QUEENS PARK
CLUNES

Conservation Analysis and Conservation Policies

Originally prepared by Richard Aitken
15 February 1990

Revised and reprinted
by Wendy Jacobs
Heritage Adviser, Shire of Talbot and Clunes
June 1994

Preface

This report was prepared by Richard Aitken, Heritage Adviser for the Shire of Talbot and Clunes in 1990. It did not have wide circulation at the time. This version has been retrieved with the help of Richard Bayley and reprinted for wider circulation.

Some of the work to the trees has been undertaken in the past four years but most of the recommendations have yet to be addressed. The report is an excellent basis for the planning of future work in the Gardens and in the creek area of central Clunes. I especially commend Policy 2.5.1. including the undergrounding of electricity in the area and the provision of a continuous walkway through Queens Park and the Township of Clunes.

In August 1993, the Clunes Tourist and Development Association commissioned a report from Allom Lovell & Associates on "Dilapidation Assessment and Restoration Proposal for the Queens Park Fountain at Clunes. That report gives a detailed assessment of the fountain. Information regarding the shielding of the fountain from tree roots was also placed on file in the Shire Office at this time by the Heritage Adviser. These reports are appended here.

Wendy Jacobs
Heritage Adviser
Shire of Talbot & Clunes

June 1994

QUEENS PARK, CLUNES

CONSERVATION ANALYSIS AND CONSERVATION POLICIES

RICHARD AITKEN

15TH FEBRUARY, 1990

CONTENTS

1.0 INTRODUCTION

Queens Park (Crown Reserve RS 1754) is located in the Township of Clunes and is approximately 1 ha. (2.5 acres) in extent. It is bounded on the north-east by Ligar Street, on the north-west by Cameron Street, on the south-east by Smeaton Road and on the south-west by Creswick Creek. The park is included within the "Area of Special Siginificance" defined in the local planning scheme and a planning permit is required for any new building.

Queens Park was "initially planted" in the mid-1880s and with construction of the fountain in 1887 (to celebrate Queen Victoria's Jubilee) the park was officially opened. The bowling club was set out as early as 1878 and is therefore an integral part of the park's development. The Talbot and Clunes Conservation Study 1988 analysed the site as part of a network of botanic gardens created in nineteenth century in provincial Victoria. The planting of such gardens was aided immeasurably by Ferdinand von Mueller who as Government Botanist and, for a period, Director of Melbourne's Botanic Gardens liberally distributed seeds and plants to all parts of the State. Some provincial gardens, like Malmsbury, Castlemaine, Buninyong, Hamilton and Camperdown are larger and possibly closer to the ideals of a botanic garden but Queens Park forms a significant link in this network of gardens. It was not merely a municipal park catering for the recreation of residents but contained a significant emphasis on planting, the results of which are clearly evident today.

This report has been prepared in response to requests from both the Talbot and Clunes Heritage Project Committee and the Clunes Tourist and Development Association. It aims to establish a programme of works which will conserve existing attributes of the park and also recommend works which would enhance its significance.

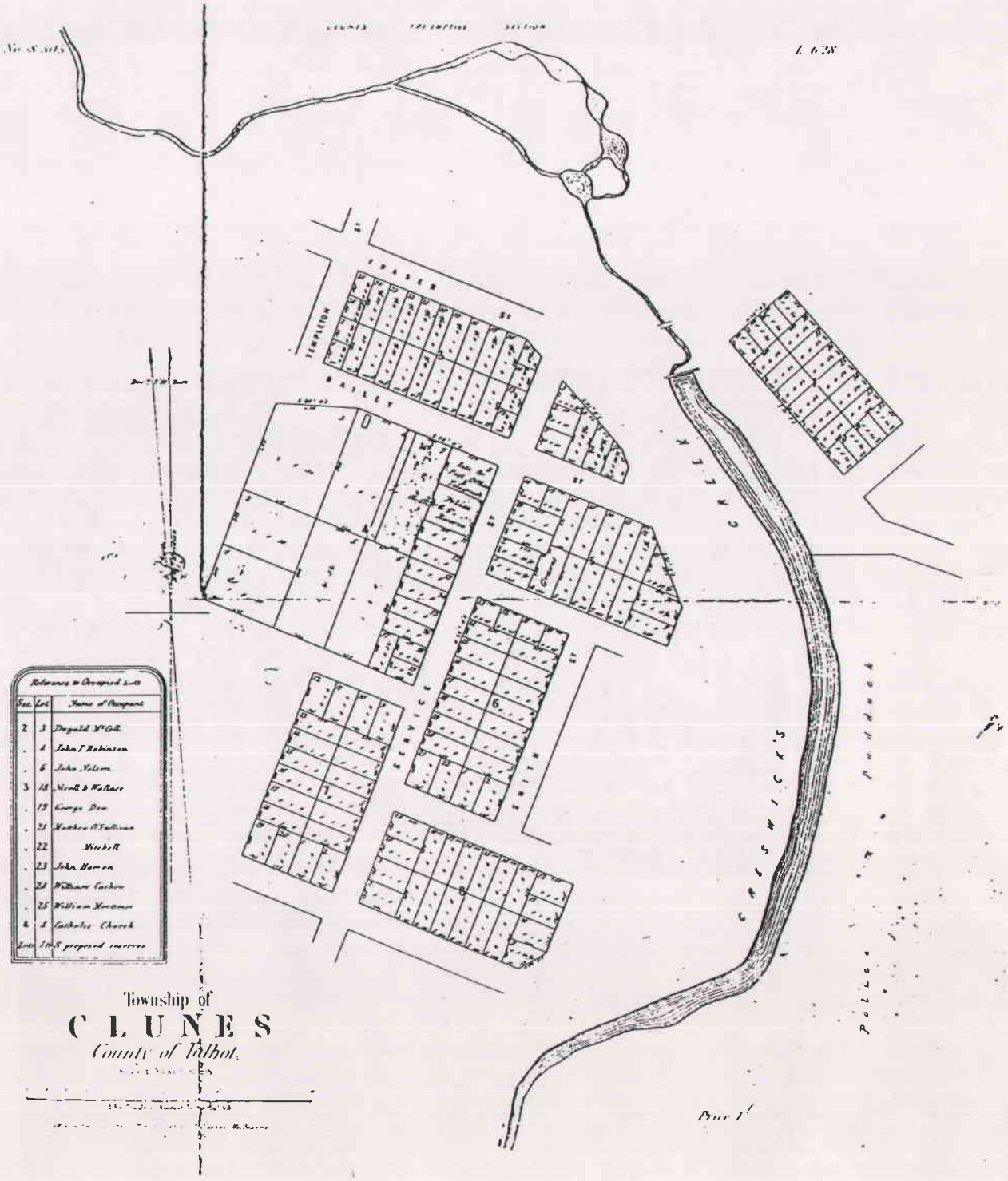
It is vital that this report be widely circulated and discussed prior to major works being undertaken. Only after general agreement regarding the analysis and policies is reached should works be commenced. This may seem self evident but it is very important to establish policies which cannot be refuted as works proceed. This allows for a co-ordinated long term plan to be implemented.

2.0 HISTORY

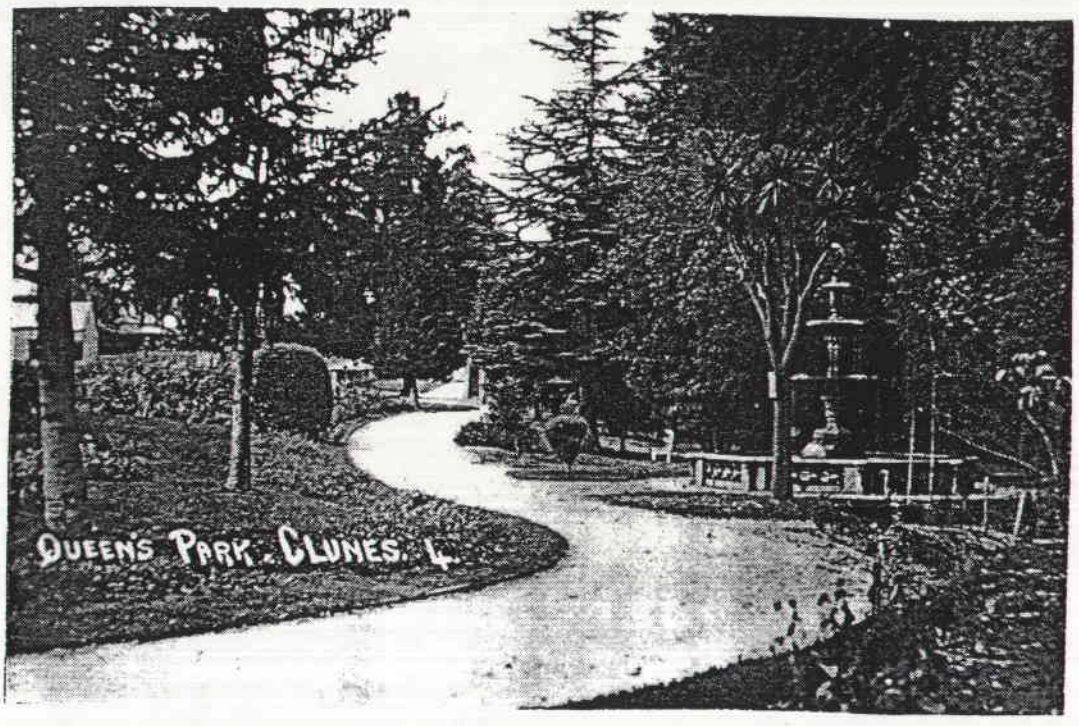
A 30 acre reserve for a botanic garden was included in the 1864 township plan of Clunes although the land was never developed. An early reference to planting on the site of Queens Park was contained in a letter written by the Borough of Clunes to the Secretary for Lands in 1886. "The land is fenced" said the Town Clerk "and partially planted ... the Council propose to make more improvements". Ligar Street was reduced to 1 chain and following the creation of a sludge channel along the line of the creek, an area of slightly over two acres was available for a public garden. (1). A decade earlier Council had resolved "to plant 30 or 40 trees" on the east side of Ligar Street and a number on the west side of the creek opposite the site of Queens Park, but the details of implementation of this proposal are unclear. In the same year (1872) mullock from a mining company had blocked the second branch of Creswick's Creek and Council grasped upon the opportunity of improving the area. (2). The fountain was constructed in 1887 to commemorate the jubilee of Queen Victoria's accession to the throne in 1837 and the park was also officially opened at this time. In 1878 a deputation was received by the Borough of Clunes when permission was sought to occupy a portion of the Creek Reserve as a bowling green. The bowling club (as yet in an embryonic form) undertook to plant the ground if the Council would fence the area. On 3 June 1878 the Council adopted a proposal by its Public Works Committee and the Town Clerk was instructed to prepare a lease for the ground. (4). As the Borough was not gazetted as a Committee of Management for the entire reserve until just over ten years later the exact nature of the agreement is uncertain. (5). However "Fidelis" recalled the green was laid out by Arthur Batson, the Town Clerk, and an early photograph showed a small timber clubhouse on this site.

By the turn of the century, Queens Park was reaching maturity. The trees, mainly evergreen conifers, contrasted strongly with the deciduous poplars (planted along the creek in the 1880s) and "detailed" planting was evident. Neatly clipped box hedges lined a serpentine path of crushed quartz and a large cordyline was planted adjacent to the fountain. At this date many of the early plantings had been thinned and augmented with other exotic plantings, especially at the north end where a "pinetum" was cultivated. (7)

1. Rs1754, letter dated 10 April 1886.
2. Borough of Clunes, minutes, 5 June 1872; 9 October 1872.
3. Undated cutting from the Age , c.1927 in Weickhardt papers, Shire of Talbot and Clunes.
4. Borough of Clunes, minutes; 2 May 1878; 30 May 1878; 3 June 1878.
5. Rs1754, 18 June 1888.
6. "Fidelis", 1920, p.8.
7. Early photographs held by Shire of Talbot and Clunes; Jane Lennon collection, Melbourne.



Township of Clunes, surveyed by John Templeton in 1858 and sold in 1860-62. The position of the allotments in Section 1 defined the later extent of Queens Park. (Plan L.628, Central Plan Office)



Queens Park, pictured around the turn of the century. By this date the planting had matured and the park was maintained at a high level. (Jane Lennon collection, Melbourne)

3.0 PHYSICAL ANALYSIS

This garden contains many remnant nineteenth and early twentieth century plantings. A detailed inspection of Queens Park was made in 1989 by John Hawker of the Royal Botanic Gardens. He inspected most of the plants in the park and the following table gives table gives details from his identification. The estimates of trunk diameter, height and spread have been provided by Officers of the Department of Conservation & Natural Resources.

1-2	Eucalyptus ficifolia
3-6	Populus alba
6A	Buxus sempervirens
7	Chaemycyparis lawsoniana
8-10	Populus alba
11	Cupressus torulosa
12	Cedrus atlantica f. glauca
13	Pittosporum eugenioides
14	Grevillea spp.
15	Pinus halepensis
16	?
17	Grevillea spp.
18	Garrya elliptica
19	Taxus baccata
20	Pittosporum eugenciodes
21	Ilex altaclaren
22	Picea sitchensis
23	Pinus ? radiata
24	Viburnum tinus
25	Grevillea spp.
26	Abies pinsapo
27	Grevillea spp.
28	Cedrus altantica f. glauca
29	Cedrus deodara
30	Ulmus x. hollandica
31	Viburnum tinus
32	?
33-36	Populus alba
37	Ligustrum vulgaris
38	Populus alba
38A	Acacia pendula
39	Cupressus lusitanica
39A	Ulmus x. hollandica
40	?
41	Washingtonia robusta
42	Pinus radiata
43	Pinus canariensis
44-47	Ulmus x. hollandica
48	Populus nigra "Italica"
48A	Arumitalicum
48B	Armaryllis belladonna
49-51	Ulmus x. hollandica
52-54	Cupressus macrocarpa "Aurea Horizontalis"
55	Pinus radiata
56	Cupressus macvocarpa "Aurea Horizontalis"
57	Cedrus deodora
58	Ulmus x. hollandica
59	Cedrus atlantica f. glauca
60-62	Pinus radiata
63	Cupressus macrocarpa
64-66	Pinus radiata
67	Cupressus macrocarpa
68-69	Pinus radiata

70	Araucaria bidwillii
71	Cupressus lusitanica
72	? Cupressus lusitanica
73-76	Cupressus macrocarpa
77	Cedrus deodara
78	Pinus radiata

The Bowling Club is an early intrusion in the area although the car park to the north is on part of the garden reserve. The fountain and a small gabled shed are now the only early remaining garden structures. The original path has been covered.

4.0 COMPARATIVE ANALYSIS

Queens Park is only one of a network of botanic gardens created in nineteenth century provincial Victoria. The planting of these gardens was aided immeasurably by Ferdinand von Mueller who as Government Botanist and, for a period, Director of Melbourne's Botanic Gardens liberally distributed seeds and plants to all parts of the State. Some provincial gardens, like Malmsbury, Castlemaine, Buninyong, Hamilton and Camperdown are larger and possibly closer to the ideals of a botanic garden but Queens Park forms a significant link in this network of gardens. It was not merely a municipal park catering for the recreation of residents but contained a significant emphasis on planting, the results of which are clearly evident today.

Queens Park developed into three main sections:

- a "pleasure garden" at the north end;
- the bowling club in the centre;
- "pinetum" at the south end.

The northern "pleasure garden" was developed in a gardenesque style, common in the mid to late nineteenth century. Explanations were placed on individual specimen trees, often with a view to evoking thoughts of exotic locations. Hence at Queens Park, speciums of palms (Washingtonia robusta), cedars (Cedrus atlantcia and C. defdara), poplars (Populus alba) and elms (Ulmus x. hollandica) brought plants from the tropics, Europe and England to the goldfields. Shrubbery bordered with box hedging contained exotic planting and these considerably increased the range of plants in Queens Park.

The bowling club was incorporated with Queens Park at a very early date and forced a barrier between the northern "pleasure gardens" and the southern "pinetum". The presence of a purely recreational facility whilst it contributes to the social significance of the Park's history also means that Queens Park was denied a more exclusive role as a botanic garden. Whilst other Victorian provincial botanic gardens now incorporate bowling clubs (eg. Buninyong) these have generally been much later additions and are therefore viewed as intrusions into otherwise intact gardens. In the case of Queens Park, the bowling club by virtue of its early date of establishment must be seen as an intergral part of the Park. This does not mean, however, that the much more recent car park should be viewed in the same light.

Planting of conifers, especially the pinus species, had been popularised by the writings of John Cladius Loudon and the 'pinetum' became a feature in many of Victoria's public and larger private gardens.

Queens Park is also a significant reminder of contemporary local reaction against mining debris and representative of an early reclaimation project, the genesis of many of Victoria's outstanding gardens.

5.0 SIGNIFICANCE

In summary, Queens Park is significant as one of a number of small provincial botanic gardens, a garden form popular in nineteenth century Victoria. The garden contains many remnant nineteenth and early twentieth century plantings and has considerable potential for reconstruction of missing elements using the wealth of documentary evidence available. The garden remains as a significant reminder of contemporary reaction against mining debris and representative of an early reclaimation project.

PART B: CONSERVATION POLICIES

1.0 INTRODUCTION

If this statement of significance is accepted then certain major policies and implications for future works logically follow. These have been written in the form of policies with a rationale and implications. Recommended works are included at the end of this report and are cross referenced to the policy number. They are also structured into short, medium and long term priorities.

Queens Park is within the Area of Special Significance (as defined by the Shire of Talbot & Clunes Planning Scheme) and a planning permit is required for any new building. The Planning Scheme requires new buildings to be "harmonious in appearance and character to all buildings, works and landscape features" in the central area of Clunes, from where it would be visually exposed and therefore this policy only reinforces a requirement already in force.

The Planning Scheme may impose conditions in any permit requiring the retention and protection of any existing trees, the planting or replanting of specified types of trees, shrubs, or the provisions of any other landscaping works or embellishments, which are considered by the Responsible Authority to be an appropriate means of enhancing or protecting (as the case may be) the established character of the Conservation Precinct concerned, (i.e. the central area of Clunes).

A map showing the boundary of the Conservation Precinct and Area of Special Significance is included in Appendix One.

2.0 EXISTING CONDITIONS

2.1 Extent of Land

2.1.1 Policy

That the entire extent of the land bounded by the original reservtion be considered part of Queens Park.

Rationale

The original reservation gazetted in 1887 has not been altered and all development has taken place within this area.

Implications

That the original extent of the bowling club be considered part of the design of the area.

That the southern 'pinetum' be considered as of equal significance to the more fully landscaped northern area.

No part of the area should be given over to any purpose which goes against the spirit of the original reservation for public gardens.

2.1.2 Policy

That adjacent land gazetted as public park or for public purposes be incorporated in any future plans for Queens Park.

Rationale

The adjacent Victoria Park area was gazetted as a public park in 1888 and was clearly intended to form a link with Queens Park. Likewise a reservation for public purposes extends for 150 links (approximately 30m) from the bank of the creek (where the bank is not gazetted as a roadway -e.g. Creek Parade). This forms a continuous walkway through Queens Park and the Township of Clunes.

Implications

The existing walking tracks should be maintained and where necessary, upgraded.

Consideration could be given to reconstructing the suspension bridge adjacent to the east end of Bath Street to enable a complete 'circuit' to be undertaken by walkers.

Any new planting in Victoria Park or along the Creek could be based on the policy for Queens Park and thereby enhance the nineteenth and early twentieth century character of the Creek Valley.

2.2 Tree Assessment

2.2.1 Policy

That a Tree Management Progrmme be undertaken to identify the existing condition of each tree and recommend appropriate maintenance requirements.

Rationale

Formative (corrective) pruning, routing and remedial or surgical pruning to shape and remove deadwood, diseased and damaged branches is necessary during the life of a tree or shrub.

Such pruning is a necessary maintenance task in any garden, especially a public garden. Queens Park contains examples of poor pruning (e.g. pines) and a Tree Management Programme is required if these trees are to be made safe and, in some instances, aesthetically enhanced.

Implications

A Tree Management Programme should be commissioned by the Shire of Talbot and Clunes or Department of Conservation, Forests and Lands.

Pruning may in itself not actually prolong the life of a tree but by making the tree safer it can be retained longer. However, poor pruning techniques and a failure to identify and treat potential problems can affect the safety, landscape quality and survival of plants.

A tree surgeon should be consulted for specialised and difficult tree work.

In the event of tree removal, care should be taken not to damage trees and shrubs being retained. The stump should be removed as they can harbour pests and disease in addition to their unsightly appearance. Treatment with a "stump grinder" is recommended.

2.3 Surviving Nineteenth and Early Twentieth Century Planting

2.3.1 Policy

That all significant planting and features from the nineteenth and early twentieth century be retained.

Rationale

This period has been identified as the major period of significance of Queens Park. Little significant development took place after the early part of this century.

Implications

Most of the planting will be retained. All trees identified from this period should be retained unless they are in a dangerous condition. A detailed investigaiton will need to be made (using both early photographs and visual assessment) to determine the age of the planting.

Much of this work has already been undertaken by John Hawker of the oyal Botanic Gardens during a visit in 1985.

When surviving nineteenth centruy plantings are due for replacement (due to over-maturity, disease, damage or other reasons) replacement plantings should use the same species and preferably come from the same stock. For this reason propagating from existing mature trees should be undertaken. Further assistance with this and record keeping can be obtained from the Royal Botanic Gardens (contact Peter Lumley).

The southern 'pinetum' should be retained and replanted where necessary.

2.4 Existing Garden Structures

2.4.1 Policy

That all garden structures incorporated in the gardens in the nineteenth and early twentieth centuries be retained and conserved.

That detailed investigation into the original fabric of all such structures be undertaken before any work on them proceeds.

Rationale

The statement of significance identifies garden structures of this period as important components of the Queens Park.

Implications

Structures which would be retained include the fountain and small tinker shed in the northern section of the Park.

2.5 External Factors

2.5.1 Policy

That significant views or vistas from within Queens Park be retained.

Rationale

The amenity of the park is strongly influenced by its surrounds. This is particularly critical as Queens Park is only 50m wide at its widest end (the south) and just over 20m wide at its thinnest (the northern end).

Implications

Views of Creswick Creek are the most significant feature as they effectively contribute to the landscape quality of Queens Park and 'visually' increase its apparent size. Management of Creswick Creek should therefore be viewed as an intergral part of management of the Park.

The nineteenth and early twentieth century atmosphere is also provided by views to surrounding houses from this period. Those houses which are particularly prominent in this respect are 1, 3, 15, 19 and 21 Ligar Street; 12 Creswick Road; 41 Angus Street, corner Bland Street; 1 Cameron Street; former Butter Factory, Cameron Street; and former School of Mines, Service Street.

The SEC power lines are particularly intrusive and undergrounding of these could be considered.

Policy

That adjacent land gazetted as public park or for public purposes be incorporated in any future plans for Queens Park.

Rationale

The adjacent Victoria Park area was gazetted as a public park in 1888 and was clearly intended to form a link with Queens Park. Likewise a reservation for public purposes extends for 150 links (approximately 30m) from the bank of the creek (where the bank is not gazetted as a roadway -e.g. Creek Parade). This forms a continuous walkway through Queens Park and the Township of Clunes.

Implications

The existing walking tracks should be maintained and where necessary, upgraded.

Consideration could be given to reconstructing the suspension bridge adjacent to the east end of Bath Street to enable a complete 'circuit' to be undertaken by walkers.

Any new planting in Victoria Park or along the Creek could be based on the policy for Queens Park and thereby enhance the nineteenth and early twentieth century characher of the Creek Valley.

3.0 FUTURE WORKS

3.1 New Planting

3.1.1 Policy

That all new tree planting respect the nineteenth and early twentieth century character of Queens Park.

Rationale

This period is the most significant in the history of Queens Park and appropriate new planting could enhance this character.

Implications

Tree planting should utilise species known to have been available in Victoria's central goldfields in the late nineteenth and early twentieth century (with emphasis on the period when the park was planted in the late nineteenth century. Planting from this period is discussed in Part A, Section 3.0 and advice on appropriate species for the policy period could be obtained from the Royal Botanic Gardens. This information is available from the Royal Botanic Gardens who have a database compiled from old nursery catalogues and other contemporary sources. Documentary evidence may be available in council records or contemporary newspaper reports (these have not been checked).

To guide planting extensive use of relevant early photographs should be made especially in regard to location and style. The interpretation of these photographs may require expert advice from staff at the Royal Botanic Gardens.

The distinction between the southern 'pinetum' and northern 'pleasure garden' should be respected in any new planting. This will affect the choice and spacing of trees.

Many of the plants from this period are uncommon today and this should create interest for many visitors (especially if these plant are carefully labelled).

3.2 Post 1920 Plantings

3.2.1 Policy

That most post-1920 plantings (apart from replacement plantings of earlier species) be gradually phased out.

Rationale

The nineteenth and early twentieth century character of the garden will be enhanced by removal of later species.

Implications

There is scope for inclusions of some modern cultivars, but in general these are incompatable with the formal nature of the park. Such plants as Grevillea ..., found in the northern sections of the park, are more appropriate to a modern "bush garden" than a formal nineteenth century park.

There are very few plants in this category and their removal will not have a major impact on the park. This policy will, however, assist in creating a more accurate representation of Queens Park during its heyday.

3.3 Path Layout

3.3.1 Policy

That the original nineteenth century path layout be reinstated.

That original path detailing (i.e. materials, profile and edging) reinstated.

Rationale

The statement of significance has identified the original path layout as an important component of Queens Park.

Implications

Documentary and physical investigation will need to be undertaken to determine the original path layout as subsequent work has erased this layout.

Similar investigation will need to be undertaken to determine the original path detailing.

3.4 New Buildings or Alterations to Existing Buildings

3.4.1 Policy

That any buildings be sympathetic to the nineteenth and early twenthieth century character of the gardens.

Rationale

Buildings have the potential to make a large impact on the gardens. Buildings such as the Bowling Club House generally detracts from the significant character of the garden. Any new or replacement buildings should therefore strive to complement or even enhance the significance of the garden.

Implications

3.5 Fencing

3.5.1 Policy

That all fencing respect the nineteenth and early twenthieth century character of the park.

Rationale

The current fencing around the northern section does not add to the significance of the park, whereas the original timber picket fencing was a major feature of the park.

Implications

The new section of treated pine fencing north of the Bowling Club should be demolished and replaced by a fence more in character with the gardens. Research into evidence of the original fence should be undertaken.

Long term replacement of the perimeter fence should be considered. The design should follow the detail of the original timber picket fence.

A hedge of suitable Victorian species for the external boundaries should be planted as an interim measure until total replacement of the existing fence is possible. The hedge should be trimmed on the outside of the existing wire fence.

4.0 INTERPRETATION

4.1 Policy

That the gardens interpreted to assist public understanding of their significance.

Rationale

The gardens form a rich cultural environment for Clunes and the central goldfields area and have considerable potential for educating visitors (apart from the undoubted recreational potential of the park).

Implications

The wealth of early photographs should be exploited in any interpretation of the gardens. The council should obtain the highest quality reproductions of any photographs of the gardens and at least three sets should be produced. One set should be kept in archival storage (e.g. La Trobe collection, State Library of Victoria); one set for those in charge of maintenance and conservation of the gardens; and one set on public display.

A brochure containing a plan of the gardens, a summary of their history, the statement of significance and a summary of the policies should be produced and made available at a nominal cost (or even free of charge) to visitors to assist their enjoyment and help interpret the significance of the gardens.

This published material could be supplemented by a permanent or changing display of early photographs and material regarding the gardens, their history and current objectives and/or projects.

A comprehensive plant labelling programme should be commenced. This should be based on the work undertaken by John Hawker in other botanic gardens including the Royal Botanic Gardens. Full details including design of labels and costing are available from the Royal Botanic Gardens (contact John Hawker).

Any plants not identified by this study should be sent to the Royal Botanic Gardens for positive identification.

Any new evidence regarding the history of the gardens should be referred to the Historic Places Branch of the Ministry for Conservation & Natural Resources to assess whether any change in policy is necessary.

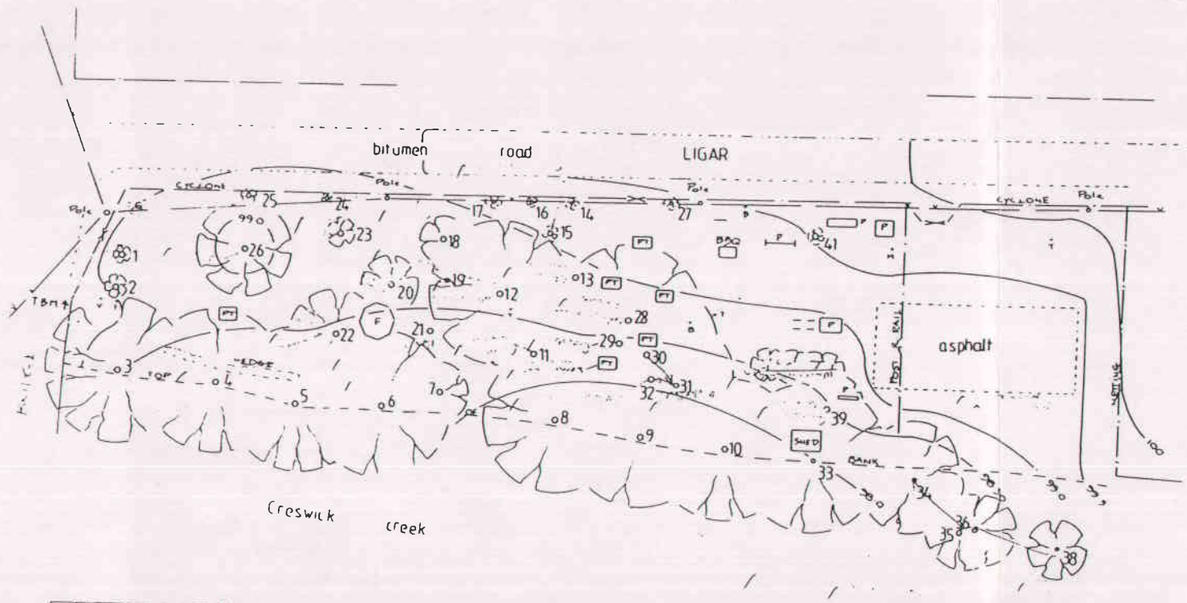
Council should actively seek more details of the history of Queens Park, in particular a more thorough check on council minute books and early newspapers than has been possible in this report.

A 'Friends of Queens Park' could be established to further the objectives of these policies. Contact could be made with Eve Almond at the Royal Botanic Gardens for details of the 'Friends' group at the RBG.

FEATURE PLAN OF CLUNES PUBLIC GARDENS

SCALE of METRES

0 10 20 30 40 50



no	type	butt	ht	spread
1	FLOWERING CUM	0.3	3	2.5
2	FLOWERING CUM	0.5	5	4.0
3	POPLAR		30	20
4	POPLAR		30	20
5	POPLAR	1.5	30	20
6	POPLAR		30	20
7		0.8	15	8
8	POPLAR		30	20
9	POPLAR		30	20
10	POPLAR		30	20
11	CYPRESS			
12	POPLAR		30	20
13	GREVILLEA	0.3	3	2.5
14	GREVILLEA		3	3
15	PINUS RADIATA		15	0.5
16			15	1.0
17	GREVILLEA		20	2.0
18		1.0	8.0	7.0
19			0.8	1.0
20		0.7	8	8
21		0.1	4	3
22	POPLAR	1.2	25	12
23	PINUS RADIATA	0.5	3.0	4
24			1.6	1
25	GREVILLEA		2	2
26	POPLAR	1.3	30	14
27	GREVILLEA		2	2
28	POPLAR	1.7	30	20

no	type	butt	ht	spread
29	POPLAR	1.0	20	10
30	POPLAR	0.5	20	15
31	POPLAR	1.0	20	15
32				
33	POPLAR	1.5	30	20
34	POPLAR	1.5	25	15
35	POPLAR	0.7	10	10
36	POPLAR	0.6	10	10
37				
38	POPLAR	0.5	8	8
39	CYPRESS	1.2	25	10
40				
41	PALM	1.0	20	7

KEY

symbol	
V	VALVE
T	TAP
G	ROCK GARDEN
PT	PICNIC TABLE
P	PLAYGROUND EQUIPMENT
B	BIN
F	FOUNTAIN
M	MONUMENT

LEVEL DATUM : ARBITRARY

TBM CONC BRIDGE APRON RL 100.00

no	type	butt	ht	spread
42	PINUS RADIATA	1.2	30	10
43	PINUS RADIATA	1.2	30	10
44		1	20	15
45		1	20	15
46		1	20	15
47		1	20	15
48		1	20	15
49		1	20	15
50		1	20	15
51		1	20	15
52	CYPRESS	1.7	25	20
53	CYPRESS	1	15	15
54	CYPRESS	1	10	15
55	PINUS RADIATA	1	20	15
56	CYPRESS	0	8	8

no	type	butt	ht	spread
57	PINUS RADIATA	1.0	15	8
58		0.8	10	9
59		0.8	10	8
60	PINUS RADIATA	1.2	20	15
61	PINUS RADIATA	0.6	15	8
62		0.8	10	8
63	CYPRESS	0.8	10	8
64	PINUS RADIATA	1.5	25	15
65	PINUS RADIATA	1.5	25	15
66	PINUS RADIATA	1.5	25	15
67	CYPRESS	1	8	4
68	PINUS RADIATA	1	20	8
69	PINUS RADIATA	0.8	10	5
70		1	8	8
71	CYPRESS	0.8	8	6

no	type	butt	ht	spread
72	CYPRESS	1.6	8	10
73	CYPRESS	0.8	10	8
74	PINUS RADIATA	0.3	6	4
75				
76				
77				
78				

DIVISION OF SURVEY & MAPPING

Appendix 1

Advice from Richard Barley, Horticulturist

Department of Conservation & Environment

Royal Botanic Gardens
and National Herbarium

Birdwood Avenue
South Yarra Victoria 3141
Australia
Telephone (03) 655 2300
Facsimile (03) 655 2350

File: 8.1.44
Your Ref:
In reply please quote:
Contact:
16 March, 1992

Mr Les Mason
Engineer
Shire of Talbot & Clunes
Shire Offices
Talbot 3371

Dear Les

Queen's Park and Pinetum at Clunes

Following our site visit on Friday 13th of March, I offer the following observations and recommendations regarding the trees and some other features of Queen's Park in Clunes:

1. Trees in Queen's Park

In general the trees in this park are in the mature phase of development. As such they require general maintenance to improve structure, health, aesthetic quality and safety. The risk of falling limbs can be minimised through remedial pruning and removal of dead wood and old stubs, and this work will improve their chances of long-term health.

Cabling is required in two specimens. There is a cypress (?Cupressus torulosa) with twin trunks which should be cabled at about one third the height of the trunks, and the elm with the three trunks needs a three-way cable to support all uprights. I would recommend this work rather than removal, because of the exposure to other trees which would result from total removal. Several of the larger trees have developed very uneven canopies by virtue of their close spacing, and to remove too many would leave these looking far from satisfactory.

I recommend the removal of several of the weaker trees:

Populus alba (White Poplar) hanging over the small garden shed (marked on attached plan)
Row of elm suckers next to playground equipment
Cedrus deodara - thin weak specimen behind large *Cedrus atlantica* f. *glauca*

The canopies of some of the poplars along the creek should be separated from the park specimens, to allow a more balanced development of the latter.

I strongly recommend that all tree work be carried out by a qualified arborist. A suitable person would be Trevor Lawrence of Ballarat. If he is too busy or unable to do the work, I am happy to supply further names of arborists who work around the state.

The ivy should be removed from trees along the creek line where possible, by cutting the ivy stems at the base of the tree and removing the vines when they are dead.

There are several trees, including the *Abies pinsapo* on the National Trust Register of Significant Trees, and two pines on the western side of the park which have been planted too close to the SEC wires. If allowed to mature they will require constant and severe pruning, which will ultimately ruin their shape. I gather at least one of the pines is commemorative, and therefore has intrinsic value.

I recommend that the SEC be approached with a view to relocating the wires underground. The SEC has funding for this type of work, and I believe this situation warrants relocation of wires. The wires were obviously installed after some of the offending trees (e.g. the *Abies*) had reached maturity, and were therefore poorly located from the outset.

An approach to have these wires put underground can be made through the regional office of the SEC. I would be happy to supply my comments to the SEC on this matter.

I do not think it appropriate to have a rubbish bin attached to the *Abies pinsapo* listed on the National Trust Register of Significant Trees. The practice of attaching bins (or any facility) to tree trunks should be avoided, as it causes damage to the trunk, provides a site for disease entry, and attracts increased pedestrian activity in the root zone of the tree, leading to compaction and deoxygenation of the soil.

2. Entrance gate area at the northern end of Queen's Park

The pedestrian entry point should be visually strengthened, by a 'formal' placement of trees or palms on either side of the gateway, inside the garden. Suitable species could include a pair of *Washingtonia robusta* (the palm at the carpark end of the gardens) or *Cordyline australis* (the Cabbage Palm, present in photographs of the gardens in its horticultural heyday), or perhaps some of the more formally-shaped conifers (*Sequoiadendron giganteum, Cupressus funebris, Picea* or *Abies spp.*).

The pile of rocks to the left inside the gate could be developed as a mounded rockery, with an assortment of succulent and bold-foliaged plants. This type of feature would be consistent with the historical theme of the gardens. If this option is not favored, then the rocks should be removed altogether, and the area use for other plantings.

3. Fountain

Although the fountain has historical significance, I do not think its renovation is justified at this time. Works on similar structures in provincial towns have proved to be very expensive, and I believe the most effective use of the resources of the Shire would be in developing the botanical features of the Gardens, rather than this structure. In its current state it does offer a degree of amenity as an historical feature, and I believe it should be retained as such. If in the long term substantial funds became available, the restoration of the fountain could be considered.

4. Box hedge

This feature, between the fountain and the bridge, appears in early photographs as a low clipped hedge. Lack of regular maintenance over a long period has led to its development into a taller, uneven hedge. Returning it to its earlier form would be

neither advisable nor possible. The current level of maintenance in the Gardens is insufficient for the requirements of a clipped box hedge.

I recommend that this hedge be lightly clipped over in early autumn and spring, and that cuttings be taken and propagated, with a view to replanting perhaps along the fence line.

5. Pathways

Historical photographs show a path system, meandering through the Gardens. The surface appears to have been finely crushed quartz. Archaeological surveys would need to be undertaken to confirm the exact positioning of these paths.

A long-term development plan may include reinstatement of the main path through the gardens, maybe linking up with a path to the pinetum. If this is to be done, I recommend the path be of similar dimension to the original, and the surface material be the same if possible.

6. Playground equipment

There seems to be a large quantity of equipment, all of which may not be necessary. If this is the case, then some rationalization of equipment should be carried out. I recommend that the actual need for playground equipment be examined, and it then be tailored accordingly.

All equipment should be contained within a single area, and not be allowed to spread through the gardens. This is important both from the point of view of child safety, and aesthetics of the park. Impact absorbing material (e.g. woodchips, tanbark) should be installed beneath the equipment where required, and all pieces of equipment should be examined in regard to their safety and condition.

7. Bowling Club carpark

The carpark between the Bowling Club and the Gardens detracts significantly from the amenity of the area in its current form. While I see the need for car parking facilities for the Bowling Club, I think it most unfortunate that the site was located within the Gardens reserve, as it effectively disrupts the continuity between the plantings of Queen's Park and the pinetum.

The situation can be improved by planting trees within parts of the carpark area. These will not only ameliorate the current visual impact of the carpark, but also provide shade for cars parked therein. The trees should not be positioned close enough to cause shading or dehydration problems for the bowling green (see plan).

The bitumen (remnant of the tennis court) between the northern end of the carpark and the play equipment will need to be taken up, and the substrate broken up before planting.

The planting areas within the carpark will need to be ripped or dug to a depth of around 500mm, and preferably have improved soil or organic matter introduced in the backfill. They will need to be bordered (e.g. by red gum sleepers), and have some sort of

protective barrier against errant drivers (e.g. low redgum post and rail, preferably not treated pine).

Some suitable genera and species for planting in this area include:

Quercus spp.
Platanus X acerifolius
Tilia spp.
Ulmus X hollandica

8. Pinetum

The pinetum is an important feature of the Gardens, which appears to have suffered from insufficient maintenance and misuse. Most of the trees require the attentions of a skilled arborist, to undertake routine maintenance (branch stub removal, deadwooding, weight reduction of selected limbs etc.). Such work will reduce the risk of damage to public and property from falling limbs, but also extend the aesthetic and healthy life of the trees.

Several trees should be removed (see plan). These are weak individuals with little or no potential for healthy development, and their removal will improve the conditions for remaining trees by reducing light restrictions, and competition for water and nutrients.

The stumps should be removed (ground out) when the trees are removed. The old cypress stumps should be removed also at this time, while the machinery is on site.

The open area (towards the southern side of the Bowling Club) where several trees have been removed should be replanted with conifers, preferably with some Australian relevance (e.g. *Araucaria cunninghamii* (Hoop Pine), *Agathis robusta* (Queensland Kauri), *Araucaria bidwillii* (Bunya-bunya Pine, *Callitris glaucophylla* (Cypress Pine, etc.)). Some of these may need protection from frosts during the first year or so.

The row of *Pinus radiata* (Monterey Pine) at the southern end of the Pinetum are still good specimens, but I recommend a new row be planted in the old road reserve, parallel to these (see sketch plan). This will give the new trees time to establish and achieve some growth before the inevitable removal of the older pines occurs. Suitable species to maintain the theme of the area would be *Pinus canariensis* (Canary Islands Pine), *Pinus ponderosa* (Western Yellow Pine) or *Pinus nigra var. maritima* (Causican Pine). The row should be one species only.

It would also be wise to plant some future replacements for the elm on the apex of the triangular island south of the pinetum (see plan).

The drains lining the disused road adjacent to the row of *Pinus radiata* are quite significant historical features, and care should be taken to preserve them. When viewed in May they had considerable amounts of weed growth. I recommend this be treated with a suitable translocatable herbicide (e.g. Roundup).

The boundary of the pinetum and Ligar Street requires some definition. I suspect that the alignment should be the same as the fence further north along the street at the Queens Park end.

I recommend that ultimately this area be fenced, and vehicles be excluded from the pinetum. There should be no need to use the pinetum as a carpark (especially once the shade is established in the other carpark), and indeed it is in conflict with the intended passive use of the area as an adjunct to Queens Park. Vehicles compact the soil in the root zone of the trees, and accelerate their decline. The area should be reserved for pedestrian use only. A gate could be included in the proposed fence, to allow necessary access by maintenance and emergency vehicles.

The various piles of rubble, concrete etc. should be removed, and further use of the pinetum as a stockpile area or tip prevented. The grass should be maintained as rough turf only, with slashing as required.

9. Link between Pinetum and northern end of the park

As a longer term aim, I would think it very desirable to have some sort of pedestrian link between the Queen's Park end of the reserve and the Pinetum, to allow access without people having to walk along the road.

An approach may be to design and build a boardwalk along the creek side of the bowling club. This would be an ideal project for one the Government's schemes for the unemployed. It would only require good plans and supervision, and a heap of timber. Perhaps it would be worth approaching one of the local timber promotion groups (e.g. in Creswick).

10. Trees in the Camping Ground

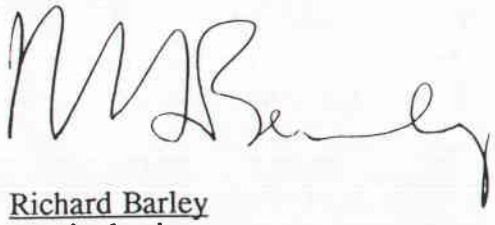
Several of the very worst of the elms along the creek frontage need to be removed. They have been identified on site, and should require no further details.

An old metal and wire guard around the trunk of the *Eucalyptus botryoides* near the entrance of the camping ground should be removed. A specimen of *E. botryoides* (the one close to the track) near the new cabin should be removed.

I think it would be wise to investigate what type of herbicide has been used on the elm suckers along the creek frontage toward the tent camping area. It may have some bearing on the future health of the mature trees. I also recommend ensuring that no campers (or other unauthorised people) carry out this sort of *ad hoc* weed control.

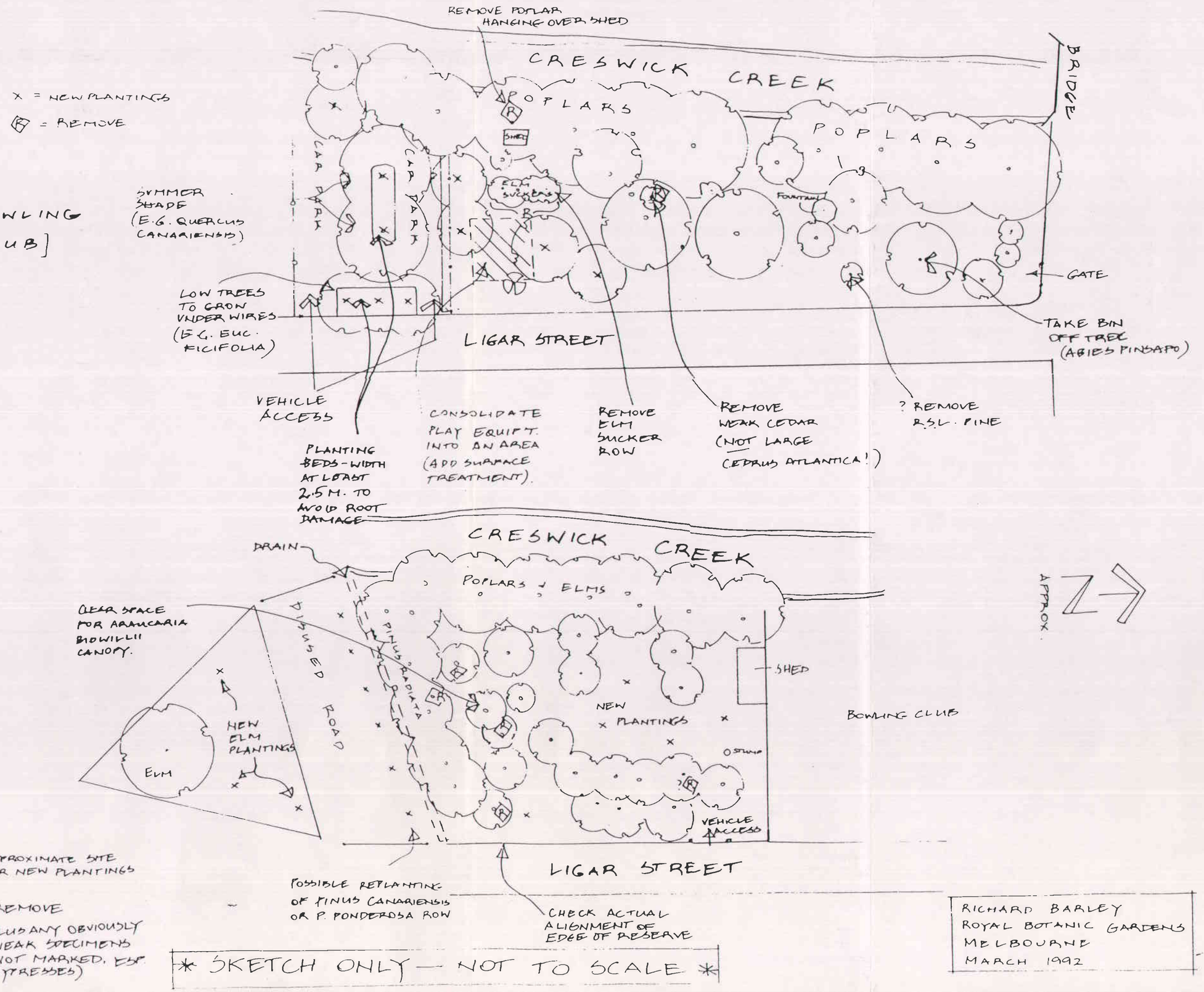
I look forward to my next visit to Clunes. Please contact me if you have any queries, on 03 655 2323, or at the above address.

Yours sincerely



Richard Barley
Horticulturist

QUEENS PARK - CLUNES



X = APPROXIMATE SITE FOR NEW PLANTINGS

R = REMOVE (PLUS ANY OBVIOUSLY WEAK SPECIMENS NOT MARKED, ESP. CYPRESSES)

* SKETCH ONLY — NOT TO SCALE *

RICHARD BARLEY
ROYAL BOTANIC GARDENS
MELBOURNE
MARCH 1992

Appendix 2

Significant Trees in the Shire of Talbot & Clunes

114

FAMILY: Pinaceae
NAME: Abies pinsapo Boiss.
COMMON NAME: Spanish Fir
NO. OF TREES: Single
LOCATION: Queens Park, Clunes
LONGITUDE/LATITUDE:
MUNICIPALITY: Shire of Talbot and Clunes
OWNERSHIP: Shire of Talbot and Clunes
SIGNIFICANCE: Location or Context: historic garden or park; Outstanding Size: canopy spread
STATUS: Recorded
ACCESS: Unrestricted
CIRCUMFERENCE: 2.44m HEIGHT: 26.2m SPREAD: 12.3m DATE: 9/10/86
ESTIMATED AGE: 100 yrs
CONDITION: Good
NOTES: A native of Spain, the species has grown particularly well throughout the Central Highlands, Daylesford, Coghills Creek, Creswick, Ballarat, Buninyong and Mt Macedon.

410

FAMILY: Pinaceae
NAME: Cedrus atlantica 'Fastigiata' (Endl.) Carr
COMMON NAME: Fastigiated Blue Atlas Cedar
NO. OF TREES: Single
LOCATION: Queens Park Botanic Gardens, Clunes
LONGITUDE/LATITUDE:
MUNICIPALITY: Shire of Talbot and Clunes
OWNERSHIP: Shire of Talbot and Clunes
SIGNIFICANCE: Horticultural Value: Location or Context: historic garden or park; Rare or Localised: 10-50 known specimens; Outstanding Example of Species
STATUS: Recorded
ACCESS: Unrestricted
CIRCUMFERENCE: 3.45m HEIGHT: 27.0m SPREAD: 15.4m DATE: 8/8/85
ESTIMATED AGE: 106 yrs
CONDITION: Good
NOTES: This form is rare in cultivation in Victoria.

415

FAMILY: Pinaceae
NAME: Cedrus atlantica f. glauca (Endl.) Carr
COMMON NAME: Blue Atlas Cedar
NO. OF TREES: Single
LOCATION: Queens Park Botanic Gardens, Clunes
LONGITUDE/LATITUDE:
MUNICIPALITY: Shire of Talbot and Clunes
OWNERSHIP: Shire of Talbot and Clunes
SIGNIFICANCE: Horticultural Value: Location or Context: historic garden or park
STATUS: Recorded
ACCESS: Unrestricted
CIRCUMFERENCE: 3.6m HEIGHT: 23.0m SPREAD: 18.0m DATE: 8/8/85
ESTIMATED AGE: 106 yrs
CONDITION: Good
NOTES: This large and dominant tree is significant due to the presence adjacent of an outstanding example of C. atlantica f. fastigiata which illustrates the different growth habits.

417

FAMILY: Myrtaceae
NAME: Eucalyptus camaldulensis Dehnh.
COMMON NAME: River Red Gum
NO. OF TREES: Single
LOCATION: Roadside 0.3km from Maryborough Road, western side past 'London Bridge', 1.2km from Talbot
LONGITUDE/LATITUDE:
MUNICIPALITY: Shire of Talbot and Clunes
OWNERSHIP: Shire of Talbot and Clunes
SIGNIFICANCE: Outstanding Size: circumference; Curious Growth Form: unusually damaged; Aboriginal Culture: Corroboree tree
STATUS: Classified
ACCESS: Unrestricted
CIRCUMFERENCE: 12.2m HEIGHT: 18.4m SPREAD: 26.0m DATE:
ESTIMATED AGE: 500 yrs
CONDITION: Fair
NOTES: The trunk has a cavity 2.2m wide and over 4m high. The tree is known as the 'Aboriginal Maternity Tree'. The legend is that the cavity provided protection to the Aborigines.

418

FAMILY: Fagaceae
NAME: Quercus suber L.
COMMON NAME: Cork Oak
NO. OF TREES: Stand of 40
LOCATION: South of Mt Beckworth and north of Glendaruel
LONGITUDE/LATITUDE:
MUNICIPALITY: Shire of Talbot and Clunes
OWNERSHIP: Department of Conservation & Environment
SIGNIFICANCE: Horticultural Value: Location or Context: contribution to landscape
STATUS: Recorded
ACCESS: Unrestricted
CIRCUMFERENCE: 1.6m HEIGHT: 12.0m SPREAD: 8.3m DATE: 8/8/85
ESTIMATED AGE: 60 yrs
CONDITION: Good
NOTES: This stand is one of many trial plantings of the species by the former Forests Commission. May be of genetic importance and is a potential seed source.

Appendix 3

Dilapidation Assessment and Restoration Proposal for The Queens Park at Clunes by Allom Lovell & Associates.

DILAPIDATION ASSESSMENT AND RESTORATION PROPOSAL

FOR

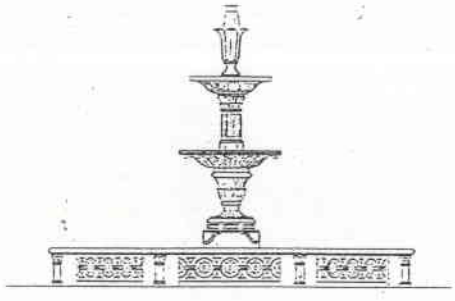
THE QUEENS PARK FOUNTAIN
AT

CLUNES

DRAFT

Prepared for

THE CLUNES TOURIST AND DEVELOPMENT ASSOCIATION



Allom Lovell & Associates Pty Ltd
Conservation Architects
35 Little Bourke Street
Melbourne

April 1993

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1.0 INTRODUCTION

1.1 Background and Brief

This report details the results of an existing condition survey and assessment of the Queens Park Fountain at Ligar Street, Clunes. The survey was commissioned by the Clunes Tourist and Development Association and was carried out on location by Allom Lovell and Associates, Conservation Architects.

The principal objectives of the survey and assessment have been as follows:

1. to assess the heritage significance
2. to establish areas where failures have occurred and the likely causes;
3. to predict the likely outcome of the failed areas if left unattended; and
4. to prepare appropriate strategic options for conservation repair and maintenance both in the short term and in the long term including assessing the viability of relocating the fountain to a more central location within the town.

1.3 Methodology

The report broadly follows the format of the Australia ICOMOS (International Council on Monuments and Sites) guidelines for the preparation of conservation plans and the principles set out in the Australia ICOMOS Charter for the Conservation of Places of Cultural Significance (Burra Charter) adopted by Australia ICOMOS to assist in the planning conservation of heritage places.

1.4 Terminology

The conservation terminology used in this report is of a specific nature, and is defined within the Australia ICOMOS Charter for the Conservation of Places of Cultural Significance (the Burra Charter) as endorsed by the Australian Heritage Commission (Appendix A). The terms most frequently referred to are: **place, preservation, restoration,** and **adaptation.** These terms are defined in the charter as follows:

'Place' means site, area, building or other work, group of buildings or other works together with associated contents and surroundings.

'Preservation' means maintaining the fabric of a place in its existing state and retarding deterioration.

'Restoration' means returning the existing fabric of a place to a known earlier state by removing accretions or by reassembling existing components without the introduction of new material.

'Reconstruction' means returning a place as nearly as possible to a known earlier state and is distinguished by the introduction of materials (new or old) into the fabric. This is not to be confused with either re-creation or conjectural reconstruction which are outside the scope of this Charter.

'Adaptation' means modifying a place to suit proposed compatible uses.

1.5 Listings and Classifications

The fountain is not included on the Register of Historic Buildings, nor is it listed as a notable structure by the National Trust of Australia (Victoria). In the 1988 Talbot and Clunes Conservation Study, the fountain was identified by conservation consultant Richard Aitken as one of the nineteenth century garden structures surviving within Queens Park. The fountain was not individually assessed as part of this study, but it is relevant to note the statement of significance for the park in general.

> Queens Park is one of a number of small provincial botanic gardens, a garden form popular in nineteenth century Victoria. The garden contains many remnant nineteenth and early twentieth century plantings and has considerable potential for reconstruction of missing elements using the wealth of documentary evidence. The garden remains as a significant reminder of contemporary reaction against mining debris and representative of an early reclamation project.[1]

2.0 HISTORY AND ANALYSIS

2.1 Generally

The fountain was erected in 1887 coinciding, with the completion of Queens Park, within which it is located. The park was established to commemorate the jubilee of Queen Victoria's ascension to the throne in 1837. The fountain is located to the northern end of the park and is partially visible from Ligar Street and Cameron Street.

The fountain structure consists of two principal components; the multi-tiered, brick and decorative pressed cement, or 'cast stone', fountain structure and the raised, rendered brick pond, with applied pressed cement mouldings, which surrounds the fountain structure at low level and collects the water which has spilled down from the nozzle at the top via the two bowls. Decoratively, the design features interpretations of neo classical motifs typical of late Victorian architectural style, including the Corinthian order colonettes, the acanthus leaves about the main shaft, the pateras to the pond wall and the vermiculation at the plinth.

The fountain is currently inoperative and it appears to have been in this condition for a considerable period of time. This inoperative condition is due to several significant construction failures. In particular, damage is evident at the pond wall, which is fractured in several locations, and to the pressed cement bowls on the fountain structure, where spalling and general degradation has occurred. In addition, there is general degradation of the applied decorative pressed cement elements to both the fountain structure and the pond wall. The inspection of the base of the pond indicated minimal damage but this area will require further examination to confirm its integrity and intactness. A photograph dated 1936 and attributed to 'Mrs Gilbert' indicates a fountain head at the top of the fountain structure from which the water jet was sprayed. This element is now missing.

Although the fountain has been inoperative for some time, and gives the appearance of a derelict and unmaintained structure, it is noted that further damage, which might be expected due to the action of vandals, has not occurred.

The inspection revealed that it is possible to repair the fountain, but that it is likely to be an expensive exercise.

2.2 Preliminary Statement of Significance

The following statement statement of significance has been prepared on the basis of the limited information readily available about existing fountain structures in Victoria. To date a comprehensive study of fountain structures in the state has not been undertaken. Richard Aitken's 1986 study of the Thompson Fountain in the Hamilton Botanic Gardens represents a first attempt at listing extant fountains in Victoria and is the source of the most relevant information on the subject.[2] The list of known extant fountains produced as part of this report identifies the Clunes fountain as one of the earlier fountains in rural gardens (though dates of many other fountains in these areas are not known). Further research is needed to clarify the exact nature of the relative significance of this fountain.

Preliminary Statement of Significance

The Queens Park Fountain is of significance in the local context as a remnant nineteenth century structure within Queens Park, Clunes, and a structure which is contemporary with the construction of the park. The survival of the fountain and other nineteenth and twentieth century structures

enhances the historical significance of the park, which has been identified as one of a network of rural botanic gardens which were established in the nineteenth century. In addition to its significance in this local context, the fountain is potentially of individual significance as a fountain structure. While there are a number of similar commemorative fountains throughout the state, (for example, in Daylesford, Ararat, Ballarat, Bendigo, Geelong and Melbourne), the Clunes fountain is of significance in that it is a relatively intact example of such structures, and one of the few to be found in botanical gardens in rural Victoria.

2.3 Options Arising from the Statement of Significance

Subject to finding more information about its design, construction and history it is a structure which may well be of sufficient importance to be included on the Register of the National Estate (Australian Heritage Commission listing) and/or the Historic Buildings Register (State Historic Buildings Council listing). Should it be included on either or both of these registers it would be eligible for financial assistance in the form of grants or low interest loans for works.

To pursue this matter further the Tourist and Development Association needs to complete applications to both bodies seeking consideration for listing . The applications should be accompanied by detailed historical information about the fountain which identifies the reasons for its historic and/or architectural significance.

National Trust Appeals

If the National Trust lists the structure it would be possible to launch a National Trust sponsored fund raising appeal. This enables the appeal to be tax deductable and provides a means of administering and publicising the appeal. Such appeals still depend on the activity of the fund raising group but the Trust sponsorship potentially lends greater status to the project.

It is suggested that the National Trust be approached to review their recording of the fountain and suggest to them that it warrants upgrading to classified status.

Direct Approaches for Donations

Funds can also be raised by directly approaching potential donors either as part of a general appeal or on a one off gift basis. Such donors might be existing residents or businesses within the district or people who have left the area but still have an interest. Within this area the Shire Council might also be approached to provide dollar for dollar assistance or a direct grant.

3.0 PHYSICAL DESCRIPTION AND DILAPIDATION ASSESSMENT

3.1 Context and Surrounds

3.1.1 Description

The fountain is located in the northern section of Queens Park which is bounded by Creswick's Creek to the west, Cameron Street to the north, Ligar Street to the east and Smeaton Street to the south. The park, which is protected on the street frontages by a low chain mesh fence, is densely planted, in particular to the northern end which was cultivated at the turn of the century as a 'pinetum'. Most of the trees in the park have reached full maturity and due to the density of the foliage and the size of the trees immediately about the fountain it is very difficult to appreciate it from any vantage point other than from within the park which is itself difficult to access due to the perimeter fence which has limited openings.

3.1.2 Dilapidation Assessment

In addition to the visual and access problems of the location, the effects of tree root activity from the adjacent mature trees, two of which are within three metres of the pond wall, are evident from the heaving of the substrate which has caused the breaches in the pond wall. It is clear that this problem has existed for some time; an earlier attempt at repairing the inner skin of the pond is visible, but has failed due to the continued growth of the tree roots.

3.1.3 Repair and Conservation

It is recommended that a comprehensive study of the vegetation and planning of the park be undertaken and that a management plan be prepared for the future protection, growth and operation of the park, including strategies for the ongoing protection, maintenance and improved access to the fountain.

If the pond wall is to be made water tight, it will be essential to curtail the effects of the existing trees and to provide ongoing protection from the effects of roots of any other trees in the vicinity. This may involve the need to completely remove the two closest trees and to install a tree root barrier to the complete perimeter of the pond wall.

3.2 The Pond

3.2.1 Description

The pond is constructed of brickwork which has been finished in a combination of plain cement render and applied pressed cement decorative mouldings. It is octagonal in plan form and measures 3.6 metres across internally at the widest point and is 0.5 metres deep. The supporting substructure to the base and to the wall was not examined as part of this survey.

The pond and its base are both finished internally in plain render. Externally the finish is of heavily ornamented pressed cement work, with each of the eight bays of the wall featuring a band of interconnecting circular rosettes. The junctions between the bays are constructed as projecting pedestals with an engaged colonnette. The top of the wall is flat and 0.4 metres wide and appears to have been designed to be used as a seat. The pond wall has been constructed as two separate skins with the inner skin designed to perform the function of water retention, while the outer skin is

designed only to support the decorative work. A water outlet pipe is located to the south west corner.

3.2.2 Dilapidation Assessment

The pond wall is generally in poor condition showing major fractures through the complete wall thickness in at least four locations and several other fractures, the full extent of which could not be accurately determined. At the points of fracture there has been both vertical and horizontal displacement of up to 30mm, visible only on the exterior, where patching of the cracks has been attempted. At least half of the pressed cement rosettes on the exterior of the pond wall are either missing or damaged, while none of the engaged colonettes remains intact at the pedestal corners. The inner skin of the wall has become separated from the outer skin and the resultant fracture between the two is allowing unrestricted water ingress which would be accelerating the decay from within of both the skins. The presence of this fracture which runs for the complete perimeter on the top of the wall indicates that the inner skin has probably been replaced at some stage. The existing failure of the inner skin therefore confirms the continued disruption to the substrate described in Section 3.1 of this report.

The concrete base of the pond appears to be relatively sound, and it appears likely from the condition of the walls, that it has been replaced. The capacity of the base to retain water could not be determined and would have to be tested.

In summary, the condition of the wall of the pond is the most serious problem with the fountain, particularly with respect to the need for this wall to be water tight. The failure of the wall can be attributed to the presence of tree roots and the resultant heaving of the subsoil as the moisture content varies from season to season. Although an inspection of the footings was not possible, it is clear that with the unstable subsoil conditions, the footings are inadequate.

3.2.3 Repair and Restoration

Stage One - Further Investigation and Initial Stabilisation

The first action must be to prevent the continued decay due to failing footings which appears to be the result of the expansion of the adjacent trees root systems. It is recommended that a landscape consultant be engaged to advise further on this matter as it may prove viable to stabilise the subsoil condition and retain the trees. The condition of the footings to the wall and to the base were not inspected as part of this study and will need to be exposed and inspected before determining the scope of the works required.

Stage Two - Repair and Restoration

In order to make the fountain operable again the pond must be made waterproof. Having established the cause of the fracturing to the wall and undertaken initial stabilisation of this condition there are two principal options for the waterproofing of the pond.

Option 1
Make repairs to the existing masonry wall and install a new copper or stainless steel membrane lining.

Comment
This option is the more expensive but is guaranteed to provide a long lasting and impermeable membrane. It is not, however, in keeping with the original design and is therefore a compromise from a conservation point of view.

Option 2
Remove complete inner skin of brickwork and rebuild using suitable waterproof mortar to provide watertight skin.

Comment
This option is the cheaper of the two and would maintain the existing design. The success of the work would, however, be dependent on the degree to which one could guarantee no further foundation movements. It would therefore involve the removal of adjacent trees. It would also involve higher ongoing maintenance costs.

3.3 The Fountain Structure

3.3.1 Description

The fountain structure, which is centrally placed within the octagonal pond, consists of seven distinct levels and measures approximately 3.4 metres from the base of the pond. The seven levels from the bottom to the top are as follows :

1. Plinth
2. Main Urn
3. Main Bowl
4. Shaft
5. Secondary Bowl
6. Secondary Urn
7. Water Jet Nozzle Piece (missing)

The plinth is square shaped and tapers up to an octagonal plan form. It is constructed of brick and is plain rendered with openings to each of the four faces below water level. An inscribed marble plaque to the north eastern face reads :

1887
ERECTED BY THE BURGESSES OF CLUNES
AS A MEMORIAL OF AFFECTION AND LOYALTY
ON THE COMPLETION OF THE FIFTIETH YEAR OF
THE REIGN OF HER MAJESTY QUEEN VICTORIA

J E MEYERS MAYOR

There is also a smaller marble piece attached to the south western face.

Mounted on an octagonal base on top of the plinth is the main urn which supports the main bowl or dish, creating a cascading effect when overflowing with water. Within the bowl a shaft consisting of four co-joined colonettes rises up to support the secondary bowl which would spill water into the main bowl. Within the secondary bowl sits the secondary urn which in turn supported the now missing water jet nozzle piece. All of the elements above the plinth appear to have been manufactured as precast pressed cement or 'cast stone' and then assembled on site.

3.3.2 Dilapidation Assessment

With the exception of the general condition of the two bowls, the missing nozzle at the top and the general degradation and absence of some of the decorative elements, the fountain structure is in a reasonably sound condition. Access to the original reticulation pipework was not possible as part of this inspection but it can be assumed that an ungalvanised pipe runs from top to bottom. This pipe is likely to be functional not only for water delivery to the nozzle but also as a structural core. While the exterior of the structure appears generally sound, the condition of the internal pipe will need to be investigated further. Should it prove to be rusting it will require replacement.

The plinth requires minimal remedial works with the exception of the lettering to the marble plaque. Subject to the methods proposed to make the fountain operational, it is possible that some works to the hollow interior of the plinth will be required to facilitate installation of new water reticulation plumbing.

The outer rim to the main bowl has almost completely spalled off at the point of the reinforcement steel which has rusted. The surface of the interior of both bowls is significantly decayed due to the action of minerals in the water and mosses and lichens which have attacked the surface. While the bowls appeared sound otherwise, it can be assumed that work would be required to these areas.

Throughout the length of the fountain structure there are various missing or damaged decorative elements such as leaves to the underside of the main bowl, baubles to the perimeter rim of the secondary bowl and leaves to the main urn.

3.3.3 Repair and Restoration

The lettering to the marble plaque should be carefully restored by a qualified stonemason.

While both of the main bowls appear to be in reasonable condition and repairable as opposed to requiring replacement, this will have to be confirmed with a more detailed inspection. Based on the inspection undertaken, the repairs required would be limited to the removal of the exposed steel and reinstatement of the missing rim to the main bowl, the resurfacing of the interior faces of both bowls and the repair and replacement of the missing decorative baubles to the rim of the secondary bowl.

The missing decorative elements should be replaced using a compatible material to the existing pressed cement, and adhered using stainless steel dowels and epoxy resin adhesive. Moulds based on casts taken from existing elements can be made for almost all of those elements which are missing.

3.4 Reticulation

On the assumption that the fountain is to be made operable again, new plumbing and electrical work will be required to facilitate the circulation of water. This will affect the fountain structure as well as the pond. The preferred system is one which relies on recycling water and the concomitant use of an electric pump and filtering system. This system, while not typical of the original system, is preferred for several reasons. For example, it enables the use of soft', or filtered water which minimises corrosion of the structure, it minimises the consumption of water, it is independent of the town water supply pressure variations and it can be automatically controlled. The system is very simple and involves a pump and control device housed into a recessed sump either within the pond or preferably outside the perimeter of the pond wall. This pump is connected to a pipe which runs to the top of the fountain to the nozzle. Should the existing steel pipe prove to be in reasonable condition, a new plastic inner pipe can be inserted into it. Alternatively, it may be necessary to remove the steel pipe if it is corroded. Given the precast construction technique of the existing structure it is certainly viable to disassemble the components to replace this pipe if required.

The missing water jet component should be manufactured new from pressed cement based on drawings produced from an interpretation of the evidence contained in old photographs.

3.5 Lighting

For the purposes of display and for security it is recommended that submersible spotlights be placed within the pond. As the pumping system will require an electrical supply in any case, the additional expense can be minimised.

3.6 Fence

An early photograph of the fountain shows a section of a picket fence and this might be used as the reference point in designing a new fence structure.

3.7 Landscaping

It is recommended that a gravel pathway be reinstated around the perimeter of the pond as seen in the old photographs. Such a path would, however, need to be incorporated into a path network throughout the park which would be designed with appropriate edging (kerbing).

4.0 RESTORATION OPTIONS AND COSTINGS

4.1 Generally

This survey has identified a number of specific works required to the fountain to either maintain it or to restore it to original working order. These can be broken down into four categories:

- urgent repairs and maintenance works,

- long term repair and maintenance works and,

- restoration works

- modifications

In all these categories it would be desirable that the general conservation objective should be borne in mind and where works are carried out they are based on knowledge of original detailing and structure. In all cases it would be highly desirable to avoid temporary solutions.

4.2 Urgent Works

The urgent works are those that are required to prevent the continued deterioration of the built fabric or to ensure public safety. These are works to which an immediate commitment of funds should be made and include further investigations and arresting of the decay caused by tree root activity.

4.3 Long Term Repairs

The long term repair and maintenance works are those works that should be carried out, preferably within the next one to five years, to prevent longer term failure in the building fabric. If not carried out there is the potential for the cost of associated rectification work to be substantially higher than at present. They are, however, not works that relate to public safety. Works in this category would include installation of a root barrier if required and erection of protection against vandals.

4.4 Restoration Works

The third category, restoration works, includes those works that it would be desirable to undertake for the long term conservation and restoration of the fountain. They are works in which there will always be a choice regarding their execution. These works are those that would restore the fountain to a condition approximating the original.

4.5 Adaptive Works

The final category are adaptive type works which are deemed desirable given the different demands of the contemporary society versus those that existed when the fountain was first erected. These works include the provision of electricity.

4.6 Costings

The following costing information has been prepared after assessment of the required works and discussions with contractors experienced in similar work. The costings are indicative only but will provide an order of estimate enough to prepare strategies for any conservation works.

Supply and install new electrical gear

New pump, filter, treatment plant, control board, pit, plumbing and lighting and power supply.	**$15,000**

Repair Tank (options)

1. Remove and rebuild complete pond including walls and base saving and reusing wherever possible existing decorative mouldings	**$40,000**
2. Remove and rebuild complete inner skin	**$20,000 - $30,000**
3. Repair outer skin and install new stainless steel or copper membrane lining	**$40,000**

Repair Fountain Structure

1. Modelling	**$3,000**
2. Make moulds	**$5,000**
3. Manufacture missing or damaged pressed cement components	**$5,000**
4. Install new pressed cement components	**$5,000 - $10,000**

Other

Plumbing Assume new PVC liner to existing steel pipe to fountain structure and connect up to new pump.	**$2,000**
Fence Install new perimeter paling fence in compliance with Australian Standards requirements for swimming pool safety fences	**$5,000**
Paths Install new 2.0 metre wide gravel path to complete perimeter including edging	**$1,500**
Demolition Remove two mature trees, grub out stumps and treat ground for suckers.	**$5,000**
Root Barrier Install new flexible polyethylene root barrier in connection with new fence and gravel pathway.	**$7,500**

TOTAL	**$74,000 - $99,000**

Restoration should reveal anew, culturally significant aspects of the *place*. It is based on respect for all the physical, documentary and other evidence and stops at the point where conjecture begins.

ARTICLE 15
Restoration is limited to the reassembling of displaced components or removal of accretions in accordance with Article 16.

ARTICLE 16
The contributions of all periods to the *place* must be respected. If a *place* includes the *fabric* of different periods, revealing the *fabric* of one period at the expense of another can only be justified when what is removed is of slight *cultural significance* and the *fabric* which is to be revealed is of much greater *cultural significance*.

Reconstruction

ARTICLE 17
Reconstruction is appropriate where a *place* is incomplete through damage or alteration and where it is necessary for its survival, or where it recovers the *cultural significance* of the *place* as a whole.

ARTICLE 18
Reconstruction is limited to the completion of a depleted entity and should not constitute the majority of the *fabric* of a *place*.

ARTICLE 19
Reconstruction is limited to the reproduction of *fabric* the testedical and/or documentary evidence. It should be identifiable on close inspection as being new work.

Adaptation

ARTICLE 20
Adaptation is acceptable where the *conservation* of the *place* cannot otherwise be achieved, and where the *adaptation* does not substantially detract from its *cultural significance*.

ARTICLE 21
Adaptation must be limited to that which is essential to a use for the place determined in accordance with Articles 6 and 7.

ARTICLE 22
Fabric of *cultural significance* unavoidably removed in the process of *adaptation* must be kept safely to enable its future reinstatement.

Conservation Practice

ARTICLE 23
Work on a *place* must be preceded by professionally prepared studies of the physical, documentary and other evidence, and the existing *fabric* recorded before any disturbance of the *place*.

ARTICLE 24
Study of a *place* by any disturbance of the *fabric* or by archaeological excavation should be undertaken where necessary to provide data essential for decisions on the *conservation* of the *place* and/or to secure evidence about to be lost or made inaccessible through necessary *conservation* or other unavoidable action. Investigation of a *place* for any other reason which requires physical disturbance and which adds

substantially to a scientific body of knowledge may be permitted, provided that it is consistent with the conservation policy for the *place*.

ARTICLE 25
A written statement of conservation policy must be professionally prepared setting out the ***cultural significance***, physical condition and proposed ***conservation*** process together with justification and supporting evidence, including photographs, drawings and all appropriate samples.

ARTICLE 26
The organisation and individuals responsible for policy decisions must be named and specific responsibility taken for each such decision.

ARTICLE 27
Appropriate professional direction and supervision must be maintained at all stages of the work and a log kept of new evidence and additional decisions recorded as in Article 25 above.

ARTICLE 28
The records required by Articles 23, 25, 26 and 27 should be placed in a permanent archive and made publicity available.

ARTICLE 29
The items referred to in Article 10 and Article 22 should be professionally catalogued and protected.

EXPLANATORY NOTES

Article 1 Place includes structures, ruins,archaeological sites and areas.

Article 1.5 The distinctions referred to in Article 1.5, for example in relation to roof gutters, are:
Maintenance - regular inspection and cleaning of eaves spoutings.
Repair involving restoration - returning of dislodged gutters to their place.
Repair involving reconstruction - replacing decayed gutters.

Article 2 Conservation should not be undertaken unless adequate resources are available to ensure that the fabric is not left in a vulnerable state and that the cultural significance of the place is not impaired. However, it must be emphasised that the best conservation often involves the least work and can be inexpensive.

Article 3 The traces of additions, alterations and earlier treatments on the fabric of a place are the best evidence of its history and uses.
Conservation action should tend to assist rather than to impede their interpretation.

Article 8 New construction work, including infill and additions, may be acceptable provided:
It does not reduce or obscure the cultural significance of the place.
It is in keeping with Article 8.

Article 9 Some structures were designed to be readily removable or already have a history of previous moves, eg. prefabricated dwellings and poppetheads. Provided such a structure does not have a strong association with its present site its removal may be considered.
If any structure is moved it should be moved to an appropriate setting and given an appropriate use. Such action should not be to the detriment of any place of cultural significance.

Article 11 Preservation protects fabric without obscuring the evidence of its construction and use. The process should always be applied:
Where the evidence of the fabric is of such significance that it must not be altered. This is an unusual case and likely to be appropriate for archaeological remains of national importance.

Where insufficient investigation has been carried out to permit conservation policy decisions to be taken in accord with Articles 23 to 25.

New construction may be carried out in association with preservation when its purpose is the physical protection of the fabric and when it is consistent with Article 8.

Article 12 Stabilisation is a process which helps keep fabric intact and in a fixed position. When carried out as a part of preservation work it does not introduce new materials into the fabric. However, when necessary for the survival of the fabric stabilisation may be effected as part of a reconstruction process and new materials introduced. For example, grouting or the insertion of a reinforced rod in a masonry wall.

Article 13 See explanatory Note for Article 2.

Appendix 4

Shielding of Tree Roots

Telephone discussion with Mr. Jim Holden,
VicRoads, Kew Telephone 03 854 2452

Tree Root Barriers

Removal of Tree

In his experience the removal of the tree sometimes creates greater problems as the ground rehydrates once the tree is not taking moisture from the area and this can cause more earth movements and lead to more damage than if the tree was retained.
He felt that the roots of trees could take some pruning, carefully carried out with a good chance of survival for the tree.

Construction of Root Barrier

Need to construct a slit trench using a chain trencher such as a "ditchwitch". Most trenchers only dig to 1200mm but should aim to use one that can dig to 1500mm. These types of machines are used by the SEC or by private excavation contractors.

Need to watch out for services. Locate water pipe and hand dig around it and mark so that not damaged by the contractor. The Gas and Fuel inspectors have "Pipe finders" which may have to be used to locate the pipe initially.

The root barrier should be made in the shape of a square with the sides positioned to do the least damage possible to the existing trees. This may mean placing the angle of the square near the tree. When marking out the square allow for the trenches to go past the corners as the digger works on a 60 degree angle and need to have the trench vertical at the corners. May need to use a ditcher shovel to ensure that the trench is clean of earth.

The barrier should be High Density Polyethylene (HDPE) 1mm thick sheets and placed in one piece, bent at the corners. The HDPE is available from "Polyweld" in Melbourne. The barrier should be placed on the side of the trench nearest the fountain. The barrier should be placed as soon as possible in the trench to minimise the danger of trench collapse. The barrier should have a 1 metre overlap at the join. This should be placed as far from the major tree roots as possible. May have to be located at the water pipe. This needs to be carefully screened using slits in the barrier.

VicRoads use a tree root inhibitor "Casoron" sprinkled in the base of the trench to deter roots from travelling under the barrier. This should also be used at the join and around the slit for the water pipe.

Backfill the trench with "liquafil" a cement/sand/fly ash fill that is available from "Pioneer". It flows like water around the trench. VicRoads use the weakest grade available. If this is not available a mortar mix can be used. Very wet to ensure that it flows around.

The plastic should come to the surface and protrude into the gravel of the pathway. Roots try very hard to go over the barrier.

5.0 CONCLUSIONS

This report identifies that the fountain is of historic importance, that it is in a reasonably intact condition and that it is repairable.

To fully restore the fountain in the existing location and to ensure a minimal ongoing maintenance commitment for a period of up to 20 years, the cost would be in the order of $75,000 to $100,000 subject to the restoration options selected.

The work involved in the restoration of the fountain itself is of a specialised nature and could not be undertaken by unskilled labour. The various associated works required such as the landscaping could however be readily undertaken by volunteer labour.

A large proportion of the cost is involved with the pond and making it watertight while the work required to the fountain structure proper is not great. This compares to the Daylesford fountain where the fountain structure was severely decayed while the pond was reasonably intact and below ground level making it less vulnerable to problems arising from water leakage.

Should the problem of the ongoing tree root damage to the pond be solved then it may be viable to consider less extensive repairs to the pond wall which would further reduce the cost.

The fountain should not be made operable before the remedial mortar repairs are undertaken because this will lead to the decay of the existing fabric at an accellerated rate.

This report has identified that the fountain is of some historic significance as part of the park within which it is located. Due to this significance the fountain should not be relocated from the park.

To demolish and rebuild a faithful replica of the fountain would cost approximately $200,000 and this option cannot be supported either economically or from a conservation perspective.

Should it be desirable to have a fountain within the centre of the town, consideration should be given to the design and construction of a new fountain which, due to the costs involved, might be constructed from alterantive materials.

APPENDIX A

Endnotes

1 Richard Aitken, Architect and Conservation Consultant. Talbot and Clunes Conservation Study. Prepared for the Shire of Talbot and Clunes, [Melbourne], 1988, p. 300.

2 Richard Aitken, Architect and Conservation Consultant. Thompson Fountain, Hamilton Botanic Gardens Conservation Analysis and Options for Reconstruction. Prepared for the City of Hamilton and Provincial Botanic Gardens Rejuvenation Committee, [Melbourne], 1986.

APPENDIX A THE BURRA CHARTER

The Australia ICOMOS
GUIDELINES FOR THE CONSERVATION OF PLACES OF CULTURAL SIGNIFICANCE
Known as
THE BURRA CHARTER

Preamble

Having regard to the International Charter for the Conservation and Restoration of Monuments and Sites (Venice 1966), and the Resolutions of the 5th General Assembly of ICOMOS (Moscow 1978), the following Charter has been adopted by Australia ICOMOS.

Definitions

ARTICLE 1. For the purposes of this Charter:

1.1 *Place* means site, area, building or other work, group of buildings or other works together with pertinent contents and surroundings.

1.2 *Cultural significance* means aesthetic, historic, scientific or social value for past, present or future generations.

1.3 *Fabric* means all the physical material of the *place.*

1.4 *Conservation* means all the processes of looking after a *place* so as to retain its *cultural significance.* It includes *maintenance* and may, according to circumstance include *preservation, restoration, reconstruction* and *adaptation* and will be commonly a combination of more than one of these.

1.5 *Maintenance* means the continuous protective care of the *fabric*, contents and setting of a *place*, and is to be distinguished from repair. Repair involves *restoration* or *reconstruction* and it should be treated accordingly.

1.6 *Preservation* means maintaining the *fabric* of a *place* in its existing state and retarding deterioration.

1.7 *Restoration* means returning the EXISTING *fabric* of a *place* to a known earlier state by removing accretions or by reassembling existing components without the introduction of new material.

1.8 *Reconstruction* means returning a *place* as nearly as possible to a known earlier state and is distinguished by the introduction of materials (new or old) into the *fabric.* This is not to be confused with either re-creation or conjectural reconstruction which are outside the scope of this Charter.

1.9 *Adaptation* means modifying a *place* to suit proposed compatible uses.

1.10 *Compatible use* means a use which involves no change to the cultural significance fabric, changes which are substantially reversible, or changes which require a minimal impact.

Conservation Principles

ARTICLE 2
The aim of *conservation* is to retain or recover the *cultural significance* of a *place* and must include provision for its security, its *maintenance* and its future.
ARTICLE 3

Conservation is based on a respect for the existing *fabric* and should involve the least possible physical intervention. It should not distort the evidence provided by the *fabric*.

ARTICLE 4
Conservation should make use of all the disciplines which can contribute to the study and safeguarding of a *place*. Techniques employed should be traditional but in some circumstances they may be modern ones for which a firm scientific basis exists and which have been supported by a body of experience.

ARTICLE 5
Conservation of a *place* should take into consideration all aspects of its *cultural significance* without unwarranted emphasis on any one at the expense of others.

ARTICLE 6
The conservation policy appropriate to a *place* must first be determined by an understanding of its *cultural significance* and its physical condition.

ARTICLE 7
The conservation policy will determine which uses are compatible.

ARTICLE 8
Conservation requires the maintenance of an appropriate visual setting, eg, form, scale, colour, texture and materials. No new construction, demolition or modification which would adversely affect the settings should be allowed. Environmental intrusions which adversely affect appreciation or enjoyment of the *place* should be excluded.

ARTICLE 9
A building or work should remain in its historic location. The moving of all or part of a building or work is unacceptable unless this is the sole means of ensuring its survival.

ARTICLE 10
The removal of contents which form part of the *cultural significance* of the place is unacceptable unless it is the sole means of ensuring their security and *preservation*. Such contents must be returned should changed circumstances make this practicable.

Conservation Processes

Preservation

ARTICLE 11
Preservation is appropriate where the existing state of the *fabric* itself constitutes evidence of specific *cultural significance*, or where insufficient evidence is available to allow other conservation processes to be carried out.

ARTICLE 12
Preservation is limited to the protection, *maintenance* and where necessary, the stabilisation of the existing *fabric* but without the distortion of its *cultural significance*.

Restoration

ARTICLE 13
Restoration is appropriate only if there is sufficient evidence of an earlier state of the *fabric* and only if returning the fabric to that state recovers the *cultural significance* of the place.
ARTICLE 14

Restoration should reveal anew, culturally significant aspects of the *place*. It is based on respect for all the physical, documentary and other evidence and stops at the point where conjecture begins.

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