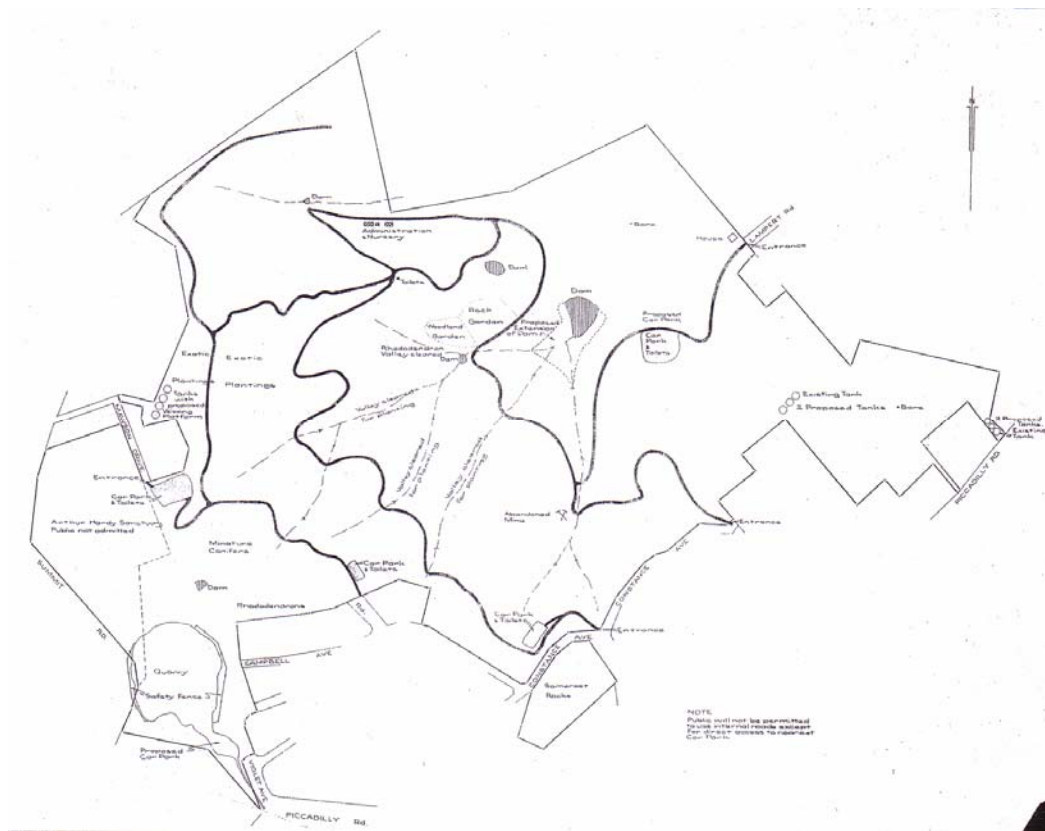
Two fumigations of Nursery No 1, using methyl bromide, were undertaken in 1973. But it was found that soil fumigation was an ineffectual means of killing or controlling *Phytophthora cinnamomi*. Monitoring continued throughout the Garden but no new outbreaks of *Phytophthora cinnamomi* were detected. Isolated plant deaths in Rhododendron Valley were found to have been caused by the treatable Honey Fungus (*Armillariella mallea*) rather than *Phytophthora cinnamomi*.

During 1974 most of the remaining plant stock was removed from Nurseries No 2 and 3 enabling the dismantling of these nurseries. The Duck Pond was reconstructed from a small extant farm dam and increased to cover a surface water area of 0.25ha. The present upper car park site was also cleared of trees and scrub and large stones, less specimens of Grass Trees (*Xanthorrhoea semiplana*), for future use as a car park and picnic area. While the rainfall was again low, 1270mm, plantings of 40 species of *Viburnum* spp and 8 species of *Hydrangea* spp were undertaken in Viburnum Valley. During 1974, regenerating stringybarks in the Fifth Creek Valley were cleared in preparation of the establishment of an alpine and rock garden area. While no plantings were undertaken because of the hot dry season, access roadways and an irrigation system were installed to create the foundations of this garden area. In conjunction with the initial plantings in the rock garden woody and herbaceous shade-loving plants were also planted in the Meadow garden, together with the installation of an irrigation system.

Adjacent to the new Administration Centre site, a workshop (22 x 6m) was erected in 1974 to accommodate all vehicles, plants and tools together with a new repair and maintenance area. The Board also acquired grading and rolling equipment and plant that enabled regular maintenance of internal consolidated gravel service roads, and surface sealing of the existing lower car park.

During 1975-1976 the Board continued with its land acquisitions and negotiations. A small area, comprising three allotments including 'Karoora', was donated to the Board by Kanmantoo Mines Ltd. The Board also purchased several small allotments adjacent to the former Hardy family lands and adjoining the Quarry. These actions included negotiating with the District Council of Stirling to enable rationalization of the south-eastern boundaries and for a possible car park at the mouth of the quarry. As part of the quarry rehabilitation, the Board successfully sought funds under the Extractive Industries Fund for the rehabilitation works including safety fencing, benching, and strategic blasting to create a small lake on the quarry floor. Field prepared concept plans for these works. The Herbarium also reported progress on its inventory of indigenous and naturalised plants survey of the Garden reporting some 244 species, including specimens of *Gramineae*, *Liliaceae*, *Orchidaceae*, *Leguminaceae* and *Campanuleaceae* spp together with 30 species of *Compositae* (Lothian 1999: 19).

## 2.0 DEVELOPMENT OF MOUNT LOFTY BOTANIC GARDEN



**Figure 2.10:** Plan of the Mount Lofty Botanic Garden in December 1976 as prepared by DJ Wickham. Source: Botanic Gardens Archive.

In 1976 some 25 species of *Betula* spp were planted through the established Narcissus collection below the upper water tanks. The Board also obtained a significant donation by horticulturist and Summertown nursery proprietor David M Thomson of one the most extensive private collections of miniature, dwarf and slow-growing conifers in Australia. This collection, of over 900 specimens, were planted in the upper south-west corner of the Garden and included forms of *Pinus*, *Chamaecyparis*, *Abies*, *Picea*, *Cedrus*, *Cupressus* and *Juniperus* spp. (Lothian 1994: 5; Thomson 2003 pers. comm.; Duvergier 1976: 1).

Planting also commenced on the lower section of Sixth Creek with 10 species of *Ulmus*, 40 species and varieties of *Salix* spp and a small group of *Widdringtonia* spp. Clearance of regrowth stringybarks continued in the Fifth Creek valley but no plantings occurred. In Fourth Creek valley plantings of *Crataegus*, *Dentzia*, *Stewartia* spp and several other shrubs occurred. Specimens of *Fagus*, *Tilia* and *Quercus* were also added to the northeast lower section of the Garden. In the lower car park, a new toilet block was erected and a fire-proof post and wire fence was erected along the eastern boundary of the Garden being funded through an Urban Unemployment Relief Scheme grant. This completed the perimeter fencing of the entire Garden. In the southwestern sector, the Duck Pond dam wall was increased in height by 45cm by carting clay from excess soil left over from the construction of the lower car park (Duvergier 1976: 1, 3).

### 2.2.5 Opening of the Garden

As works progressed over the 1970s, and more dignitaries and public officials inspected the Garden, political pressure was placed upon the Board to formally open the Garden to the public. The Board and Lothian resisted this pressure for several years wanting to ensure adequate foundational plantings as also adequate infrastructure and public facilities. The dearth of funding for the latter was particularly of concern. Discussions with state government officials during late 1976, wherein the Board proposed November 1978 as an opening date, resulted in a direction to open the Garden in November 1977. As part of this decision the

public facility works program for the Garden had to be brought forward. This required the immediate financing of the upgrading and surfacing of the upper and lower car parks, erection of a viewing platform (later named the Lothian Lookout), construction of a further two toilets, bitumen surfacing of internal access roads, and other ancillary works. A decision was also made to convert Mawson Drive and the Lampert Road entry routes into two-way access roads to the upper and lower car parks respectively. Included in these works was the erection of a security fence around the Administration Building and Flora Reserve, and the re-alignment of Rocky Ridge Road (Duvergier 1977: 1).

Planting works continued in haste as a consequence of this deadline. Major beds of over 4,000 cultivars of European *Erica* and *Calluna* spp occurred in association with the Thomson collection. Some 10,000 *Narcissus* cultivar spp and 7,000 *Scilla* spp bulbs were planted on the southern and eastern flanks of Tarn Hill dam, and the Woodland Garden received additional plantings. These latter activities completed the planting strategy for these areas (Duvergier 1977: 2).

While plantings activities were hastened, the weather provided again low rainfalls, with only 1050mm being recorded in 1976. It was also found that Spring Dam could not sustain the volume of water sought, especially given the erratic seasonal rainfalls, and a bore was successfully sunk with good water located at 47m.

The pending opening of the Garden in late 1977 determined most of the 1976-1977 planting and works activities in the Garden. Clear felling commenced in Seventh Creek, and the Garden's work units were partially restructured. The treated pine [Lothian] Lookout platform, constructed on top of the four water tanks, was completed together with a new pathway leading from the upper car park, and a new toilet block constructed at the bottom of Rocky Ridge Road. A new gravelled staff car park was completed together with a new bitumen staff access road from Lampert Road along the northern boundary flank. The Duck Pond spillway was faced in Nairne bluestone and the majority of all stock in the small Tarn Hill nurseries was removed (Anon 13 July 1977; Tilbrook 1977a, 1977b; Anon 31 August 1977; Anon 20 July 1977; Anon 9 March 1977; Duvergier 1978: 1, 2).

A key feature of the Garden, the main lake, was also constructed in 1978. The original farm dam bank was demolished, base clay removed and a 2.4 x 10.5m wide, clay-core, retaining wall was constructed. This lake accorded with the intent of the Master Plan but varied considerably in its spatial configuration. Topsoil was also removed from the former market garden land and the underlying clay used in the dam wall (Lothian 1994: 1). From Lothian's recollections:

*They decided to make a clay core bank, dug a ditch ... 'they took out all the soil of that and took off the top soils of about ten acres (4ha) adjoining and got down to the clay and mined the clay which they put into this ditch under pressure. They banged it down very hard, in place of a concrete bank, and of course it prevented leakages'. So now that section is 30 feet lower [30m] than it used to be – this was the amount of clay removed to fill the bank of the lake. The lake was useful for water storage and fire control but also provided an ornamental feature that is very important today (Lothian 1999: 18).*

## 2.0 DEVELOPMENT OF MOUNT LOFTY BOTANIC GARDEN

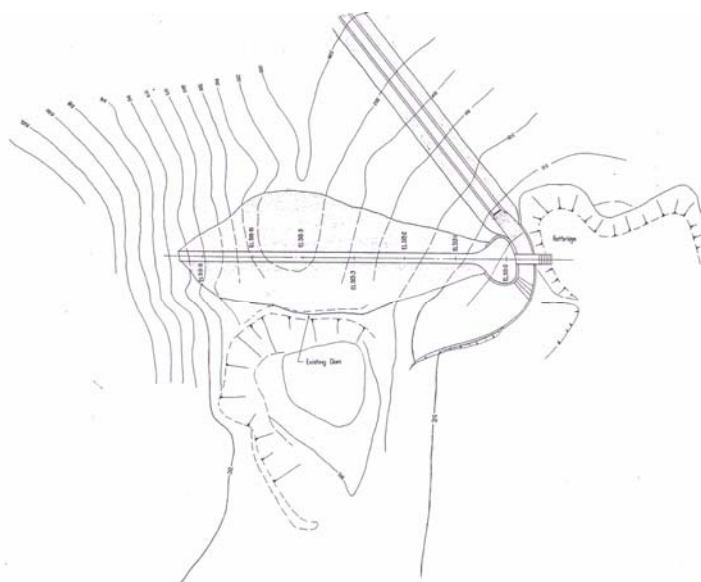
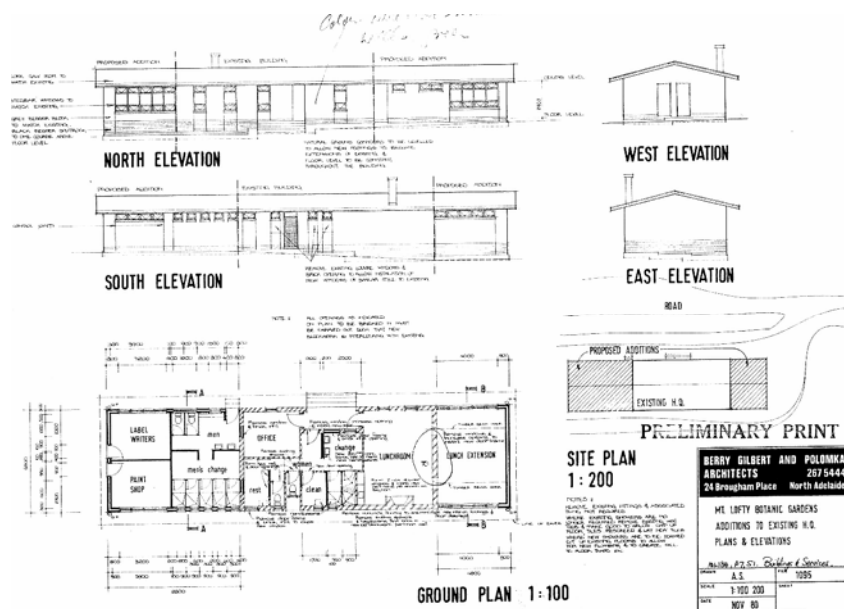


Figure 2.11:  
Design plan for  
the new Main  
Lake dam  
depicting the  
original farm dam  
waterbody.  
Source: Botanic  
Gardens Archive.

On 5 November 1977, his Excellency the Governor of South Australia, Keith Seaman OBE, opened the Garden to the public. Some 1000 people were in the audience including Correy and his young family and Collin Robjohns. Robjohns launched a Friends of the Gardens group at the opening—the first such friends group for a botanic garden in Australia. Seaman unveiled two commemorative plaques, one by the lookout and a second by a tree that he planted (Roberts 9 November 1977: 1; Anon 9 November 1977: 1, 29; Duvergier 1978: 3).

Works, following the opening, in 1978-1979 sought to cater for the safety of the public as well as to address security issues. Barrier rails were erected, fencing and gates constantly checked and repaired, pathways constructed, water hydrants installed, and fire monitoring increased. Galvanised irrigation piping was progressively laid. Plantings continued in Second Creek valley with *Syringa* and *Lonicera* spp, errant clumps of blackberries slashed, and three small sheds were acquired from the Highways Department and re-erected adjacent to the Administration Building for use as tool sheds (Duvergier 1980: 1, 2, 3).

Fire management and visitor services were the main tasks in the Garden in 1979-1980. An old 'poly' sheeting plant house was demolished near the Administration Building and a new glass house erected. The installation of galvanised irrigation piping around the Garden continued, a major firebreak down Rocky Ridge Road was cleared, and further plantings of *Syringa* and *Lonicera* spp occurred in Second Creek Valley. Six large *Quercus palustris* were transferred from near the Staff Car Park into the Upper Car Park to enable shade and autumn colour. By chance, during 1979 two additional properties came up for sale. Some 12ha of the Mitchell family land, to the north, was also acquired enabling a rationalisation of the northern boundary. Over several years Lothian had repeatedly approached the elderly Mitchell brothers as to the acquisition of this land. Their reluctance to sell was discovered to lie in a legal restriction relating to entailed estates that prevented the sale of the land. Upon discovery of this restriction the Board enabled the removal of the restriction contingent upon purchase which the Mitchell brothers accepted. To the south, 2ha including a residence was also acquired from the Mant family (Lothian 1999: 20; McLaren 1981: 7).



**Figure 2.12:**  
Extensions to the Administration Centre as proposed by Berry Gilbert Polomka in 1980. Source: Botanic Gardens Archive.

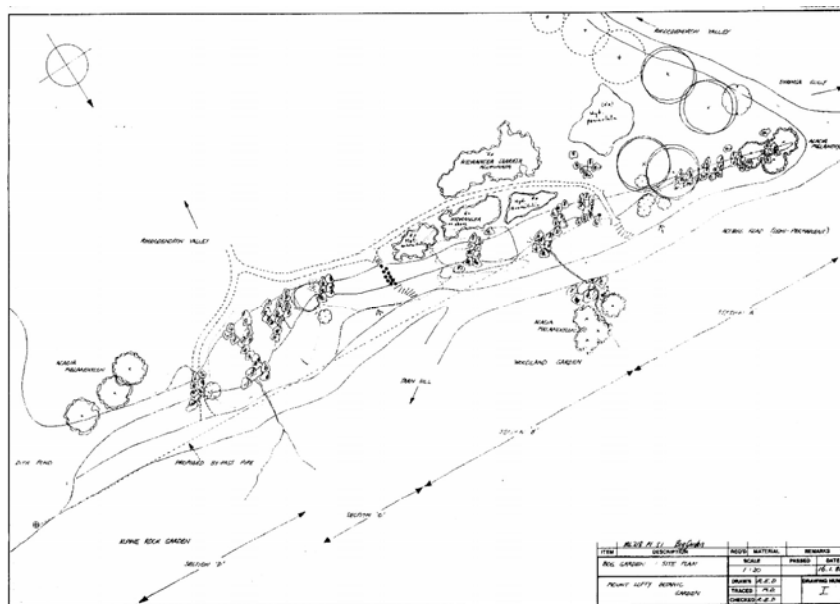
### 2.2.6 The Morley Years

In 1980 Dr Brian Morley was appointed Director succeeding Lothian. Morley had been intimately involved with the Garden since his earlier appointment as co-ordinator of its horticultural and taxonomic activities. Morley perceived, at the time, that his main tasks were to continue the planting program initiated and orchestrated by Lothian and to address fire, water and public facility infrastructure works in the Garden. This objective was however thrown into disarray as a consequence of the Ash Wednesday fires of February 1983.

In 1981 Morley directed clear felling activities to occur in the Sixth Creek Valley to enable the creation of the fern collection. The establishment of the Fern Gully proceeded with extensive clearing, path formation, and sprinkler installation. A considerable number of donated ferns and spores were thereupon planted together with almost 100 0.5-2m tall tree ferns. The Bog Garden was also excavated and formed, extensions undertaken to the Administration Building, and a commemorative plaque unveiled to record the origins of Mount Lofty Botanic Garden. A plaque, unveiled by David Wotton as Minister of Environment & Planning, was sited adjacent to the Lookout to commemorate “the Lothian Vision of a Botanic Garden for temperate plants.” At the same time, the Lookout was officially named the ‘Lothian Lookout’. While an additional 3 *Quercus palustris* were also replanted in the Upper Car Park, the Garden experienced its first case of serious theft with the removal of between 16-20 *Karume Azaleas* near the Upper Car Park in the twilight hours of 14 March 1982. The western sheds, adjacent to the Administration Building were demolished and a new three-bay extension erected. The Building itself was extended east and westwards to accommodate new lunchrooms and ablution facilities, together with a new paint shop and label printing room (Anon nd: 1; Duvergier 1982: 1, 2, 4).



## 2.0 DEVELOPMENT OF MOUNT LOFTY BOTANIC GARDEN



**Figure 2.13:**  
Design for the Bog  
Garden. January  
1980. Source:  
Gardens Archive.

In the Rhododendron Valley, further plantings of species donated by the Rhododendron Society of South Australia continued. At the lower end of the valley, a *Rhododendron 'Yakusimanum'* was planted as a memorial to gardener Abe Ketedromo by his father. Ketedromo, a long-standing member of the Garden workforce had died suddenly of a heart attack in 1981 while working at the Garden (Anon nd: 1; Duvergier 1982: 1, 2, 4).

During 1982 to 1983, prior to the Ash Wednesday fires, the Garden continued undertaking planting activities in the Fern Gully. The works program also included extensions to the irrigation system, introduction of a 100m survey grid over the entire Garden, replacement of tracts of the 1.8m high chain wire perimeter security fencing, and continued fire retardation measures. Plantings around the Duck Pond continued with *Nymphaea* spp introduced from 'Beechwood', additional *Narcissus* spp lifted from old Nursery No 2 and planted in the median strips of the Upper Car Park, *Clematis cirrhosa* planted around the Lothian Lookout, and *Iris* spp planted around water pools. Morley had observed that the Duck Pond was "designed as a deliberate feature" in the aesthetic landscape of the Garden. Fern specimens continued to be planted in the Fern Gully, and the upper reaches of the Gully were prepared for the extension of this collection (Dolling nd : 2; Duvergier 1982: 1, 2, 6, 7; Field 2003: 3; Morley pers comm. 2003; Schutz pers comm. 2003).

The Adelaide Hills have long been susceptible to bush fires. Fires on 13 January 1939 affected parts of Crafers, Upper Sturt, Aldgate, Heathfield, and Mylor damaging several farm properties and parts of Belair National Park. Fires on Black Sunday, on 2 January 1955, severely razed properties from Upper Sturt to Loftia Park to Crafers again. Both fires did not affect the upper reaches of the Piccadilly Valley (Martin 1998: 236-237).

These were minor fires compared to the two Ash Wednesdays that ravaged the district in 1980 and 1983.

The Ash Wednesday fires on 20 February 1980 burnt some 8,000 hectares primarily in the Longwood, Bradbury and Mylor valleys and ridges. This fire was minor in human and property loss compared to the disastrous second Ash Wednesday fire of 16 February 1983 that afflicted most of the Hills, the Clare Valley, the South East and large tracts of the Victorian landscape. This latter fire, in the Adelaide Hills, was a merciless inferno that started in Cleland Conservation Park and swept southwards along the Greenhill, Mount Lofty south and Crafers ridgelines destroying most houses, mansions and gardens in its path. The fire swept down the regrowth stringybark western flanks of the Garden resulting in some 50% of the Garden being severely burnt (Martin 1988: 238-242). In conjunction with the fire, most of the summer-house residences along Ridge Road were extensively destroyed. The James Morgan family had just

acquired 'Mount Lofty House' and had spent part of January and February stocking the 'House' with furniture and paintings only to see the entire collection destroyed in the fires. In 1984 architect Ross Sands acquired 'Mount Lofty House' and set about the restoration and renovation of the ruins transforming it into a 'country estate' before it passed into the Mercure Grand chain as an international hotel.

The intensity of the fire effectively destroyed all the exotic elderly trees on the Arthur Hardy Sanctuary Reserve, especially the Sycamore (*Acer pseudoplatanus*) that "had become a weed in the Lofty area." It burnt the Radiata Pine (*Pinus radiata*) and severely affected the stringybark (*Eucalyptus oblique*), Irish Strawberry Tree (*Arbutus unedo*), Sycamore (*Acer pseudoplatanus*) and Cork Oak (*Quercus suber*). Morley perceived this as an opportunity to review the direction of its management and to revert the majority of the vegetation in the Reserve back to indigenous vegetation in accordance with the intent of the original Barton bequest. Just prior to the bushfire Morley had been approached by the South Australia Jubilee 150 Board desirous of promoting an exchange of flora with the State of Texas as a mutual celebration of sequicentennial status. Morley used the invitation and the bushfire aftermath to propose a temperate garden of south-western North America flora in the area from the Reserve and into the Quarry itself. The Australian-American Association supported the initiative providing a plaque to accompany a palisade of Sweet Gum (*Liquidambar* spp) trees along Mawson Drive that were planted in the autumn of 1984 (Lothian 1999: 19; Morley 14 May 1984; Lothian 1994: 2).

In the Rhododendron Valley, most of the plantings in the upper reaches of the gully were effectively burnt. Only *Rhododendron ponticum* survived, being the stock upon which many of the original plants had been grown, and thereupon allowed to spread. As a result of the fire the Rhododendron Valley received donations from the Rhododendron Societies of South Australia and of North-West Tasmania in April-June 1983, and *Viburnum* spp from 'Beechwood' and the Adelaide Botanic Garden were planted in Viburnum Gully. A timber gazebo was also erected, adjacent to the Thomson conifer collection, by G Barker (Duvergier 1982: 1, 2, 6, 7).

A key outcome of the 1983 fire was that the design and planting strategy in the Garden was immediately revisited. The fire had resulted in extensive damage to the *Eucalypt* spp fingers and crown that draped the upper reaches and internal ridgelines of the Garden. It had also burnt several sections of deciduous plantings, but most of the gully collections (*Magnolia*, *Rhododendron*, *Syringa* spp especially) remarkably survived. Only half the Rhododendron Gully was lightly burnt in this fire and most of the specimens survived and continued flowering. In an effort to re-assess the situation and original logic of the Garden, Morley re-read the Master Plan and in it found a geographical planting vision allied to his own taxonomic interests. Correy had originally proposed creating planting precincts that were composed of distinct geographical plant collections rather than an arboretum-like planting approach. While the Board had originally adopted the Master Plan in principle, the actual planting approach applied was determined very much by Lothian on the basis of his interests and species he could easily obtain. Notwithstanding the re-appraisal of the planting strategy embedded in the Master Plan, Morley perceived that he was "not trying to capture a design ethic but to drive a plant agenda that could feasibly be maintained." The result was a planting arrangement not conducive of taxonomic or geographical principles but one reminiscent of a broader Gardenesque style landscape with collections of specialised plant species in distinct locations, like the Fern Gully or Rhododendron Valley (Morley pers comm. 2003).

The event of the fire, fortuitously, also enabled the allocation of \$1 million state government funds to upgrade the public access and water storage systems in the Garden over 1983-1984. While funds were available for these post-fire works, Morley had little fund access to enable the engagement of additional staff to review and or execute the Master Plan (Morley pers comm. 2003).

Following the fire, Morley prioritised fire retardant and firebreak clearance works in the Garden. This included extensive propagation of deciduous trees of *Acer*, *Quercus*, *Platanus*, *Betula*, *Liquidambar* spp etc. "so that belts of fire retardant trees can be planted at selected sites in the garden in an endeavour to prevent another fire as damaging as the one experienced in

## 2.0 DEVELOPMENT OF MOUNT LOFTY BOTANIC GARDEN

February.” Two additional bores, with pumps, were also drilled near Lampert Road (Bore No 3) and on the recently acquired Mitchell’s land (Bore No 2) (Duvergier 1982: 2-3; Morley pers comm. 2003). Interestingly the Annual Report by Garden Superintendent DV Duvergier does not lament the impact and destruction of the Ash Wednesday fires upon the Garden but continues in a language reminiscent that the event was simply an isolated incident in his yearly activities (Duvergier 1982: 1-7).

During 1983-84 the Garden started changing its planting approach to align with this change of philosophical approach imposed by Morley. The Bog Garden was renovated with rocks, *Liquidamber* spp planted on the ridge between the Syringa and Rhododendron Valleys, *Cedrella* spp planted along the flanks of Rocky Ridge Road to serve as a fire retardant break, and *Erica* and *Cytisus* spp grubbed out around the Administration Building. Burnt *Eucalypt* spp were felled and grubbed out adjacent to the Fern Gully, with select straight logs being kept for use as parking barriers in Botanic Park, new fern specimens recently collected in the Otways Ranges in Victoria were planted, and timber foot bridges restored. In other areas, burnt tracts of *Eucalypt* spp were selectively thinned, specimens of *Platanus* spp were planted on the ridge between the Rhododendron and Viburnum gullies as a fire break, and specimens of *Sorbus* spp added to the upper reaches of the Rhododendron Valley. Extensive re-labelling, stump removal, renewal of irrigation systems, and gully drainage clearing also occurred. Earthworks were also undertaken for new water tanks, and four new concrete tanks were positioned in the Garden to increase its water storage capacity (Duvergier 1985: 1, 3, 4, 5; Schutz pers comm., 2003).

During 1984-85 the Garden completed near 80% of the erection of a 1.8m high chain wire mesh fence around the surrounds of the Garden, moved from the old to the new water reticulation system, and constructed a storage compound on Mitchell’s allotment. Fire sprinklers were installed around the Administration complex, and the Garden continued planting deciduous tree corridors where strategic fire retardant breaks were warranted. By this stage some 400 specimens of fern had been planted in the Fern Gully. The first census of the plant collection in the Garden was also completed and published as a *Catalogue* (Powell 1985: 1).

Development and management works in 1985-86 in the Garden reflected refinements to the management of many planting areas and a continuing upgrade of visitor facilities and services. More plant labels were added, additional paths cut and upgraded, directional signage installed, grassed areas extended, and additional species planted. Botanical mapping of the species was in progress, *Vireya Rhododendron* spp were planted in the upper reaches of Rhododendron Valley, dry-stone walling continued and further irrigation improvements were undertaken in the Rhododendron Valley. A new rubble road was constructed through the upper portions of Mitchell’s allotment, a new lunchroom and toolshed erected in the Fern Gully, fenced-off former mine sites were reviewed and blasted in consultation with the Department of Mines & Energy, and traffic counters installed for the first time.

During 1985, Morley sought to extend and double the capacity of the upper car park. Such a proposal impinged upon the original Arthur Hardy Sanctuary bequest, and the family was again consulted as to this proposal as it involved an *Act* to vary the boundary of the Sanctuary to accommodate this work. The *Arthur Hardy Sanctuary (Alteration of Boundary) Act 1989*, to vary the boundary of the Arthur Hardy Sanctuary was approved by state cabinet and assented by Executive Council on 16 March 1989 (Powell 1986: 1, 2; *Arthur Hardy Sanctuary (Alteration of Boundary) Act 1989*; assented 16 March 1989).

During 1986-87 the Garden staff concentrated much of their activities upon works in the Sanctuary, Vireya Gully, Crafers Quarry surrounds, together with extension of visitor information facilities and plant labels. Land slippage occurred in the Rhododendron Valley due to poor drainage, the Alpine area was extended with *Echinap* and *Cotoneaster* spp and the area was viewed as comprising a pure alpine plant collection area rather than a woodland garden. The viewing platform area, now subsumed in Cape Tulip, was sprayed and grubbed. A large area surrounding the quarry was cleared and grubbed of trees and stumps, and the quarry rehabilitation project commenced. The first plantings of *Vireya Rhododendron* spp occurred in the upper reaches of the Rhododendron Valley in spring 1986. *Rosa* spp were also first planted

along the road leading to the Mitchell's storage compound. A new road was cut and carefully bitumen surfaced, following the contours, through the Fern Gully to eliminate erosion problems associated with the old road (Powell 1987: 1, 2).

Works projects and plantings continued in 1987-88, and a 29% increase of car visitations was recorded. While the summer was dry, the Garden continued to seek a "green" approach as being "very desirable both from an aesthetic and maintenance point of view." During this period the Alpine garden was doubled in size and planted with numerous bulb specimens in the Nursery and most of the *Syringa* spp were removed from Syringa Valley and *Camellia* spp were planted therein. New pathways were also constructed in the Rhododendron and Syringa Valleys, and near the Upper Car Park. Rehabilitation works at the Crafers Quarry were now complete and irrigation pipes and sprinklers were being laid together with pumps to create a waterfall. The first of several Greg Johns sculptures was placed near the David Thomson dwarf conifer collection, and the Tarn Hill dam was filled in and planted with a cover of Rye Grass. The Spring Dam was drained, and excavated to double its holding capacity, a section of Allan Correy Drive was realigned and bitumen surfaced, and a sponsored garden seat installation program commenced (Powell 1988: 1, 2). Some 7,200 tons of excess soil, excavated from the site of the Bicentennial Conservatory, was also carted to and spread in the quarry to assist the development of the Texas garden (McAlister 1988: 2).

Art was a strong interest of Morley. Although he was conscious that art could be introduced into the Garden he desired that it should be sympathetic and not dominate and visually transform the Garden into a sculpture park. To this end, Morley perceived that "Mount Lofty Botanic Garden is the art work, the canvas is Piccadilly Valley" and that art pieces needed to respect this. Morley's friendship with sculptor Greg Johns enabled the commissioning of 'Guardian Figure' (1987) and 'Balancing Peace Figure' (1994). These preceded Johns' subsequent gift of 'Between Sky and Earth' (1980), and the special commission of the Collin Robjohns Gates (1996). All sculptures were formed of austen steel, and the Gates were made of mild steel oiled to prevent rust and mounted on cobblestone pillars (Morley pers comm. 2003; Hatcher pers comm. 2003; Schutz pers comm. 2003; Johns 1996: 1-3; Johns 1990; Johns 1994).

The Robjohn Gates formed a commemorative feature to honour the role and support of Collin Robjohns, founding President of the Friends of the Botanic Gardens of Adelaide, and were opened by his Excellency, Sir Eric Neal, Governor of South Australia, on 15 September 1996. Associated with the gates was created a thematic Himalayan landscape of rocks and plants that reflected Robjohns' interest in the Himalayan landscape and plants arising from his early travels in the Yunnan area of China. Species included hardy specimens of known wild origins, such as *Cotoneaster*, *Berberis*, *Rosa* and *Juniperus* spp, that were complemented with an avenue of Southern Magnolia (*Magnolia grandiflora*) along the entrance road.

From July 1987 to July 1989 there was a 59% increase in visitation, from 18,802 to 28,956 vehicles being recorded. This was despite another dry summer in 1988-89, and some 2,000 new plantings. During the initial stages of a new secondary pathway system was commenced. During 1988-89 the plant-labelling project continued, and some 150 Japanese Flowering Cherries were received via quarantine. In November 1988 a Japanese Flowering Cherry tree planting ceremony and commemorative plaque unveiling took place at the Garden to celebrate sister state links with the Okayama Prefecture and the port of Mitsushima in Japan. The former Tarn Hill dam site was now re-structured in beds to accommodate an enlarged *Narcissus* cultivar collection, and works commenced on the South American Gully. This Gully was a particular focus because the Nursery was now over-flowing with specimens, and involved the construction of pathways, installation of a sprinkler system, and the commencement of plantings with some 100 specimens being established. Much of the plant specimens in the Gully were sourced from the Woodbank Nursery in South America due to a friendship established by Lothian and Morley with its proprietors. Path reconstruction also occurred in the Viburnum Gully and Woodland, an old Plant Pathology glasshouse (originally designed by Woods Bagot) from the University of Adelaide was relocated to the Nursery, and a further 300 plants were added to the Quarry area (Hatcher pers comm. 2003; Powell 1989: 1, 2).

## 2.0 DEVELOPMENT OF MOUNT LOFTY BOTANIC GARDEN

In December 1989 the Board announced the creation of a nature trail and its sponsorship by the State Bank. A project instigated personally by Morley, the trail was intended to “provide glimpses of many species of flora and fauna in an area of managed natural scrub ...” The trail wound its way through stands of Swamp Wattle (*Acacia retinodes*) and Black-eyed Susan (*Tetratheca* spp.), Grass Tree (*Xanthorhoea* spp), and the elusive and rare Coral Fern (*Gleichenia microphylla*) (BGA&SH New Release 1989: 1-2; Morley pers comm. 2003).

Progress continued on the Quarry project, planting activities and the extension of irrigation services in 1990-91. Completion of the Quarry benching occurred, the lower reaches of the Rhododendron Valley was prepared for plantings of dwarf Asian *Rhododendron* species, and most of the original living *Pinus* spp plantings undertaken in 1959 were relocated and replaced with Australian species. A plant collection trip in February 1991 to the Victorian Otway and Dandenong Ranges resulted in some 150 new specimens being added to the Garden. The *Vireya Rhododendron* spp collection was also shifted to the upper reaches of the Rhododendron Valley. These shifts and changes reflected much the geographic planting approach taken in the Master Plan and by Morley. The entire chain wire mesh boundary fence, now completed, was extensively cleared of vegetation growth to ensure an adequate fire-break (Powell 1991: 1, 2, 3; Lothian 1994: 3).

Most noticeable in 1991-92 was the dramatic increase in visitation. Some 43,000 vehicles were counted representing some 170,000 visitors. This visitation was placing obvious pressure upon existing car parks, toilets and associated visitor facilities, in particular the lower car park area. An internal mini-bus system was introduced to aid the movement of visitors and interpretation during the peak visitation months, and further seats and drinking fountains installed. Pathways in the Bog Garden and Rhododendron Valley, now subject to excessive foot traffic, were extensively re-surfaced and capped in concrete, and a rock garden was created on the south flank of the Duck Pond. A restructuring of work teams, into 3 working sections, also occurred (Powell 1992: 1, 2).

Works in 1992-93 involved further plantings and upgrading of visitor facilities and services. The living collection of the Garden contained approximately 10,500 accessions, representing over 7,000 species, and the Garden increased its seed importation and specimen collecting activities. It was also an unusually wet year, with 1,650.5mm in comparison to the average of 1,190mm resulting in an unseasonable spring and early summer. A collection of Daffodils provided by the Friends of the Botanic Gardens were planted, and the Upper Car Park was re-landscaped and planted in shrubs and beds and with stonework. The Upper Car Park renovation was a major capital work project during this year. Similar but smaller works were undertaken around the lower car park. The mini-bus service continued and increased in its popularity, and potable toilets were hired during the high visitation periods to cater for the demand (Powell 1993: 1, 2, 3).

Vehicle visitation numbers increased in 1993-94 to 47,578, but the season was extremely dry with only 961.25mm of rain. Further collecting trips resulted in more specimens, and the Garden also received a large donation of containerised Chinese warm temperate and sub-tropical flora, mostly of wild collected origins, from Bob Cherry. Improvements and final works to the upper car park continued, and two small ponds were added to the Fern Gully. The Main Lake was drained for the first time to address its increasing high nutrient content that had resulted in the decrease of its clear appearance. Tests revealed its water was slightly alkaline but low in nitrates and phosphates and microbially active. These factors were normal in waterbodies so it was concluded that aquatic vegetation needed to be introduced (Watkins 1994: 1, 2, 3).

Significant staff changes distinguished the 1994-95 period in the Garden. Des Kotz, Works Supervisor of the Mount Lofty Botanic Garden, retired on 9 August 1994 after nearly 20 years of service. Ian Powell was re-allocated to manage ‘Wittunga’ Botanic Garden, and in November 1994 John Schutz was appointed Curator of the Mount Lofty Botanic Garden. Gardener’s Charlie Day and Rex Hoppo also retired after 18 years service to the Garden respectively.

Paving works on the Upper Car Park, using pavers from the former Hackney Bus Depot, was completed. Rainfall was again low this season, dropping to 919mm that left the bores struggling over summer to cope with the irrigation water demand (Schulz 1995: 1, 2).

As part of a review of land holdings associated with the Garden during the late 1990s, the Board proposed the sale of allotments formerly donated by Kanmantoo Mines Ltd and the redistribution of the capital into the Garden. This process involved the successful approval of the proposal by both Houses of state Parliament given that the properties had been donated to the Crown and the Board (Memorandum, Morley to Jones, 12 July 1996).

The Board also sought the possible sale of the Somerset Rocks allotment (Section 484) in 1999. While little development or management actions had occurred on the allotment prior to the 1983 bushfire subsequent management involved intermittent slashing. An interdepartmental review of its biodiversity concluded that the vegetation was regarded as significant under the Principles of Clearance of Native Vegetation (Schedule 1) of the *Native Vegetation Act, 1991*, and hosted colonies of *Acrotriche fasciculiflora* and *Olearia grandiflora* – both Mt Lofty endemic species rated as uncommon (Memorandum, 18 August 1999; Memorandum 25 May 1999).

Rationalisation of nursery operation marked the main change in 1998-99, and the main capital work was the extension of the Lower Car Park as designed by Taylor & Cullity Pty Ltd. Shannon Architects were also involved in advising spatial and siting requirements for a kiosk/café and interpretation/information building(s) (Taylor & Cullity 1998: 1-7). New plantings continued in all major collections and visitation was now reaching 235,060 people. Select stringybark removal occurred in Fern Gully, in the Woodland garden and around the upper Conifer lawn, and a major storage shed was erected in the Mitchell's compound (Schulz 1999: 1). These works continued in 1999-2000, with further planting activities. Reference groups considered the Syringa and Viburnum Gully, and Crafers Quarry collections resulting in a draft Living Collection Policy.

In October 1999, the state Premier, John Olsen, launched two new plant trails and brochures for the Magnolia Gully and Rhododendron Gully together with new visitor infrastructure and the opening of the new car parks. This launch concluded a \$950,000 grant that included new car parking facilities, signage, upgraded and new walking trails, new bridges and widened roads, landscaping and drainage works, and new storage facilities. Redevelopment works also commenced on the Bog Garden. A review of the Garden's irrigation system, by Brown & Root, was also commissioned. The Adelaide Symphony Orchestra also held several successful events in the Garden, and the Friends introduced their 'Special Plant of the Month' fliers (Schulz 2000: 1-2, 5-6). In early 2000 a Wollemi Pine (*Wollemia nobilis*) was planted by state Minister for the Environment David Wotton near Tarn Hill.

### **2.2.7 Recent Developments**

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.

Forbes has concentrated on the consolidation of a complex institution and has astutely anticipated new developments by the adoption of a Strategic Plan (2002). In early 2003 Adelaide Research & Innovation Ltd and Taylor Cullity Lethlean were respectively appointed to prepare the *Mount Lofty Botanic Garden Conservation Study* (2006) and the *Adelaide Botanic Gardens Master Plan* (2006) for the Mount Lofty Botanic Garden..

With the death of Noel Lothian in late 2004, a special memorial service was fittingly held in the Arboretum to honour his creation of the Garden.

During 2005 Shannon Architects prepared a pre-feasibility report for the design, siting and construction of new visitor facilities in the Garden (Shannon Architects 2005).

## 2.3 DEVELOPMENT OF THE LAND HOLDINGS

While the above historical review recounts summations of land acquisitions, bequests, transfers, and road closures that result in the present land holdings and boundaries of the Mount Lofty Botanic Garden, the detail of these actions has not been included. The following discussion, and tabulation, provides a more focused summation.

In mid 1952 the estate of the late Thomas S Backhouse was listed for public auction by auctioneers FW Bullock & Co and Keith Wilkinson. Comprising 43.35ha (106 acres) it immediately provided the opportune landscape in which to create a Hills Botanic Garden. The Land Board valued Lots 43, 51, A and 52 at £500, £810, £1500 and £570 respectively. However they were acquired at the prices of £362.10.0, £775, £1500 and £570 respectively.

Lot A was initially under contract of sale to Sir John Lavington Bonython who sought purchase of the allotment to enable straightening of titles with his adjoining property 'Eurilla' on the ridgeline. The state Government, however, negotiated an arrangement to re-align the title boundaries and to acquire the large outstanding portion to add to the Garden. Further delays occurred in the eventual transfer of titles as water right encumbrances between the Backhouse estate and JL Bonython, that enabled access by Lindsay Gordon Bonython, had to be resolved and re-negotiated. LG Bonython owned market garden land immediately adjoining the Backhouse allotments in the valley.

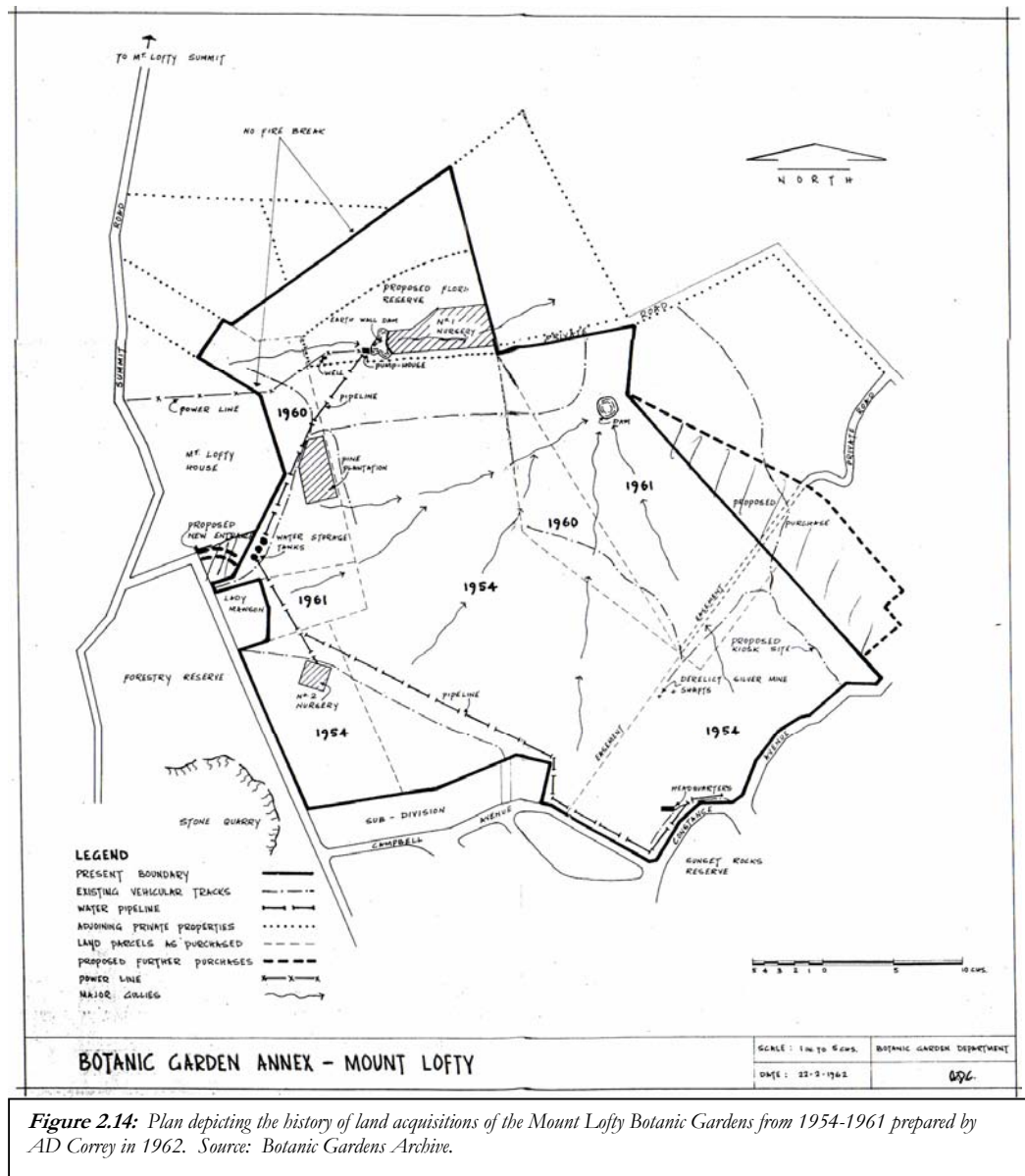
On 25 November 1954 the three main allotments (sections 487, 488-489), following financial settlement, were gazetted for use as a botanic garden. This acquisition established the foundational land holdings for the Garden. However, further acquisitions continued over successive years as land from LG Bonython, the Chapman family, Mitchell and O'Leary families within the valley, in particular, were transferred to the Garden. The O'Leary family comprised Kevin James and Barbara O'Leary. During 1958, LG Bonython advised the Board that a developer had approached him to purchase parts of this market garden for residential subdivision. Having previously expressed their desire to acquire any LG Bonython land, negotiations started immediately with Bonython resulting in an additional 2.5ha being acquired for £1036 (South Australia 1954, *Government Gazette*, 25 November 1954, p. 1260; Minutes of the Board of the Adelaide Botanic Garden, Visit to Mount Lofty by Members of the Board, 21/7/59; Minutes of the Board of the Adelaide Botanic Garden, 10 April 1953; Lothian 1994: 1).

During 1959 negotiations were entered into with the owners of 'Mount Lofty House' to acquire approximately 3.75ha (9acre) of land in Section 496 that adjoined the Garden. Following successive discussions, and a determination by the Lands Board as to the use of funds that would defer other construction works in the Garden, some 4.1ha (9.75ac) was purchased in 1959 for £2552 and gazetted in April 1960 as part of the Garden. This land would later provide an area for the erection of the upper water tanks.

During 1961 the Board successfully sought the closure and dedication of an unmade section of Violet Avenue adjacent to the Arthur Hardy Reserve and Crafers Quarry. In late 1961 the Board also acquired additional 8.3ha (20ac) on Section 500 from LG Bonython at a cost of £4365.

During 1962-63 the Board regularly inspected progress at the Garden. It endorsed action to acquire further lands, including 2.7ha (section 509) and 3.75ha (Section 510) at £400/500/acre and £500/acre respectively. This action accorded with the Interim Master Plan recommendations, prepared by Allan Correy that proposed that an area of 84ha should be ultimately acquired to enable growth and the realization of the Master Plan vision. In 1962 the Garden comprised some 58ha before the purchase of Sections 509 and 510. During 1962 the Board also successfully sought the transfer of Somerset Rocks (1.58ha; Section 484) from the Tourist Bureau Board thus bringing together the four original allotments offered by the Estate of TS Backhouse (Correy 1965: 32; Correy 1962: 1). Additional land identified by Correy

comprising Sections 511, 512, 528 and 502 were also acquired during 1962-64 and were included in his Master Plan proposal.



**Figure 2.14:** Plan depicting the history of land acquisitions of the Mount Lofty Botanic Gardens from 1954-1961 prepared by AD Correy in 1962. Source: Botanic Gardens Archive.

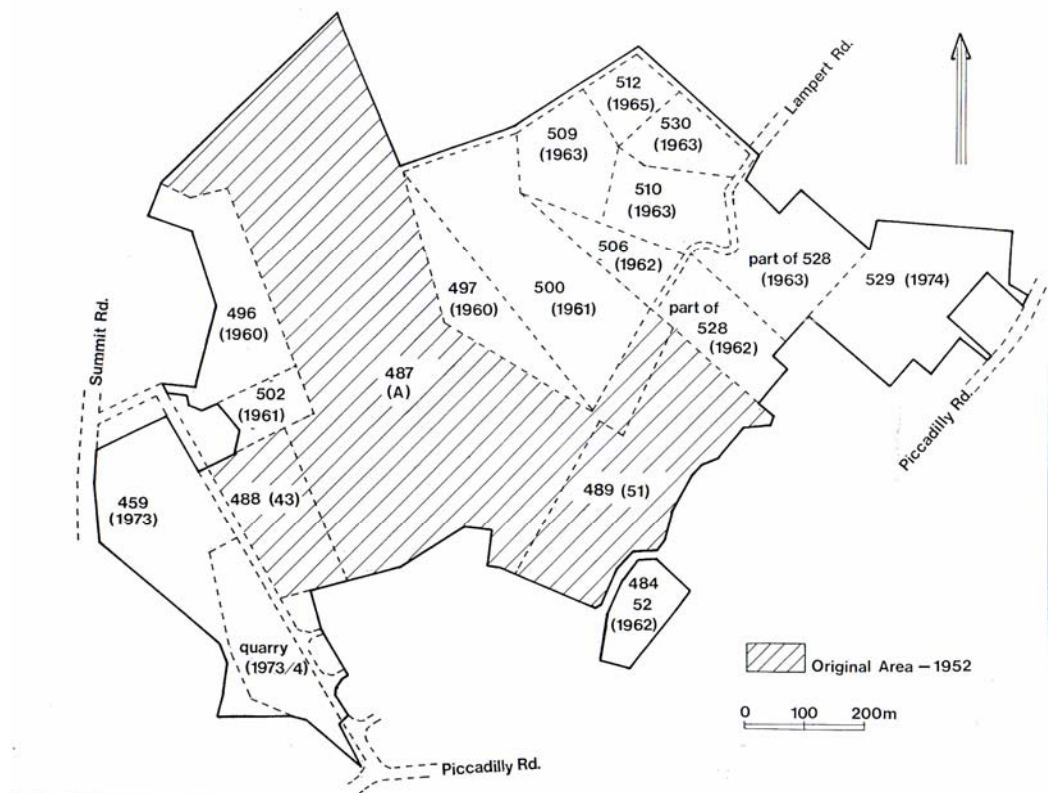
During 1964-65 the Board completed the acquisition of LG Bonython's remaining land holdings (Section 512; 1.35ha, and Section 530; 1.45ha) bringing the Garden to 79.2ha. The Board also commenced investigations to acquire allotments from TM Burke (15.3ha), LG Bonython's house allotment (1.4ha), land from the Mitchell family, consideration of a land donation from SH Allen, proposed a transfer of unused closed road reserves from the District Council of Stirling (Minutes of the Board of the Adelaide Botanic Garden, 5 July 1957, 2 August 1957; Field, 1966, 'Landscape Architect's Report on Additional Land Purchase for Mount Lofty Garden - 8<sup>th</sup> September, 1966', p. 1; Anon 1966, 'Report on Inspection of Mt Lofty Botanic Garden', pp. 1, 2).

In 1973 the Woods & Forest Department proposed the transfer of the Arthur Hardy Sanctuary Reserve to the Board. The Board eagerly accepted this transfer as well as successfully negotiating for the purchase of the Crafers Quarry (3.23ha) from the District Council of Stirling at a cost of \$11,250 (Letter, FK Barton to Conservator of Forests, 18 February 1972; Letter, FK Barton to Conservator of Forests, 15 February 1972).



## 2.0 DEVELOPMENT OF MOUNT LOFTY BOTANIC GARDEN

During the late 1990s the Board commenced discussions with the O'Leary family, who owned land to the eastern flank of the Garden. These discussions were entertained in the recognition that following the passing of Kevin O'Leary, the majority of the land holdings were bequeathed to be transferred to the Board of the Botanic Gardens of Adelaide following the demise of his immediate children. This bequeath has provided little certainty to both the children and the Board, and negotiations have occurred from time to time to try to develop a mutually satisfactory outcome for both parties within a shorter timeframe. This makes assessing the conservation merit, and thereupon the master plan implications, of this land holding difficult if not pre-emptive.



**Figure 2.15:**  
*Plan of land acquisitions for the Mount Lofty Botanic Garden from 1952-1973. Source: Gardens Archives.*

### Mount Lofty Botanic Garden Acquisition History

Section	Owner	Date of Acquisition	Area (ha)	Government Docket Number
487 Lot A	Estate of Thomas S. Backhouse	25.11.1954	31.25	DL 8738/50, 715/53
488 Lot 43	Estate of Thomas S. Backhouse	May 1962	4	DL 8738/50, 715/53
489 Lot 51	Estate of Thomas S. Backhouse	25.11.1954	8.1	DL 8738/50, 715/53
496	Mt Lofty House	April 1960 and June 1963	4.1	DL 4810/57, BG 70/58
497	Lindsay Gordon Bonython	28.04.1960	2.5	DL 4810/57, BG 70/58
500	Lindsay Gordon Bonython	March 1961	8.3	BG 91/59
502	Mt Lofty House	June 1961	0.9	BG 91/59
506	Lindsay Gordon Bonython	March 1962	1.6	BG 91/59
509	Lindsay Gordon Bonython	January 1963	2.7	DL 3960/62
510	Lindsay Gordon Bonython	December 1963	3.75	BG 194/63
511	Mount Lofty House	Exchange for Sect 507 1962	0.9	BG 129/60, BG 150/61
512	Lindsay Gordon Bonython	August 1965	1.35	BG 233/65
528 west portion	H.C. Mant	March 1962	2.4	BG 149/61
484 Lot 49	S.H.M. Allen	Donation; October 1967	0.07	BG 286/66
530; house lot	Lindsay Gordon Bonython	October 1966	1.46	BG 292/66, BG 309/67
484 Lot 52	Tourist Bureau	Transferred to the Board; October 1962	1.45	PTB 444/62; BG 185/63
529 (Cuttings Valley)	T.M. Burke Pty Ltd	Portion Sect 837/840; July 1971	5.50	BG 367/69
K	Kanmantoo Mines Pty Ltd	Donation; March 1974	0.2	BG 409/71
484 Lots 33 & 44	District Council of Stirling	Transfer including Road Closing; November 1975	0.5	DL 2422; DE 4020/76
459	Arthur Hardy Sanctuary	Transfer from Woods & Forests Department; March 1973	5.159	WFD 124/39; Highways Dept 1328/63
Part 1204	R.M. Hardy & Associates	June 1973, April 1974	3.75	BG 483/73, 491/73, 519/73, 541/74
Lots 49 and 50 of Deposited Plan 4656	S.H.M. Allen	Donation, 1998	0.1	

Note: all lands were originally listed as "Part Sect. 840" in the Hundred of Onkaparinga. The areas listed include the revised section numbers given on gazettal.