

Community, Development and Heritage Committee Meeting Agenda

Tuesday, 28 August 2012
Council Chamber, 401 Greenhill Road, Tusmore

Members: Councillor Lemon – Presiding Member
Mayor David Parkin
Councillors Bills, Capogreco, Cornish, Davey, Hasenohr, Monceaux,
Osterstock, Palk, Piggott, Pocock and Wilkins

1. Apologies

2. Leave of Absence

3. Confirmation of Minutes

Recommendation

That the Minutes of the Community, Development and Heritage Committee held on 24 July 2012 be taken as read and confirmed.

4. Officers Reports

Items where there is no discussion to be had, are voted on individually at the beginning of this section of the Agenda, then all other items are debated and voted on individually.

4.1 1921 Avenue of Sugar Gums, Hazelwood Park

Attachment A
Attachment B
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5. Other Business

6. Closure

Item No: 4.1
To: Community, Development and Heritage Committee
Date: 28 August 2012
Author: John Draper – Senior Projects Officer
Contact: 8366 4254
Subject: 1921 AVENUE OF SUGAR GUMS, HAZELWOOD PARK
Attachments: A. Aerial Image of Hazelwood Park
B. Image of Memorial Avenue
C. Image of historical plaque
D. Aerial image of avenue in 1936
E. Consulting Arborist Tree Inspection Summary
Prev. Resolution: C8781, 10/07/12

Officer's Recommendation

1. That the Report be received.
 2. That Council endorse the development of a Hazelwood Park Memorial Tree Avenue Management Plan to be considered by the Community, Development and Heritage Committee of Council in November 2012.
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Purpose

1. To provide Elected Members with information regarding the history and background to the 1921 Memorial Sugar Gum Tree Avenue in Hazelwood Park and a recommended tree management approach.

Strategic Plan

2. The following Strategic Plan desired outcomes are relevant:

"Preservation of the historic character of the City"

"A connected system of well designed and maintained open spaces"

"A well maintained and aesthetic streetscape consistent across the City"

"A vibrant and diverse community that has a strong sense of belonging"

Communications/Consultation

3. The following communication/consultation has been undertaken:
 - 3.1 The Administration has contacted the Burnside Historical Society to investigate the background and history of the avenue plantings.
 - 3.2 Discussions with Council's Reader Services Librarian, Technical Officer – Arboriculture and independent consulting arborist.

Statutory

4. The following legislation is relevant in this instance:

Local Government Act, 1999

Heritage Places Act, 1993

Development Act 1999

5. Hazelwood Park is a State Heritage Place having been entered into the State Heritage Register (11 May 1995). The effect of Hazelwood Park being a State Heritage Place is that consent is generally required from the Department for Environment and Natural Resources (Heritage SA) to undertake any form of substantial development that may affect the natural beauty and character of the Park.
6. Any substantial activity may include significant canopy management and or potential tree removal which would require referral to Heritage SA. It is recognised that the majority of trees growing within the Avenue are considered to be 'regulated trees' by definition under the Development Regulations 2008. Planning consent to either remove and or undertake substantial pruning of individual trees within the avenue must be referred through to Heritage SA for approval.

Policy

7. The following Council policies are relevant in this instance:

Open Space Strategy

Tree Management Strategy

Risk Assessment

8. The following risks have been identified:
 - 8.1 Long term management of the Avenue planting requires specific and specialised skills. The Avenue planting is now over 90 years of age. Associated with the age comes a range of issues including, tree health and vigor, canopy shape and form, major trunk and canopy framework

stress, which may lead to structural faults, and the ongoing affects of environmental conditions that may influence the health of the trees.

- 8.2 The Administration engaged an independent consulting arborist (Treevolution Arboricultural Consultants) to undertake a visual (aerial) inspection of each tree within the avenue planting. The inspection was undertaken over a two day period and required the arborist to visually examine all major trunk / branch unions to determine whether structural faults are present and in response what practical measures may be required to minimise tree / canopy failure risk and methods that may have a positive influence on projected tree life.
- 8.3 The inspection and summary of comments associated with that visual aerial inspection are attached. (Attachment E).
- 8.4 The area in and surrounding the Avenues has a relatively high pedestrian traffic zone within the Park and is the site of a number of community activities e.g. Carols in the Park and Australia Day Awards. Any structural failure of the trees poses a potential hazard to people and property. The production of a Hazelwood Park Memorial Tree Avenue Management Plan will assist Council in managing this risk.
- 8.5 The inspection has identified a range of long term structural faults that require management. The management or pruning associated with the identified issues will be undertaken, subject to Council endorsement of the Hazelwood Park Memorial Tree Avenue Management Plan (Plan).
- 8.6 The Avenue's heritage value is significant and any potential loss of the Avenue planting would seriously impact upon the community's appreciation and recognition of the cultural identity and value that the planting represents with respect to local fallen servicemen.

Finance

9. The following financial issues have been identified:
 - 9.1 There is no dedicated budget allocation for the care and management of the Avenue plantings. Current management is addressed through normal funding allocations through the Annual Business Plan. All tree maintenance is administered by the Operation Services Department with the majority of significant maintenance at heights undertaken by qualified contractors. The current budget allocation for this type of work is \$186,000.
 - 9.2 The preparation of a tree management plan will be undertaken by Council's Technical Officer – Arboriculture as part of his normal duties.
 - 9.3 The implementation of the Plan will require qualified contractors and / or Operations Services department staff to undertake the works depending upon the nature of the work. It is estimated that the cost over three to four years could be anywhere from \$60,000 to \$100,000.

- 9.4 When the Plan is presented to Council for consideration for approval, the Administration may seek additional funding through the Annual Business Plan process to supplement the existing funding for this specific initiative.

Discussion

Background

10. At the Council meeting on 10 July 2012, Council resolved (C8781):
“That a Report be prepared and brought to the August 2012 Community, Development and Heritage Committee meeting addressing all of the issues associated with maintenance of the integrity of the circa 1921 Avenue of Sugar Gums, the Memorial to local World War I Service Personnel, located in Hazelwood Park.”
11. The background to the development and planting of the memorial tree avenue is not extensive. Documents and historical records were difficult to obtain given Hazelwood Park was owned and managed by the State Government (Department of Tourism and Recreation) during the period where the War Memorial Pavilion and associated tree Avenue were first considered and developed.
12. Records associated with the dedication of the War Memorial Pavilion (which was located on the southern end of the tree avenue) are quite extensive and indicate a strong link between Burnside community members and discussions with the State Government agency at the time (1916/17).
13. Unfortunately, there is little recorded information on the actual planting of the tree Avenue suffice to say that the proposal (to plant a tree Avenue) was secondary to the installation of the memorial pavilion to recognise the Fallen Soldiers of World War 1 from the Burnside and Beaumont Wards.
14. Records show an original request by the Hon. Secretary (Mr. Alex Rodgers) of the Burnside Memorial for Fallen Soldiers committee to the then Director of the Department requesting permission to *“erect a suitable memorial in Hazelwood Park, Burnside. Also permission to plant trees to the memory of the fallen. The memorial would be substantial and imposing structure, subject to the approval of your Department, and the trees would be planted under the direction of your curator.”*
15. The dedication of the memorial pavilion took place on 17 April 1921 and it is believed that the planting of the tree avenue took place a short time after the pavilion was opened by the Governor of South Australia (Sir Archibald Weigall).
16. Transcripts of the event (“The Register” – 18 April 1921) show the opening was attended by thousands of people and that mention of the Avenue planting was to occur soon after. Refer to Attachment C – Image of Memorial Plaque.

Location of Avenue

17. The tree Avenue is located centrally within Hazelwood Park. The tree Avenue runs essentially north south. The trees are placed opposite each other and comprise a double avenue of Sugar Gums (eucalyptus cladocalyx). The original plantings extended from Davenport Terrace to the north and ran in a broad spaced arch south to the original War Memorial Pavilion (now removed) located to what is now the main entrance to the Burnside Swimming Centre.
18. There are 41 remaining trees. One of the original tree plantings now grows within the adjacent car park entry into the Avenue, and four trees grow within the grounds of the swimming centre.
19. It is suggested that the original planting comprised up to 50 trees (if the existing tree placements were consistent across the length of the avenue). An aerial image of Hazelwood Park taken in 1936 indicates at least 48 trees growing within the avenue at the time (refer Attachment D2).

Tree Assessment: Summary of Findings

20. All of the trees are Sugar Gums (eucalyptus cladocalyx). The inspection reveals that as a collective group (stand) the trees have an average height between 25 and 35 metres with an average stem circumference that range between 1.91 and 3.95 metres, therefore the majority of the trees are covered by the legislation with regard to regulated and significant trees, contained within the Burnside (City) Development Plan.
21. The species is known for an open elongated and an extensive branch framework. The species consistently develops large diameter trunks with a tall open and extended canopy individual branches are long with few internal branch unions. Individual branches are end weighted and hold the majority of weight (foliage) towards the ends.
22. The tree species is well known throughout the local area and is well represented in many large original landscape properties. The species was commonly planted as a defining boundary planting along fence lines and entry roads. The species was commonly planted for fire wood production given its prodigious regrowth rates when pollarded.
23. The memorial trees were planted as an Avenue and form a large mature group of trees. Due to the close proximity of the trees to each other they are all showing some form of canopy branch suppression and or elongation.
24. The suppression of canopy has resulted in the development of open sided tree structure, mainly to the east for the trees on the eastern side of the driveway, and west for the trees on the western side of the driveway. Most trees show long over extended scaffold branch growth, which supports a large proportion of foliage. In response lateral branching (at the branch extremities) places heavy weight loading on the branch structure and the branch union.
25. The inspection of the trees on the western side of the Avenue identified major damage in the upper canopy branch unions from bird predation (usually Sulphur Crested Cockatoos and / or Galas). This has resulted in the removal of a large amount of bark and branch tissue on the upper surface of the branch unions. The extent of decay associated with the damage to branch unions is

extensive and presents major structural issues for the long term management of the trees.

26. The aerial inspection of trees on the eastern side showed less signs of bird predation however the majority of trees showed severe over extension of the major branches with heavy end weight.
27. There are numerous examples of previous branch failures and or branches that have failed through actions associated with long term bird damage. There are numerous trees that exhibit old wounds that have lead to open wounds that have promoted severe internal decay within major branches and in some cases trunks.

Conclusion

28. The history and development of the war memorial tree Avenue plantings can be linked to the construction of the historical war memorial pavilion (now removed due to ongoing vandalism and neglect in the early 1940-50s). The pavilion was located adjacent (east) of the current Burnside Swimming Centre. There are no records available of who actually undertook the tree avenue planting suffice to say that the State Government had agreed to the planting in recognition of the status and importance the pavilion had within the local community.
29. The current health and condition of the Avenue plantings suggest some identifiable structural defects that require management. Unfortunately the management of this species of tree is difficult to undertake without typically removing sections of the existing canopy.
30. Notwithstanding that the overall health of individual trees within the Avenue is questionable, it is acknowledged that retention of the Avenue plantings is worthwhile and that it warrants a specific management Plan. The Plan will aim to retain the Avenue planting as close to its original condition/intent as possible but reduces the inherent risks associated with large trees growing within a high use area of Hazelwood Park.
31. The development of a long term management Plan will provide Council and the community with information relating to the retention and / or potential replacement of individual trees.
32. The conservation of the Avenue is considered appropriate given its symbolic and cultural significance i.e in recognition of the World War 1 War Service by local residents, and serves as a strong reminder to current an future generations.
33. The Hazelwood Park War Memorial Tree Avenue Management Plan will detail Council's commitment to the Avenues retention and provide the community with information regarding what is required to manage the Avenue into the future.
34. The Plan will need to dovetail into the overall Hazelwood Park Ecological Management Plan, which will provide Council with the overarching site management strategy for the ecological components of the site. This Plan will be developed over this and next financial year and address ecological management across the park including along the watercourse.



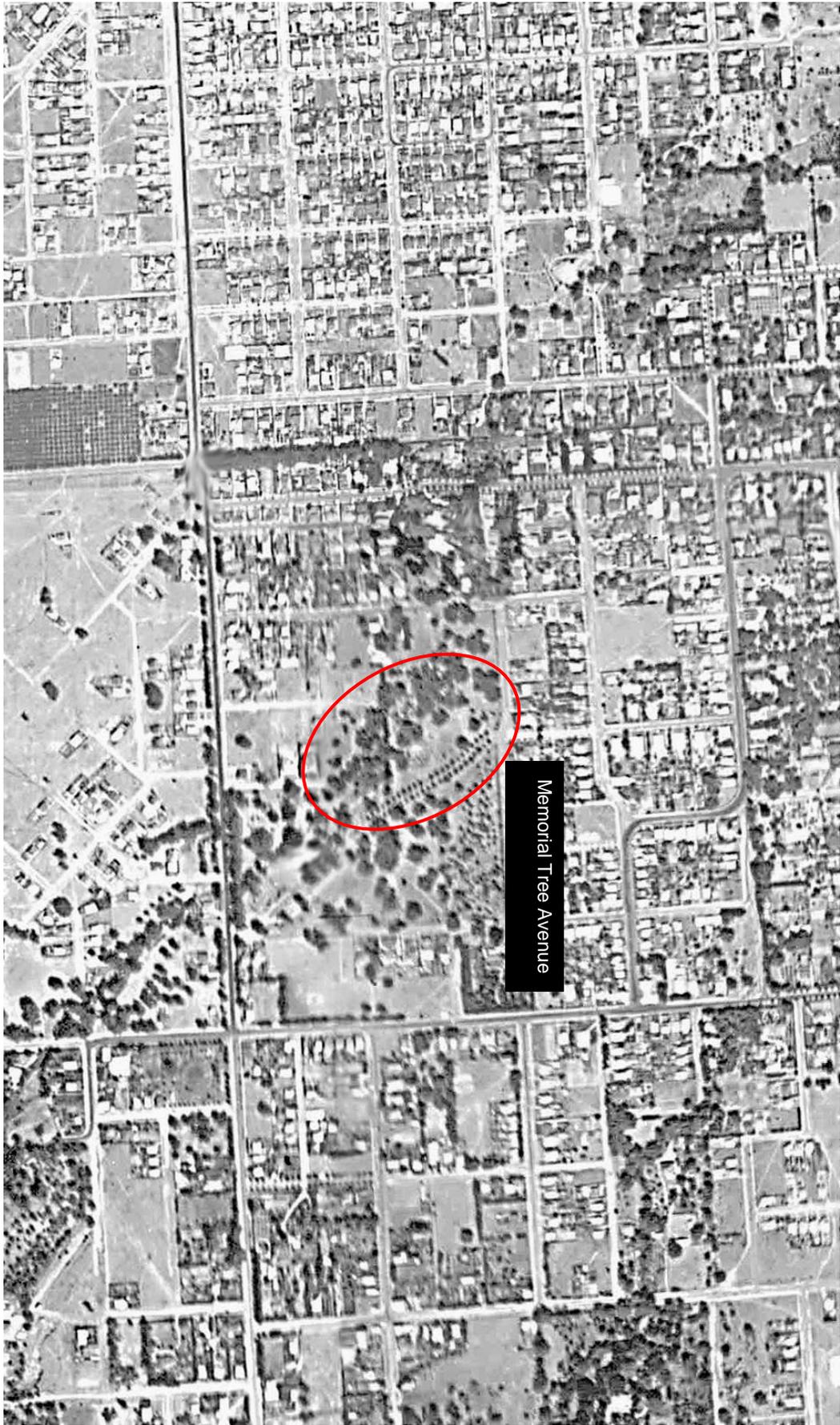
Attachment B

Images of Memorial Tree Avenues looking southeast (top) & down centre of avenue (bottom)



Copy of Memorial Plaque southern end of avenues

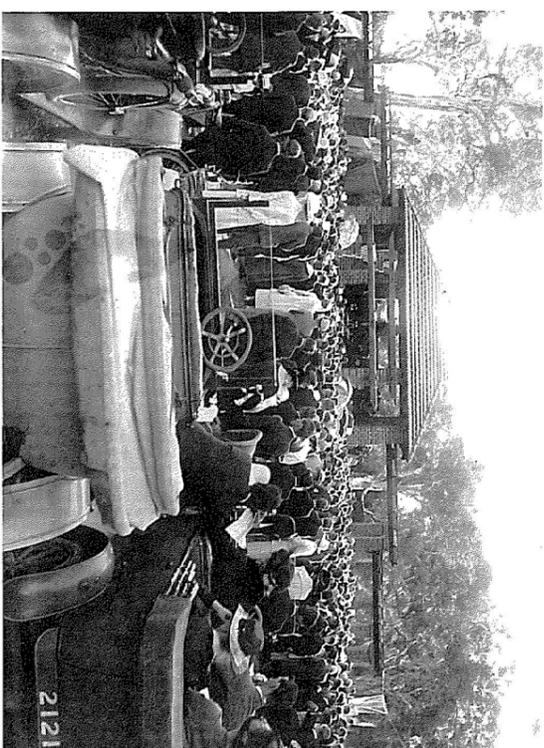




Aerial Image of Hazelwood Park (circa 1936)

Copy of Image of Opening Ceremony (17 April 1921)

DEDICATION OF WAR MEMORIAL AND OPENING OF PAVILION AT
HAZELWOOD PARK
BY GOVERNOR SIR ARCHIBALD WEIGALL ON
Sunday 17th April 1921



Donated by R.H.B. Kearns, Wattle Park

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Attachment E

ACN 140 147 137
ABN 89 140 147 137
POST PO BOX 114, St Agnes SA 5097
EMAIL treeevolution1@bigpond.com
OFFICE 0423 548 840

URBAN TREE MANAGEMENT
Arboricultural Consultancy
Tree Survey & Maintenance Plans
Hazard & Risk Assessment
Policy & Strategy Development
ARBORICULTURAL TRAINER

COLIN THORNTON MOBILE 0423 548 841
MSc Arb. Adv Dip Arb. H.N.D. Arb. N.D. Arb. Cert IV WT&A. Reg. QTRA



DATE: 5th AUGUST 2012

TREE EVALUATION / ASSESSMENT

ARBORICULTURAL CONSULTANT:

Colin S. Thornton MSc Arb, Adv Dip Arb (UK), HND Arb, ND Arb

CLIENT

John Draper
Burnside City Council
PO Box 9
GLENSIDE
SA 5065

SITE ADDRESS

Hazelwood Park Reserve
Howard Terrace
HAZELWOOD PARK
SA 5064

SUBJECT

- Aerial inspection of the avenue of Sugar Gums (*Eucalyptus cladocalyx*) located along the main driveway into Hazelwood Park Reserve.

1.0 SUMMARY

- 1.1. This report describes the aerial inspection and assessment of the Sugar Gums (*Eucalyptus cladocalyx*) contained within Hazelwood Park Reserve, Howard Terrace, Hazelwood Park.
- 1.2. The trees have been identified for inspection due to their location in a heavily used and frequently occupied major park within the Burnside city area, and the proposal to develop a tree management plan to ensure effective risk management.
- 1.3. The trees form a large avenue, planted as a memorial to the returned soldiers, that extends from the car park area on the northern side of the park south to the Burnside Swimming Centre in the central section of the park.
- 1.4. There are a total of 41 trees contained within the avenue, one of which is located within the car park area, four within the grounds of Burnside Swimming Centre and the remaining thirty six trees on the eastern and western sides of the main access driveway that leads to the swimming centre.
- 1.5. The trees have an average height between 25 and 35 metres and an average stem circumference in the range between 1.91 and 3.95 metres, deeming the majority of the trees to be covered by the legislation with regard to regulated and significant trees contained within the Burnside (City) Development Plan.
- 1.6. The upper canopy structure was identified for inspection to determine the overall structural stability of the scaffold branching structure. The trees were planted as an avenue, and form a large mature group of trees, due to the close proximity of the trees to each other they are all showing some form of suppression.
- 1.7. The suppression exhibited by the canopies has resulted in the open side of the trees structure, mainly to the east for the trees on the eastern side of the driveway, and west for the trees on the western side of the driveway, showing long over extended scaffold branch growth, which supports a large proportion of foliage and lateral branching at the branch extremities, placing a heavy weight loading on the branch structure and the branch union.

- 1.8. The aerial inspection of the trees on the western side of the avenue identified major damage in the upper canopy unions from bird predation. This has resulted in the removal of a large amount of bark and branch tissue forming the upper surface of the branch unions.
- 1.9. This will have reduced the trees capacity to respond to the damage by removing live tissue and the main growth point of the branch. The loss of cambial tissue will ultimately reduce the implementation of reaction wood formation that hardwood trees rely on to offer support at branch connection points.
- 1.10. This will ultimately result in a weakening of the union whilst further weight loading will continue as the branch implements further extension growth and foliage production, increasing the potential for future branch failures.
- 1.11. To further compound the bird damage numerous wounds on the western most trees were showing signs of hollowing at the unions from normal wood degradation, which will further weaken the branch connection points.
- 1.12. The remaining timber around the wounds was sounded using a testing mallet to determine the extent of hollowing and establish structural implications.
- 1.13. A large number of the unions exhibiting decay were found to have localised hollowing that extended up the branch and into the main stem tissue. However, the surrounding tissue and woundwood formation on the most part was found to be of a reasonable quality.
- 1.14. The main issue with regard to woundwood formation is the continued predation by birds of the newly formed tissue, thus preventing the establishment of new strengthening tissue and occlusion.
- 1.15. The aerial inspection of the trees located on the eastern side of the avenue identified only minimal signs of bird damage. However, a large number of the trees had long over extended branches with heavy foliage end weight.
- 1.16. From a risk perspective the trees located on the western side of the avenue will require extensive canopy management to address issues surrounding structural defects within the upper canopy structure.

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- 1.17. Although the trees on the eastern side of the driveway are showing only minimal signs of damage within the upper canopy unions, consideration must be given to the implications future management of the trees on the western side of the avenue may have on their structure.
 - 1.18. The reduction in canopy height on the western most trees will allow the prevailing weather conditions to access sections of the eastern trees canopies previously afforded shelter.
 - 1.19. Due to the reactive growth nature of all tree species the internal defence and growth mechanisms will not have provided sufficient stress loading and reaction growth on the upper canopy to prevent failures should they be opened to forces from which previously afforded protection.
 - 1.20. The formation of a tree management plan for this avenue, should consider the use of veteran tree management principles to initiate a reduction in canopy size to avoid major branch failures whilst stimulating a growth response that will ultimately form a new more compact canopy structure that could be managed into the future.
 - 1.21. With this in mind, should trees be reduced consideration must be given to other trees in the group to determine the impacts opening their structure to the prevailing weather conditions will have on their structural stability, and a pruning regime to reduce long over extended branches implemented.

COLIN S. THORNTON [Consulting Arborist]

Master of Science Degree in Arboriculture and Community Forest Management (UK) **(MSc Arb)**
Advanced Diploma in Arboriculture and Community Forest Management (UK) **(Adv Dip Arb)**
Higher National Diploma in Arboriculture (UK) **(HND Arb)**
National Diploma in Arboriculture (UK) **(ND Arb)**
Certificate IV Workplace Training & Assessment



Photographs demonstrating the typical, extensive damage on the upper surface of the scaffold branch unions in the upper canopy.

