ENVIRONMENT & RECREATION COMMITTEE

Wednesday
5 August 2009

www.leichhardt.nsw.gov.au
Environment and Recreation Committee Terms of Reference

The Environment and Recreation Committee, being guided by the principles of ecologically sustainable development and maximising local passive and active recreation opportunities, deals with, but will not be limited to, the following:

Environment Policy development on:

- Council’s Sustainability Strategy
- Environmental health
- Waste minimisation and resource recovery
- Stormwater management
- Corporate Sustainability
- Trees and open space
- Landscaping
- Environmental education
- Pollution monitoring
- Biodiversity conservation and enhancement

Recreation Policy development on:

- Open space plans of management and masterplans
- Management of companion animals in open space
- Management and provision of open space, including small parks and sports fields
- Management and provision of recreational facilities
- Provision of recreational programs and services

Chairperson: Cr Rochelle Porteous
Deputy Chairperson: Cr Michele McKenzie

Acknowledgement of Country

I acknowledge the Gadigal and Wangal people of the Eora nation on whose Country we are meeting today, and their elders past and present.
NOTICE is hereby given that a meeting of the Environment & Recreation Committee will be held in the Supper Room, Leichhardt Town Hall on Wednesday, 5 August 2009 at 6:30pm.

Peter Head
General Manager

AGENDA

Acknowledgement of Country

1. Apologies

2. Minutes of Previous Meeting: 3 June 2009

3. Summary of Resolutions

4. Correspondence

5. Reports from the Community

6. Policy Items Environment

   6.1 Climate Change Taskforce Minutes – 20 May 2009

7. Policy Items Recreation

   7.1 Report – Update on Celtis Sinensis

   7.2 Report – Native Plantings in Verges

8. Reports on Major Projects: Environment and Recreation – Nil

9. Item for Information

   9.1 Arborist Report for Eucalyptus Tereticornis at Birchgrove Park (from Three Wise Men Pty Ltd)

10. Other Business

11. Next Meeting – 2 September 2009
# LEICHHARDT MUNICIPAL COUNCIL
## REPORT

<table>
<thead>
<tr>
<th>DIVISION:</th>
<th>ENVIRONMENTAL AND COMMUNITY MANAGEMENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>SUBJECT:</td>
<td>ENVIRONMENT AND RECREATION COMMITTEE MINUTES</td>
</tr>
<tr>
<td>AUTHOR:</td>
<td>GILL DAWSON MANAGER ENVIRONMENT AND URBAN PLANNING</td>
</tr>
<tr>
<td>FILE REF:</td>
<td>F05/00015-4</td>
</tr>
<tr>
<td>DATE:</td>
<td>27 JULY 2009</td>
</tr>
<tr>
<td>WORD PROCESSING REF:</td>
<td>F:\Planning - Administration\Committees\Environment &amp; Rec Committee\2009\Aug 09\Agenda\Env &amp; Rec Agenda 050809.doc</td>
</tr>
</tbody>
</table>

## DIRECTOR’S SUMMARY - ORGANISATIONAL IMPLICATIONS

<table>
<thead>
<tr>
<th>Financial Implications:</th>
<th>Nil</th>
</tr>
</thead>
<tbody>
<tr>
<td>Policy Implications:</td>
<td>Nil</td>
</tr>
</tbody>
</table>

**Leichhardt 2020+ Strategic Plan Objective:**

- Community Well-being
- Accessibility
- Place where we live and work
- A sustainable environment
- Business in the Community
- Sustainable Services and Assets

<table>
<thead>
<tr>
<th>Staffing Implications:</th>
<th>Nil</th>
</tr>
</thead>
<tbody>
<tr>
<td>Notifications:</td>
<td>Nil</td>
</tr>
<tr>
<td>Other Implications:</td>
<td>Nil</td>
</tr>
</tbody>
</table>
1. **Purpose of Report**

   To advise Council of the status of Minute Recommendations of the Environment & Recreation Committee held on 3 June 2009.

2. **Recommendation**

   That Council adopt the minutes of the Environment & Recreation Committee held on 3 June 2009 with the accompanying recommendations.
MINUTES of the Environment and Recreation Committee of Leichhardt Municipal Council held in the Supper Room on 3 June 2009.

Present at the commencement of the meeting: Crs: Rochelle Porteous (Chair), Jamie Parker, Vera Ann Hannaford, Daniel Kogoy, John Stamolis, Cassi Plate Paul Geraghty, Lorraine Verheyen, Kim Wheatley, Bronwen Campbell, Drew Vukelic, Leanne Eastway

Staff Present: Gill Dawson, Aaron Callaghan, Marcel Bello, Vince Cusumano, Katie Bell

Meeting Commenced: 6.35pm

ACKNOWLEDGEMENT OF COUNTRY:

I acknowledge the Gadigal and Wangal people of the Eora nation on whose Country we are meeting today, and their elders past and present.

Cr Rochelle Porteous performed acknowledgement of country in her capacity as chair.

BUSINESS:

ITEM 1 APOLOGIES

ERC31/09 RECOMMENDED

That apologies be accepted for the non attendance of David Lawrence, David Eckstein, Cr Gordon Weiss and Bev Maunsell.

ITEM 2 MINUTES OF THE PREVIOUS MEETING: 1 April 2009

ERC32/09 RECOMMENDED

That Council adopt the minutes of the Environment and Recreation Committee meeting held on 1 April 2009 with the accompanying recommendations.

1. That Acknowledgement of Country be included in full in the Minutes.
ITEM 3
SUMMARY OF RESOLUTIONS

ERC33/09 RECOMMENDED

1. That the information in the Summary of Resolutions be received and noted.

2. That the Summary of Resolutions be updated for the following:

   • ERC07/05 Potential Sporting Fields
     That the Mayor in consultation with staff continue to seek to liaise with
     the STA.

   • ERC12/09 Minutes of the Meeting 4 February 2009
     That a letter be sent to the Bushcare Group advising of the resourcing
     strategy for the Bushcare Crew for 2009/10.

ITEM 4
CORRESPONDENCE

ERC34/09 RECOMMENDED

That the letter sent to the Sydney Harbour Foreshore Authority (SHFA) requesting
them to address the issue regarding the problems with feral cats in the former
convalescent cottages located in the Kirkbride Curtilage Precinct be noted.

ITEM 5
REPORTS FROM THE COMMUNITY

Cr Jamie Parker advised that he attended the Annandale Public School Sustainability
Assembly 25 May 2009 and congratulates everyone involved.

ITEM 6
POLICY ITEMS ENVIRONMENT – Nil

ITEM 7
POLICY ITEMS RECREATION

ITEM 7.1
RECREATION PLANNING TEAM WORK PROGRAM

ERC35/09 RECOMMENDED

1. That the community recreation planning work program be endorsed.
2. That the preparation of a Park Plan of Management for Blackmore Park be added to the work program & be considered in the budget process for a consultant to undertake.

ITEM 7.2
POISONED TREE POLICY

ERC36/09 RECOMMENDED

That the Poisoned Tree Policy set out in Section 5 of this report be implemented where Council suspects a tree on Council land has been poisoned or illegally pruned, ringbarked or damaged.

ITEM 7.3
UPDATE ON ROZELLE BAY COMMUNITY NATIVE NURSERY

ERC37/09 RECOMMENDED

That the Environment and Recreation Committee receive and note this report.

ITEM 9
ITEM FOR DISCUSSION

ITEM 9.1
PROPOSED FESTIVAL AT WHITES CREEK

ERC38/09 RECOMMENDED

That the comments raised in discussion be noted and considered in the preparation of the report to Council.

ITEM 10
OTHER BUSINESS

ITEM 10.1
BIRCHGROVE TREE

ERC39/09 RECOMMENDED

1. A further tree report be commissioned prior to any decisions being made on the existing *Eucalyptus tereticornis*.

2. That the sapling which recently died next to the mature *Eucalyptus tereticornis* at Birchgrove Park be replaced by two *Eucalyptus tereticornis*.

3. That Council examine opportunities for additional plantings and landscape embellishment at Birchgrove Park in consultation with the community.
ITEM 10.2
ORANGE GROVE MARKETS

ERC40/09 RECOMMENDED

That Doug Anderson liaise with Paul Geraghty regarding the sale of possible noxious weeds at Orange Grove Markets with an intention to notify the markets’ management of the sale if they are noxious weeds.

ITEM 11
NEXT MEETING

The next meeting will be held on Wednesday, 5 August 2009 at 6:30pm.

Meeting closed at 8.50pm

Meetings for 2009

5 August
7 October
2 December
## LEICHHARDT MUNICIPAL COUNCIL

### REPORT

<table>
<thead>
<tr>
<th>DIVISION:</th>
<th>ENVIRONMENTAL AND COMMUNITY MANAGEMENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>SUBJECT:</td>
<td>SUMMARY OF RESOLUTIONS</td>
</tr>
</tbody>
</table>
| AUTHOR:  | GILL DAWSON  
MANAGER ENVIRONMENT AND URBAN PLANNING |
| FILE REF: | F97/00807 |
| DATE:    | 27 JULY 2009 |
| WORD PROCESSING REF: | F:\Planning - Administration\Committees\Environment & Rec Committee\2009\Aug 09\Agenda\Env & Rec Agenda 050809.doc |

### DIRECTOR’S SUMMARY - ORGANISATIONAL IMPLICATIONS

<table>
<thead>
<tr>
<th>Financial Implications:</th>
<th>Nil</th>
</tr>
</thead>
<tbody>
<tr>
<td>Policy Implications:</td>
<td>Nil</td>
</tr>
</tbody>
</table>
| Leichhardt 2020+ Strategic Plan Objective: | Community Well-being  
Accessibility  
Place where we live and work  
A sustainable environment  
Business in the Community  
Sustainable Services and Assets |
| Staffing Implications:   | Nil |
| Notifications:           | Nil |
| Other Implications:      | Nil |
1. **Purpose of Report**

To advise Council of the status of the Environment and Recreation Committee Resolutions of June 2009.

2. **Recommendations**

That the information be received and noted.
<table>
<thead>
<tr>
<th>Vote Number</th>
<th>Summary of Resolutions</th>
<th>Action/Taken Planned &amp; Estimated Completion Date</th>
<th>Officer</th>
</tr>
</thead>
<tbody>
<tr>
<td>ERC07/05 - Potential Sporting Fields Feb 2006</td>
<td>3. The relevant Council officer should liaise with Leichhardt High School to come to an arrangement about the use of the parcel of STA land adjacent to the school as a public sporting field.&lt;br&gt;That the Mayor in consultation with staff continue to seek to liaise with the STA.</td>
<td>Actioned – letter sent to STA</td>
<td>Aaron Callaghan Senior Parks and Open Space Planner</td>
</tr>
<tr>
<td>ERC33/09 June 2009</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ERC35/06 - Bridgewater Park – Potential Sporting Field</td>
<td>3. That a Draft Plan of Management for Bridgewater Park be developed within the next 12 months which includes provision for low impact sporting activities, landscaping improvements and public amenities.&lt;br&gt;5. That Council look at options for the inclusion of native corridors connecting through Bridgewater Park.</td>
<td>3. The preparation for the draft POM has commenced.&lt;br&gt;5. To be addressed as part of the concept in the development of a POM for the park.</td>
<td>Aaron Callaghan</td>
</tr>
<tr>
<td>ERC43/06 - Sports Grounds Management in NSW</td>
<td>That a report be brought to the February 2007 meeting of the Environment and Recreation Committee, discussing the potential impacts of identifying open space for further active recreation on green corridors, biodiversity and quiet spaces.</td>
<td>A report on Open Space provision in relation to the Inner West Regional Strategy will be brought at a future date when staff resources allow.</td>
<td>Aaron Callaghan</td>
</tr>
<tr>
<td>ERC 44/07 Boomers Baseball – Application for Reduction of Sporting Fees - Blackmore Oval</td>
<td>2. Council undertake a comprehensive review of its sporting code oval hire rates.</td>
<td>2. Formal review on fees and charges will be submitted to September Ordinary Council meeting.</td>
<td>Aaron Callaghan</td>
</tr>
<tr>
<td>Environment &amp; Recreation Committee June 2009</td>
<td>SUMMARY OF RESOLUTIONS</td>
<td>ACTION/TAKEN PLANNED &amp; ESTIMATED COMPLETION DATE</td>
<td>OFFICER</td>
</tr>
<tr>
<td>---------------------------------------------</td>
<td>------------------------</td>
<td>-----------------------------------------------</td>
<td>---------</td>
</tr>
<tr>
<td>ERC 57/07 LOCAL GOVERNMENT EMISSIONS TRADING SCHEME</td>
<td>4. That a report on the progress of LGETS be brought back to Council prior to the completion of the transitional year after which Council will decide whether to continue for the remaining years of the trial period.</td>
<td>4. Launch meeting of LGETS has been held in April 2008. Steering Group met in June and full meetings on 5/8/08, 30/9/08, 1/12/08 and 9/2/09. Rules and purpose still being discussed. When rules are agreed Committee will be informed for approval. Next LGETS meeting - 7 Sept 2009 at Willoughby Council Modelling exercise performing practice trades indicated the 20% target will make opportunities for trade between councils very difficult. Program coordinators will re-run practice trades at lower target levels.</td>
<td>David Eckstein Team Leader Environmental Strategy</td>
</tr>
<tr>
<td>ERC 16/08 COMMUNITY ORCHARD PROPOSAL, WHITES STREET</td>
<td>That funds be set aside for the establishment of an orchard, chicken run and bee hive in the 2008-9 budget in accordance with the adopted plan of management for White Creek Valley Park (noting a slight variation to the fence line).</td>
<td>Council is still awaiting information from the Department of Planning on the disposal of these properties to Council and contamination issues that may be associated with these areas.</td>
<td>Vince Cusumano Manager Parks and Streetscapes</td>
</tr>
<tr>
<td>ERC18/08 COMPANION ANIMAL ACCESS BLACKMORE PARK</td>
<td>2. Council publicly exhibit the new regulations pertaining to Blackmore Park for a period of 28 days following which the introduction of an enforcement regime is implemented which includes the introduction of new signage and compliance works to educate companion animal owners of their responsibilities. This was amended as follows at Ordinary Council on 24 June 2008: That the decision with regards to access changes to Blackmore Oval be reviewed to ensure pedestrian access is retained and no action taken</td>
<td>2. Exhibition period complete. A site visit by Councillors was held 28 February 2009. Consultation with a range of stakeholders to be arranged. This work has been finalised subject to dates being agreed allowing full community consultation to proceed. Council has also resolved to review the LCAMP provisions for the park involving full community consultation. Work on this review commenced in April 2009.</td>
<td>Aaron Callaghan</td>
</tr>
<tr>
<td>Environment &amp; Recreation Committee June 2009</td>
<td>SUMMARY OF RESOLUTIONS</td>
<td>ACTION/TAKEN PLANNED &amp; ESTIMATED COMPLETION DATE</td>
<td>OFFICER</td>
</tr>
<tr>
<td>---------------------------------------------</td>
<td>------------------------</td>
<td>-----------------------------------------------</td>
<td>---------</td>
</tr>
<tr>
<td>in this regard until a full report is brought back to the July Council Meeting on how this can be achieved.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>ERC45/08 OTHER BUSINESS</strong></td>
<td>2. Council review installation, use and impact of light towers and shade sail at children's playground at Birchgrove Park in consultation with the community and present a report to be presented at the next available Committee meeting, to include estimated costs for any proposed changes.</td>
<td>2. A site meeting at the park was held with the Precinct Committee with Council officers and chaired by the Mayor on the 23rd February 2009. Costs associated with replacement towers are currently being obtained following the completion of a lighting report by a qualified independent lighting engineer. A further meeting with the community is being organised for August to finalise possible replacement tower location(s) prior to submitting a report to Council.</td>
<td>2. Aaron Callaghan</td>
</tr>
<tr>
<td>3. Report to Environment and Recreation Committee on the possibility of replacing grass verges in entire streets with native grasses or plants.</td>
<td>3. Report prepared for August Environment &amp; Recreation Committee meeting.</td>
<td>3. Vince Cusumano</td>
<td></td>
</tr>
<tr>
<td><strong>ERC50/08 URBAN FOREST POLICY UPDATE</strong></td>
<td>2. That sections of the proposed Urban Forest Strategy be presented to the Environment and Recreation Committee over the next year for discussion and comment.</td>
<td>2. Sections of the proposed Urban Forest Strategy will be presented over the next year.</td>
<td>2, 5 &amp; 6. Vince Cusumano</td>
</tr>
<tr>
<td>5. That the Council website be developed to include achievements of the Urban Forest Policy, links to Grow Me Instead, native nurseries and any other sites that assist people with decisions on what to plant.</td>
<td>5. Ongoing research and development of website in conjunction with opening of new nursery.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Bring updated leaflet on native planting options to February 2009 meeting for approval.</td>
<td>6. Ongoing research in conjunction with opening of new nursery. Verbal update on feedback from Committee members on the</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Environment &amp; Recreation Committee June 2009</td>
<td>SUMMARY OF RESOLUTIONS</td>
<td>ACTION/TAKEN PLANNED &amp; ESTIMATED COMPLETION DATE</td>
<td>OFFICER</td>
</tr>
<tr>
<td>---------------------------------------------</td>
<td>------------------------</td>
<td>-----------------------------------------------</td>
<td>---------</td>
</tr>
<tr>
<td>ERC09/09 DECLARATION OF CELTIS SINENSIS AS A CLASS 4 NOXIOUS WEED</td>
<td>1. That a draft leaflet and a report on a programme of works to eradicate <em>Celtis sinensis</em> be developed and brought back to the June committee meeting.</td>
<td>Report to be presented to the August Environment &amp; Recreation Committee meeting.</td>
<td>Doug Anderson Biodiversity Officer</td>
</tr>
<tr>
<td>ERC12/09 ITEM 2 MINUTES OF THE PREVIOUS MEETING: 4 February 2009</td>
<td>That a Committee report is prepared on the need for increasing the staff of the Bushcare Crew and whether this could be done within the present budget, either by replacing vacancies or retraining or whether an application to expand the budget in the 2009/10 year needs to be made. That a letter be sent to the Bushcare Group advising of the resourcing strategy for the Bushcare Crew for 2009/10.</td>
<td>A staffing review of Bushcare staffing needs is being undertaken in line with the current Work Program.</td>
<td>Vince Cusumano</td>
</tr>
<tr>
<td>ERC15/09 REVIEW OF GENERAL HOUSEHOLD (CLEAN UP) COLLECTION SERVICE TO ENCOURAGE REDUCTION AND RECYCLING OF LARGE WASTE ITEMS</td>
<td>4. That Council investigates holding ‘tours’ of local second hand centres for residents and schools to raise awareness of reuse in the 2009/10 financial year.</td>
<td>4. Resident tour investigation – planned for Sept 09. Feedback from schools – preference is for educator to come to school as there are issues with transportation and class sizes. All schools have received an educational workshop in first half of school year.</td>
<td>Allan Wilding Manager Works and Waste Services Cheryl Walker Waste Projects Officer</td>
</tr>
<tr>
<td>ERC19/09 FERAL/STRAY CAT CONTROL</td>
<td>2. That Council considers a programme of trapping within the grounds of Balmain High carried out in accordance with the guidelines outlined in this report and that funding be set aside in the 09/10 budget and management plan.</td>
<td>2. Verbal update to be provided at August meeting.</td>
<td>Doug Anderson</td>
</tr>
<tr>
<td>Environment &amp; Recreation Committee June 2009</td>
<td>SUMMARY OF RESOLUTIONS</td>
<td>ACTION/TAKEN PLANNED &amp; ESTIMATED COMPLETION DATE</td>
<td>OFFICER</td>
</tr>
<tr>
<td>---------------------------------------------</td>
<td>------------------------</td>
<td>-------------------------------------------------</td>
<td>---------</td>
</tr>
<tr>
<td>5. That Council prepare a report to committee on an education program for responsible cat ownership (registering / keep in at night etc) in accordance with the NSW Companion Animal Act to reduce the impact of domestic cats on local wildlife.</td>
<td>5. Verbal update to be provided at August meeting and a formal report to be prepared for October 2009 Environment and Recreation Committee meeting.</td>
<td>David Eckstein</td>
<td></td>
</tr>
</tbody>
</table>
| ERC24/09 CLIMATE CHANGE TASK FORCE MINUTES | That:  
2. The next Task Force agenda includes a presentation on the CPRS, lead by Cr Daniel Kogoy, and the issues that arise from it at a Council level. | Federal Government decision on CPRS anticipated August 2009. | David Eckstein |
| ERC35/09 RECREATION PLANNING TEAM WORK PROGRAM | 2. That the preparation of a Park Plan of Management for Blackmore Park be added to the work program & be considered in the budget process for a consultant to undertake. | Blackmore Park Plan of Management scheduled to commence March 2010. | Aaron Callaghan |
| ERC36/09 POISONED TREE POLICY | That the Poisoned Tree Policy set out in Section 5 of this report be implemented where Council suspects a tree on Council land has been poisoned or illegally pruned, ringbarked or damaged. | Noted | Heidi Webb |
| ERC39/09 BIRCHGROVE TREE | 1. A further tree report be commissioned prior to any decisions being made on the existing Eucalyptus tereticornis.  
2. That the sapling which recently died next to the mature Eucalyptus tereticornis at Birchgrove Park be replaced by two Eucalyptus tereticornis.  
3. That Council examine opportunities for | 1. An independent arborist report will be submitted to the August meeting of the Environment & Recreation Committee.  
2. and 3. Awaiting suitable replacement stock. | Heidi Webb |

Parks Technical Officer
<table>
<thead>
<tr>
<th>Environment &amp; Recreation Committee June 2009</th>
<th>SUMMARY OF RESOLUTIONS</th>
<th>ACTION/TAKEN PLANNED &amp; ESTIMATED COMPLETION DATE</th>
<th>OFFICER</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>additional plantings and landscape embellishment at Birchgrove Park in consultation with the community.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ERC40/09 ORANGE GROVE MARKETS</td>
<td>That Doug Anderson liaise with Paul Geraghty regarding the sale of possible noxious weeds at Orange Grove Markets with an intention to notify the markets' management of the sale if they are noxious weeds.</td>
<td>Verbal update at the August Environment &amp; Recreation Committee meeting.</td>
<td>Doug Anderson</td>
</tr>
</tbody>
</table>
20th July 2009

Mr Jamie Sinclair
General Manager
Southern Region
State Transit Authority of NSW
PO Box 455
KINGSGROVE NSW 1480

Dear Sir,

RE: STATE TRANSIT AUTHORITY (STA) BALMAIN ROAD LEICHARDT OPTIONS FOR COMMUNITY USE

In December 2006 as part of the Development Application for the new Bus Depot on Balmain Road, Leichhardt, Council’s Mayor and officers held formal discussions with the STA in relation to possible community access and use of land not set aside for development. These discussions related specifically to land adjacent and surrounding the former Cable store (now a temporary car park). This area borders Derbyshire Road and has linkages to the adjacent parkland at Pioneer Park. The area is also occupied by a heritage listed building, the former Cable Store.

In December 2006, discussions between the STA and Council centred around the possible use of this area for community recreational use. It was determined by both parties that future discussions should be held once the bus depot development was nearing completion. This correspondence is seeking to formalise further dialogue with the STA on the possibility of dedicating an area for use as community open space.

Cable Store Site

The area of land located adjacent to the former Cable Store has excellent linkages with Pioneer Park and new school playing field (currently under construction). The possibility of closing the adjoining portion of Derbyshire Road (currently used for service vehicles only) and amalgamating this area of open space with Pioneer Park is an opportunity Council would like to discuss with the STA.

Council is currently restricted in terms of development opportunities for Pioneer Park as the park is a former cemetery and hence governed by legislation which restricts development within the park.

It is envisaged that embellishment of this particular site would take into account existing recreation needs within the Leichhardt LGA, with special
attention given to the recreational needs of young people. Given the proximity of Pioneer Park and the new school playing field there is an opportunity to establish embellishment of this site as a community facility and enhance the open space linkages within this area.

Plans have been attached to this correspondence which illustrate possible recreation and community use of the site. The drawings attached also illustrate the proposed green space linkages which could result from such a development as well as its functional relationship to the adjoining bus depot.

Leichhardt Council would welcome formal discussion with the STA on the proposals outlined and it would be greatly appreciated if you could contact the Mayor’s Office on 93679191 to arrange a meeting.

We look forward to hearing from you and meeting with STA officials to discuss this issue in the near future.

Yours Sincerely

[Signature]

Cr Jamie Parker
Mayor of Leichhardt
# LEICHHARDT MUNICIPAL COUNCIL

## REPORT

<table>
<thead>
<tr>
<th>DIVISION:</th>
<th>ENVIRONMENTAL AND COMMUNITY MANAGEMENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>SUBJECT:</td>
<td>CLIMATE CHANGE TASK FORCE MINUTES</td>
</tr>
<tr>
<td>AUTHOR:</td>
<td>DAVID ECKSTEIN</td>
</tr>
<tr>
<td></td>
<td>TEAM LEADER ENVIRONMENTAL STRATEGY</td>
</tr>
<tr>
<td>FILE REF:</td>
<td>F09/00040</td>
</tr>
<tr>
<td>DATE:</td>
<td>27 JULY 2009</td>
</tr>
<tr>
<td>WORD PROCESSING REF:</td>
<td>F:\Planning - Administration\Committees\Environment &amp; Rec Committee\2009\Aug 09\Agenda\Env &amp; Rec Agenda 050809.doc</td>
</tr>
</tbody>
</table>

## DIRECTOR’S SUMMARY - ORGANISATIONAL IMPLICATIONS

| Financial Implications: | Nil |
| Policy Implications:    | Nil |

**Leichhardt 2020+ Strategic Plan Objective:**
- Community Well-being
- Accessibility
- Place where we live and work
- A sustainable environment
- Business in the Community
- Sustainable Services and Assets

| Staffing Implications: | Nil |
| Notifications:         | Nil |
| Other Implications:    | Nil |
1. **Purpose of Report**

To advise Council of the status of Minute Recommendations of the Climate Change Task Force meeting held on 20 May 2009.

3. **Recommendation**

That Council adopt the minutes of the Climate Change Task Force meeting held on 20 May 2009 with the accompanying recommendations.
CLIMATE CHANGE TASKFORCE

CORPORATE SESSION

Pre-meeting Notes: It was agreed the Climate Change Taskforce Corporate Sessions have an internal Council focus. As a consequence, to enable all relevant Council staff to attend, consideration requires to be given to scheduling these sessions at an appropriate time.

Minutes of the Climate Change Taskforce of Leichhardt Municipal Council held in the Supper Room on 20 May 2009, 6-7pm.

Present at the commencement of the meeting: Community: Richard Dudley-Smith, Paul Geraghty, Monica Pellizzari

Crs: Daniel Kogoy, Rochelle Porteous, Gordon Weiss

Staff Present: Peter Conroy, Gill Dawson, David Eckstein, Rachel Maitland

Meeting Commenced: 6:00pm

ACKNOWLEDGEMENT OF COUNTRY:

Cr Rochelle Porteous performed acknowledgement of country in her capacity as chair.

1. Apologies

That apologies be accepted for the non attendance of Cr Jamie Parker (Mayor), Lindsay Souter and Lyn Gerathy.

2. Corporate Issues

David Eckstein presented on:
- Council’s emission sources
- Data sources for Council’s emissions (including confidence levels)
- Council’s current reporting obligations for emissions
- Re-development projects that have been implemented in Council
- Current targets

3. General Discussion

Actions arising
- That an update be provided on the grant application for co-generation at LPAC.
• That a breakdown be provided for the 4 highest energy use sites in the LGA on how the electricity is used (e.g. for heating).
• That an update be provided on what energy saving features have been incorporated into the new work at LPAC.
• Investigate whether the water heaters at Leichhardt Oval #1 are left on during the week or whether they are turned off at any time.
• Investigate the lighting at Annandale Neighbourhood Centre – are they able to be turned off in some areas without jeopardising safety?
• That an update be provided on the work already investigated by Southern Sydney Regional Organisation of Councils (SSROC) on street lighting and associated energy savings that can be achieved.
• Investigate whether there are any requirements on industrial buildings to minimise energy use (for example having a white roof).
• That a recommendation from staff be brought to the next meeting on what levels of abatement could be achieved by 2012 (include aspirational and achievable/realistic targets). Include a breakdown of abatement measures and possibilities to make up any deficit.

Matters discussed and noted

• Model: lots of little changes along the way with big changes/initiatives included over time can help achieve large emission reductions, e.g., Cllr Weiss provided example from motor vehicle industry.
• Cultural/behavioural change within the organisation so staff can all do little changes toward reducing emissions in their own sections. The big changes/initiatives incorporated over time will increase emission savings exponentially. Ensure the sustainability message is filtering down to all levels of staff – any programs/strategies developed should include engagement at all levels of Council. Noted that these programs take time. GM, Manager Employee Services & Directors need to address organisational cultural issues.
• Carbon Trust website a good source of information (www.carbontrust.co.uk/).
• The type of tar used to surface roads can influence energy use.
• The colour of roofs on industrial buildings to minimise energy use could be considered.
• Decision making tool to assist in identifying issues that will generate maximum return.
• Introducing charges for activities that have an environmental impact could be considered (for example charges for parking permits, which could have a sliding scale dependent on the type of car the permit is for).

4. Next Meeting

The next meeting will be held on Wednesday, 29 July 2009.

Meeting closed at 7:10 pm
CLIMATE CHANGE TASKFORCE

COMMUNITY SESSION

Minutes of the Climate Change Taskforce of Leichhardt Municipal Council held in the Supper Room on 20 May 2009, 7 pm.

Present at the commencement of the meeting: Community: Richard Dudley-Smith, Paul Geraghty, Fiona Jury, Alison Potter, Michael Chahine (arrived at 7:30pm)

Crs: Daniel Kogoy, Rochelle Porteous, Gordon Weiss, Alan Cinis

Staff Present: Peter Conroy, Gill Dawson, David Eckstein, Rachel Maitland

Meeting Commenced: 7:10pm

1. Community Issues

Council presentation
David Eckstein presented on:
• Uncertainty of community’s emissions (ongoing issue) – need a robust baseline before determining targets

Climate Change Balmain and Rozelle presentation
Fiona Jury presented on:
• More than 700 supporters (concerned about climate change but most are not very active)
• Programs (past and present) – see attachment 1 on pages 6 and 7
• Current campaign: 100% renewable energy / switch to Greenpower. Includes plaque/sticker “I support 100% renewable energy” for households to display. “Green Streets” competition – award given to street with the most households on Greenpower. See attachment 2 on pages 8 and 9.

Please refer to the general discussion section below for actions and notes arising from these two presentations.

2. General Discussion

Actions arising
• Incorporate the idea of having the Eco Festival focussed around renewable energy (to link in with Climate Change Balmain and Rozelle’s current campaign proposal described briefly in the community issues notes above) - a matter for discussion at the June Environment and Recreation Committee meeting.
• That a proposal from staff be brought to the next meeting on what levels of abatement could be achieved by the community (include aspirational and achievable/realistic targets).
That a proposal from Council be brought to the next meeting on the proposed schools project (described briefly in the general notes below).

That an email be started asking for ideas for community education projects.

Matters discussed and noted

- Banner space is available from Council to promote programs.
- Climate Change Balmain and Rozelle have met with the Mayor regarding a 100% renewable energy campaign. Avenues for Council support include:
  - Funding to purchase plaques
  - Promotion
  - Distribution of plaques
  - Assist with forum

- The forum proposed above as part of the 100% renewable energy campaign could link with the Eco Festival resolution from the April Ordinary Council meeting. The festival could focus around, but not be limited to, Renewable Energy. The festival should be ‘hands on’ with displays, workshops and film screenings.

- Examples of renewable energy on display:
  - Centre for Education and Research in Environmental Strategies (CERES) in Brunswick East, Melbourne – Eco House on-site.
  - Centre for Alternative Technology in Wales – eco buildings, renewable energy generation on-site.

- Other ideas for Eco Festival:
  - “Wheel of Fortune” – donated by local environmental artist. It includes various environmental ‘disasters’ (has a BP focus).

- There have been a number of eco festivals in the inner-west recently and their future is currently being investigated. Council should investigate the reasons why before commencing plans for a similar festival in Leichhardt.

- Incidental contact/exposure is a tool used to engage the community, for example having a demonstration stall at the markets.

- In summary the event needs to:
  - Be attractive to people with a genuine interest in environmental issues;
  - Be attractive to people with only a passing or developing interest in environmental issues – in this case, we need a mechanism to attract them and marketing the event as an “environmental event” may not be the mechanism. We need to understand the market and establish: who they are, what would attract them, where do they live, what’s their disposable income?;
  - We need to promote it as not just another environmental event e.g. Marrickville’s Cooks River Festival, City of Sydney’s Live Green festival. When organising the event, we should critique these existing events – activities, attractions, number attending, location attributes;
  - Once we get people at the event we need to let them look, touch, feel and experience which will then allow them to appreciate the issue;
  - Once we know the scope of the event, the patronage, target, attractions etc will determine the location for the event.

- 4 focus areas/goals for community: education, lobbying, campaigning, reduction.
- Campaign suggestion of Climate Change Balmain and Rozelle: 10% uptake in Renewable Energy. Noted this would be measurable and quantifiable.
- Suggestion on focus for community: 50% education / campaigning / lobbying and 50% actions.
- Need to determine the greenhouse gas emission targets for the community before strategies can be developed.
• Schools project idea: this would involve graphing the energy use of each school, working with them to reduce their energy use, and displaying in the school grounds these energy-saving initiatives. This will educate not only the teachers and students but also the parents of the students, thus reaching the community indirectly. It was noted that there hasn’t been a big uptake in recent community sustainability workshops run by Council so perhaps the community is saturated and other measures to educate the community to reduce their footprint should be investigated.
• The schools project proposal by Council could link into the 100% renewable energy campaign by aiding the distribution of the plaques.
• Suggestion to email around any ideas for community education projects.
• The Alternative Technology Association (ATA) promotes homes that are energy efficient and organises open viewings of them. There are usually some in the Leichhardt area so Council could assist promoting these.

3. **Next Meeting**

The next meeting will be held on Wednesday, 29 July 2009.

**Meeting closed at 8:30 pm**
## ATTACHMENT 1

### Programs 2006 – 2008

<table>
<thead>
<tr>
<th>Program/Campaign</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kilowatt Challenge, Oct ‘06 – Aug ‘07</td>
<td>Competition in the community encouraging residents to reduce energy consumption. 16,000 fridge magnet postcards delivered.</td>
</tr>
<tr>
<td>Solar for Schools, May ‘06 - present</td>
<td>Facilitated solar panels to be installed on rooftops of Rozelle Public School and Birchgrove Public Schools. Assisted schools with grant applications for the same.</td>
</tr>
<tr>
<td>Earth Hour Event, March ‘07</td>
<td>Rozelle parent collaborated with CCBR to create a concert for Earth Hour and donated proceeds to CCBR.</td>
</tr>
<tr>
<td>Solar Bulk-Buy, Nov ‘08</td>
<td>Six residents took-up a $600 discount on 1KW photovoltaic system. CCBR worked with “Sydney Energy Cooperative” to promote this offer.</td>
</tr>
<tr>
<td>“Turn the Tide Kevin”, July – Dec ‘08</td>
<td>Support given to a local resident who initiated this campaign, giving all Australians the opportunity (by sending group photos and letters) to ask the Prime Minister to make 2010 Australia’s peak emissions year.</td>
</tr>
<tr>
<td>Switch to Greenpower</td>
<td>Long-term objective of Climate Change Balmain-Rozelle: education, engagement and lobbying.</td>
</tr>
<tr>
<td>Moratorium on new coal-fired power</td>
<td>Long-term objectives of Climate Change Balmain-Rozelle: facilitation of community engagement and lobbying.</td>
</tr>
<tr>
<td>stations and the non expansion of our</td>
<td></td>
</tr>
<tr>
<td>export coal industry.</td>
<td></td>
</tr>
</tbody>
</table>
## Current Programs 2009

<table>
<thead>
<tr>
<th>Program/Campaign</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>World Environment Day Rally - Saturday 13th June 2009</td>
<td>Rally from Walsh Bay to CBD voicing concern at lack of action by Government on climate change and promoting the rapid expansion of a renewable energy industry.</td>
</tr>
<tr>
<td>Building the National Network of Climate CCBR Action Groups</td>
<td>CCBR is involved in the development of a communications network structure, website, national campaigns and sharing of ideas &amp; resources</td>
</tr>
<tr>
<td>Campaign: 100% Renewable Energy / Switch to Greenpower</td>
<td>Raise awareness and educate regarding the potential of renewable energy as the solution. Facilitate a shift in acceptance of clean energy. Create a “demand driven” model for renewable energy – increased uptake of renewable energy within the LGA Reduce the community’s carbon footprint and facilitate lobbying/advocacy between the community and its political leaders</td>
</tr>
</tbody>
</table>

**Other activities include:**

- Education on climate change science, current issues and advocacy via Newsflashes / Newsletters to Climate Change Balmain-Rozelle supporters (currently > 700 households).
- State and Federal lobbying, online petitions, govt. submissions, pre-election ‘report cards’ letters, media liaison, school newsletters and local stalls.
- Collaboration with NGO’s and other climate action groups. Free energy audits to supporters provided voluntarily by local expert.
- Promotion and participation in protests, blockades, street theatre and rallies.
ATTACHMENT 2

“100% Renewable Energy for Australia”
Campaign Proposal

Vision

The 100% Renewable Energy for Australia Campaign aims to reduce the carbon footprint of the community by encouraging and assisting residents and organisations in the Leichhardt Municipality switch to Greenpower and actively support 100% renewable electricity for Australia.

Objectives

- To increase uptake of renewable energy in households and organisations in the municipality with the aim of achieving 100% renewable energy in this area as soon as possible
- To educate residents and organisations in the Municipality to show their pride in using 100% renewable energy by displaying a plaque or sticker on the front of their premises and facilitate advocacy/lobbying for renewables in the process.

Campaign Activities

- Education and engagement: free screening of “Age of Stupid” film to launch the campaign; independent information on Council’s website, forums, publicity, confutes signs on main roads
- Plaques and Stickers: facilitate a change in community behaviour/social norms by encouraging residents to switch to 100% renewable electricity and show pride in doing so by affixing a sticker or plaque to the front of their property with the following message:
  “This household supports 100% Renewable Energy for Australia”
- “Green Streets” Competition: competition whereby the street in Leichhardt Municipality with the most households on Greenpower wins the “Green Streets Award” for that calendar year!
# Quotes for Campaign Materials

<table>
<thead>
<tr>
<th></th>
<th>Graphitype Printing Services</th>
<th>Easy Signs</th>
<th>Sydney Print &amp; Design</th>
</tr>
</thead>
<tbody>
<tr>
<td>Large Corflute x 500</td>
<td>$4,043 900mm x 600mm</td>
<td>Not available</td>
<td>$15,000 420cm x 594cm</td>
</tr>
<tr>
<td>Stickers x 1,000</td>
<td>$2,117 (Cut &amp; boxed)</td>
<td>$1,341 (Uncut sheet)</td>
<td>$1,200.00</td>
</tr>
<tr>
<td>Plaques x 1,000</td>
<td>$2,056 (Plastic)</td>
<td>$3,686 (Aluminum composite)</td>
<td>$5,750 (Plastic)</td>
</tr>
</tbody>
</table>

For more information about Climate Change Balmain-Rozelle, please visit: [www.climatechangebr.org](http://www.climatechangebr.org)
# LEICHHARDT MUNICIPAL COUNCIL

## REPORT

**DIVISION:** INFRASTRUCTURE AND SERVICE DELIVERY  
**SUBJECT:** UPDATE ON CELTIS SINENSIS  
**AUTHOR:** DOUG ANDERSON – BIODIVERSITY OFFICER  
**FILE REF:** F97/02156  
**DATE:** 16 JULY 2009  
**WORD PROCESSING REF:** F:\store\council reports\council reports\Celtis update 07-09.doc

## DIRECTOR’S SUMMARY - ORGANISATIONAL IMPLICATIONS

<table>
<thead>
<tr>
<th>Financial Implications:</th>
<th>Funding is available in the Bushland Biodiversity budget for the production of a leaflet</th>
</tr>
</thead>
<tbody>
<tr>
<td>Policy Implications:</td>
<td>Urban Forest Policy</td>
</tr>
<tr>
<td>Strategic Plan Objective:</td>
<td>A Sustainable Environment</td>
</tr>
<tr>
<td>Staffing Implications:</td>
<td>Nil</td>
</tr>
<tr>
<td>Notifications:</td>
<td>Nil</td>
</tr>
<tr>
<td>Other Implications:</td>
<td>Nil</td>
</tr>
</tbody>
</table>
1. **Purpose of the Report**

To inform Council of the steps that will be taken to implement the control of *Celtis sinensis* following its declaration as a Class 4 noxious weed under the noxious Weeds Act 1993 in the Leichhardt Municipal Council LGA.

2. **Recommendations**

1. That Biodiversity Officer to produce a *Celtis sinensis* information leaflet for targeted distribution to residents.

2. That a programme including the issuing of control notices, community education and eradication measures to control *Celtis sinensis* be implemented as outlined in Section 4 of this report.

3. That Biodiversity Officer to be authorised to issue weed control notices.

3. **Background**

In February 2009 the Environment and Recreation Committee resolved as follows:

1. *That council support the aims and objectives of the Sydney Regional Celtis Management Plan 2008-2013; and*

2. *That council endorse the declaration of Celtis sinensis as a Class 4 noxious weed under the noxious Weeds Act 1993 in the Leichhardt Municipal Council LGA.*

These recommendations were supported at the February 2009 Ordinary Council Meeting.

Submissions have subsequently been sent to the National Weeds Advisory Council from all Councils participating in the Sydney Central Regional Weeds Committee, requesting the declaration of *Celtis sinensis* as a Class 4 noxious weed. Upon declaration, Council will be asked to endorse a Class 4 Management Plan specifying the levels of control required on public and private lands in the Leichhardt LGA. Upon endorsement of this plan, authorised council officers will be able to issue control notices for the weed to private and public landowners in the Leichhardt LGA.

A Class 4 declaration will allow Council to manage new infestations by enforcing control of all juvenile plants. Mature and semi-mature specimens can be controlled where plants are not included in an approved heritage plan.
This category allows limited discretion to be afforded to private properties containing large specimens which would likely cost thousands of dollars to remove (i.e. staged removal, generous time-limits etc.).

The process to have *Celtis sinensis* exempted from Council’s Tree Preservation Order is underway. In combination with the Class 4 declaration, this will enable council officers to issue control notices for semi-mature and mature specimens to private landowners.

This report outlining a programme of works and community education to control *Celtis sinensis* has been provided at the request of the Environment and Recreation Committee.

4. **Report**

A programme of works to control *Celtis sinensis* on Council land commenced in April 2009. A survey has been carried out to determine the level of *Celtis sinensis* infestation in all of council’s parks and reserves. Council’s bushcare crew has commenced eradication measures in King George Park, Leichhardt Park, White’s Creek Valley Park, Birrung Park, Spindler’s Park, Piper St. road reserve and Elkington Park. Council’s bushcare crew and tree crew will recommence eradication measures in September after the winter dormancy.

The level of infestation of *Celtis sinensis* in Council’s parks and reserves is generally light, with the exception of a moderate infestation in Leichhardt Park. It is anticipated that the removal of all specimens larger than seedlings in all Council parks and reserves can be completed by the end of April 2011. Ongoing control will then be easily achieved by a programme of steam-weeding and handweeding.

Heavy infestations have been surveyed and mapped throughout Callan Park. Work is underway to control these infestations, with eradication measures being carried out by Conservation Volunteers Australia under the supervision of Council’s Biodiversity Officer throughout the remnant bushland in and around Callan Point. Eradication measures are also being carried out by the Callan Park Bushcare Group.

Seventy-nine very large, mature specimens requiring removal by professional contractors have been identified and mapped throughout Callan Park. These mature trees produce a vast amount of seed, which is distributed throughout Callan Park and beyond by birds. The removal of these mature specimens is therefore a priority. The Ryde and Padstow Colleges of TAFE have expressed interest in assisting with the removal of these trees over a period of years as part of their arboriculture student training. Council’s Biodiversity Officer will, with the consent of the NSW Dept. of Health, submit a development application for the removal of these trees to enable this arrangement to proceed. Upon removal, these trees will be replaced with appropriate species in accordance with the Callan Park Conservation Management Plan.
In addition to the seventy-nine mature specimens in Callan Park, there are thousands of saplings and semi-mature *Celtis sinensis* throughout the park. Should Council take over control of the Callan Park, Council’s bushcare crew and tree crew could systematically remove these trees from the park over a period of years as operational budgets allow. These trees will be replaced with appropriate species in accordance with the Callan Park Conservation Management Plan.

A recently completed street-tree inventory revealed no instances of mature or semi-mature *Celtis sinensis* occurring in streetscapes in the Leichhardt LGA.

The most serious infestations on *Celtis sinensis* in the Leichhardt LGA occur on lands owned by State Rail. These railway corridors also provide important habitat for a range of indigenous fauna including locally vulnerable species such as the Superb Blue Fairy Wren, New Holland Honeyeater, Eastern Spinebill and Azure Kingfisher. While *Celtis sinensis* does not provide important habitat for these species, the control of *Celtis sinensis* in these areas will need to be carried out very carefully in order preserve important habitat vegetation such as the weed species Lantana, Green Cestrum and Blackberry. This will not be easy, as *Celtis sinensis* is often found surrounded by dense thickets of these weeds. It is all too easy to imagine State Rail, having been issued a weed control notice for *Celtis sinensis*, taking a blanket approach and controlling all weeds indiscriminately. This would in many cases be the easiest and most economical option for State Rail, and justifiable on the basis that Lantana, Green Cestrum and Blackberry are declared environmental weeds.

Loss of habitat value in railway corridors would be a major blow to biodiversity conservation in the Leichhardt LGA, and would seriously compromise the potential habitat value of many of our revegetation sites, particularly those such as the White’s Creek Wildlife Corridor, which has been designed to extend the habitat provided by the railway enclosure in Brenan St., Annandale, providing an opportunity for locally vulnerable native bird populations to extend their territories and thereby become more viable in our LGA.

Upon declaration of *Celtis sinensis*, the co-operation of State Rail will be sought to ensure that control of the weed in railway corridors proceeds according to an appropriate methodology that respects existing habitat values. Recent attempts to gain access to railway corridors for community bushcare groups to carry out *Celtis* control and native revegetation have been unsuccessful. State Rail are, unfortunately, notoriously uncooperative in these matters. Negotiations at a senior management and/or Mayoral level may be required for community volunteers and Council officers to gain access to railway corridors to carry out appropriate works subject to the necessary permits and safe operating procedures being put in place. Alternatively, State Rail appointed contactors and/or staff can be requested to undertake the works in a manner that will not compromise habitat values in these corridors. The degree of cooperation we can expect from State Rail in regard to these matters is unknown at this stage.
Controlling *Celtis sinensis* on private lands will be achieved by means of community education and the issuing of control notices where necessary. Council’s Biodiversity Officer will, on declaration of the weed, produce and strategically distribute an information leaflet. Door knocking and the issuing of control notices will take place as necessary. A strategic approach which identifies and targets areas of greatest concern will be adopted. Assistance in the identification of problem areas will be sought from Horticultural Officers working in Council’s area-based parks and street maintenance crews.

Upon declaration of *Celtis sinensis*, funding will be made available through the Catchment Management Authority for control of the weed. It is anticipated that such funding may be used to subsidise removals of large specimens of private lands.
# LEICHHARDT MUNICIPAL COUNCIL

## REPORT

**DIVISION:** INFRASTRUCTURE AND SERVICE DELIVERY  
**SUBJECT:** NATIVE PLANTINGS IN VERGES  
**AUTHOR:** VINCE CUSUMANO – MANAGER PARKS & STREETSCAPES  
DOUG ANDERSON – BIODIVERSITY OFFICER  
**FILE REF:** F06/00258  
**DATE:** 29 JULY 2009  
**WORD PROCESSING REF:** F:\store\council reports\council reports\Native verge plantings Council Report 07-09.doc

### DIRECTOR’S SUMMARY - ORGANISATIONAL IMPLICATIONS

<table>
<thead>
<tr>
<th>Category</th>
<th>Implications</th>
</tr>
</thead>
<tbody>
<tr>
<td>Financial Implications:</td>
<td>The acceptance of broad scale verge planting programme would require additional staff and funding.</td>
</tr>
<tr>
<td>Policy Implications:</td>
<td>Urban Forest Policy</td>
</tr>
<tr>
<td>Staffing Implications:</td>
<td>Nil</td>
</tr>
<tr>
<td>Notifications:</td>
<td>A consultation programme to select the species and locations would need to be undertaken</td>
</tr>
<tr>
<td>Other Implications:</td>
<td>Nil</td>
</tr>
</tbody>
</table>
1. **Purpose of Report**

This report has been prepared in response to a request from Councillors and Committee members at the December '08 meeting of the Environment and Recreation Committee to investigate the possibility of planting native grasses in verges.

2. **Recommendations**

1. That Council initiates a pilot programme in cooperation with residents to determine community interest in, and likely acceptance of, a broadscale native verge planting programme.

2. That Council carry out community consultation in a selected street to gauge the likely participation and cost implications to undertake and adopt-a-verge programme of planting native plants instead of grass and that the results of this consultation be brought back to the Environment and Recreation Committee.

3. That the street chosen for the pilot programme will be derived from the current footpath replacement programme.

3. **Background**

Leichhardt Council is one of the only LGAs that provides grass verge mowing as a service to the community. There are 73,000 square metres of grass verge in the local government area which are maintained by 15 area based crews who mow them on a three weekly cycle and edge them as necessary at a cost of $845,000 per annum.

Since the adoption of Council’s Stormwater Management Strategy Council has been increasing the amount of grass verge in the LGA. In the past two years Council has installed an additional 2,500 square metres of grass verge.

At the December 2008 Environment and Recreation Committee Meeting the Committee asked:

*That a report be brought to the Environment and Recreation Committee on the possibility of replacing grass verges in entire streets with native grasses or plants.*

Council currently supports verge plantings by means of the “Adopt-a-Verge” programme. Residents are encouraged to ‘adopt’ the verge in front of their houses for the purpose of creating a street garden, with the resident agreeing to take responsibility for maintenance. Residents who wish to adopt-a-verge contact Council and the area is then inspected to see if the verge is suitable for this purpose. If the verge is suitable, Council arranges to have the grass surface...
treated and removed, and appropriate plants for the verge provided/ or
information provided to the resident on what they can plant. This usually
excludes large growing and vigorous plants that can cause problems.

Another problem which has arisen is when residents take responsibility for the
planted area and plant inappropriate species and unsafe garden edging which
become trip hazards. If this programme was to be expanded then a policy,
guidelines and an education brochure would need to be developed.

Other typical problems have included weediness, restriction of footpath access,
parking problems, and perceived unsightliness from neighbouring residents.
These problems have on occasion led to disputes between neighbours. Access
issues have also been a problem especially in wet weather when the planted out
verges reduce access to paths and restrict persons from alighting from parked
vehicles.

Some of these plantings have, however, succeeded through the conscientious
efforts of residents aware of the need to make appropriate plant choices and to
maintain the verge planting regularly, and mindful of the impact of verge
plantings on their neighbours. There have however been problems when the
owners or occupiers of these properties move out and the new residents have no
interest in taking care of the verge plantings. In these instances, it is Council that
invariably takes up the maintenance of these areas.

There have been examples of verge gardens such as the corner or Allen St and
Darley Rd where the body corporate for the development have taken on the
maintenance of the gardens and where the plants are doing well and adding to
the streetscape amenity.

There are also examples such as in Annandale St where the gardens,
established as part of the development have not been maintained and have
reverted back to Council to carry out the regular maintenance.

4. Report

The benefits of planting natives in verges may be broadly categorised as
aesthetic, environmental and psychological/sociological.

Aesthetic benefits
Indigenous plantings in street verges have the potential to be aesthetically
pleasing, and will help to create an authentic sense of place – particularly if
street-tree plantings are included as part of a unified streetscape using iconic
local tree species such as, for example, Scribbly Gum (Eucalyptus haemostoma,
Eucalyptus racemosa) and Old Man Banksia (Banksia serrata). Care will need to
be taken with plant choices – most of our local grass species are unsuitable as
they are either annual (throw seed then die) or perennial (die back annually to
the roots then reshoot) and so will require regular, labour-intensive maintenance
to maintain appearance. Evergreen, tufted grasses such as Poa labillardieri and
Pennisetum alopecuroides may be more suitable but will need to be cut back periodically to remove dead growth, creating large amounts of waste. They also have the potential to become weedy and in some cases, especially in the height of summer can be a potential fire hazard.

Compact, small shrubs and herbs such as Blue Flax Lily (Dianella caerulea), Guinea Flower (Hibbertia scandens), Coast Rosemary (Westringia fruticosa), White Correa (Correa alba) and local Grevillea species (G.buxifolia, G.sericea, G.linearifolia) may be suitable but shrubs will need periodic pruning and/or replacement.

By the end of 2009, Council expects to have built a new community native nursery in Wisdom St., Annandale. This will greatly increase the capacity of Council and the community to produce native tubestock. A verge planting programme is one possible means of utilising the output from the new nursery.

Environmental

Environmental benefits relate mostly to maintenance practices. Native plantings will decrease the need for whipper-snippers and mowers, with a resultant decrease in noise and air pollution (including dust). In cases where concrete verges are replaced with native plantings, stormwater run-off will be decreased.

Biodiversity benefits will be small, relating to increased forage for some native birds and habitat creation for small lizards and invertebrates. Native plantings in verges are highly unlikely to advantage any of our target (locally vulnerable) species. Biodiversity conservation resources are more effectively utilised in projects with greater benefits such as increasing the size and function of bush revegetation areas in our parks, and control of regionally significant weeds such as Celtis sinensis.

A verge planting programme that decreases Council’s ability to expand and improve more viable bushland sites will have a negative impact on biodiversity conservation in the area.

Psychological/Sociological

Psychological benefits relate to the increased sense of wellbeing associated with vegetation in the landscape. These effects are well researched and accepted, and there is no reason to believe that verge plantings will not contribute, in some degree, to the psychological wellbeing of residents. These benefits will likely be enhanced if residents are involved in the planning and implementation of the program.

4.1 Cost Implications

The cost to plant out a square metre of grass verge with kikuyu turf, including the ground preparation is in the order of $8 per square metre. The costs to prepare
an area of verge for planting out with a mixture of native grasses, groundcovers and low growing shrubs and then mulching would be in the vicinity of $15 per square metre. In the case of sloping verges, to prevent soil and mulch from washing into the gutter, timber edging would need to be installed. This would add a further $15 per linear metre to the cost of the verge planting. Last financial year Council planted 1,300 square metres of grass verge at a cost of $10,800.

On average street garden beds and planted areas of verge are maintained on a monthly basis with weeding, rubbish removal and pruning of wayward growth and the planting of replacement plants being the main tasks involved. Twice yearly, mulching is also undertaken to assist with the suppression of weeds and to retain moisture levels in the soil.

It is difficult to estimate the additional cost implications to Council for maintaining plantings on verges as we are not sure how much effort the residents will provide in maintaining these plantings. However, if it is undertaken on a small scale to start with, these works could be undertaken by Area Base although Council needs to acknowledge that there could be significant cost implications should Council have to maintain a majority of these plantings. Therefore a pilot programme is recommended to determine the likely participation rates and costs for these works. The results of this consultation would be brought back to the Environment and Recreation Committee.

In relation to the on-going maintenance of verges, while it may appear to be more cost effective to reduce mowing activities through a conversion over to native gardens on verges, the cost to maintain planted out verges would be roughly the same when replacement plants, mulch, pruning back of wayward growth to maintain path and vehicular access and edging repairs are factored in. However, garden beds, unlike grass verges would require refurbishment every 5-8 years. This would entail removal of poorly performing or senescing plants and replacement with new plants. These would also require a higher level of attention to get them established. While not being as expensive as the establishment costs the refurbishment of these gardens would be in the order of $8 - $10 per square metre.

4.2 Pilot Programme

Should the Environment and Recreation Committee, having reviewed the results of the community consultation on the selected street wish to undertake a pilot programme then this could be used to gauge the effectiveness of this type of verge planting using a variety of shrubs and groundcovers, with respect to establishment, maintenance and community involvement.

The plants and the areas to be planted would be chosen in consultation with the residents in the street and it would be the responsibility of the residents themselves to undertake the regular maintenance of these planted out areas. Issues may arise in areas where some residents want the planted out verge while others wish to have their grass verge retained. In these instances, edging
would need to be installed between the planted out and grass areas to stop grasses sending stolons into the garden areas and overtaking them.

The streets chosen for the pilot programme will be derived from the current footpath replacement programme and the results of the trial will be reported back to Council.

5. **Summary/Conclusions**

While the benefits of a native verge planting programme are worth pursuing, Council’s experience with the ‘Adopt-a-Verge’ programme suggests that a prescriptive approach to plant selection and placement will be needed to ensure the success and acceptability of individual sites. This experience also suggests that Council will ultimately have to take responsibility for the maintenance of a very significant proportion of the verge plantings.
Item 9.1

ARBORIST REPORT FOR EUCALYPTUS TERETICORNIS AT BIRCHGROVE PARK

(FROM THREE WISE MEN PTY LTD)
Arboricultural Hazard Appraisal
For
Forest Red Gum
At
Birchgrove Park
Birchgrove NSW

Prepared for:

Leichhardt Council
7-15 Wetherill Street
LEICHHARDT NSW 2040

Ref: 2000
July 09
DISCLAIMER

This Appraisal has been prepared for the exclusive use of the Client and Tree Wise Men® Australia Pty Ltd (TWM) accepts no responsibility for its use by other persons.

The Client acknowledges that this Appraisal, and any opinions, advice or recommendations expressed or given in it, are based on the information supplied by the Client and on the data, inspections, measurements and analysis carried out or obtained by Tree Wise Men® Australia Pty Ltd (TWM) and referred to in the Appraisal. The Client should rely on the Appraisal, and on its contents, only to that extent.

Peter Castor
Director

BSc (For.)
Member: AIH, NAAA, ISAAC, IACA, PIA, MAE (UK)
22 July 2009
TABLE OF CONTENTS

1. BACKGROUND AND METHODOLOGY ........................................... 4
2. SUMMARY AND CONCLUSIONS .................................................. 7
3. FINDINGS IN DETAIL ............................................................... 9

ATTACHMENTS
A. Site Photographs
B. Picus Sonic Tomograph Test Report, Moore Trees
1. BACKGROUND AND METHODOLOGY

1.1 INTRODUCTION

1.1.1 This Hazard Appraisal was requested by Leichhardt Council in relation to an existing tree located on the western grassed embankment of Birchgrove Park, upslope of the oval (the subject site). An assessment was sought on the hazard potential of a Forest Red Gum, *Eucalyptus tetragona* (the subject tree) which is protected under the Leichhardt Council Tree Preservation Order. The tree has various defects and has shed several limbs in recent years.

1.1.2 The aim of this Hazard Appraisal is to assess the existing vigour and condition of the subject tree and to provide tree management recommendations. A specific strength loss assessment of the stem hollow at near ground level has been provided in addition to an aerial inspection of the crown.

1.1.3 The Arborist Report dated 10 December, 2006 prepared by National Tree Management Pty Ltd, which recommended tree removal, has been reviewed.

1.2 THE SUBJECT SITE

1.2.1 The subject tree is located on the western side of Birchgrove Park within a grassed embankment. The tree is closest to #63 and #65 Louisa Road properties to the west. There is a footpath passing the base of the tree to the east. The subject site and subject tree are indicated on the 2009 Google aerial photo below.

1.2.2 The subject tree is located in an area of Birchgrove Park which is likely to have frequent people movements during sporting and cultural events held on the oval. No people movement counts have been undertaken in the area of the tree.

1.3 DATA COLLECTION & INSPECTION METHODS

1.3.1 An on-site inspection and aerial and ground level visual tree assessments (VTA)\(^1\) were undertaken on 30 June, 2009.

1.3.2 An aerial (climbing) inspection was undertaken by Plateau Tree Services under the direction of Tree Wise Men® Australia Pty Ltd. Photos were taken by the tree climber and the author of this report on 30 June, 2009.

1.3.3 A Picus Sonic Tomograph test was undertaken by Moore Trees of the basal hollow on 30 June, 2009. Moore Trees were instructed by Tree Wise Men® Australia Pty Ltd. The Picus report (Attachment B) contains an image illustrating the extent of wood decay at a point approximately 650mm above ground level.

1.3.4 The current landuse in the vicinity of the tree and other environmental and hazard factors have been considered in assessing the overall tree hazard potential (refer to Tree Data Sheet at Section 3). In determining the stem failure potential, the Matheck formula for strength loss has been utilised.

---

1.3.5 The Site Photographs were taken by the author and by the tree climber at the site inspection. No image enhancement either within the camera or on the computer has been undertaken.

1.4 THE SUBJECT TREE AND ITS CONDITION

1.4.1 Photo A shows the various points (1-8) at which major branch failures or structural defects occurred. Photos are included of some of these defects (Attachment A).

1.4.2 The subject tree is an over-mature Forest Red Gum, *Eucalyptus tereticornis*, with a DBH of 1140mm, approximate height of 25 metres and canopy spread of 7 metres (North), 10 metres (South), 5 metres (East) and 11 metres (West). The tree is likely to be over 100 years old given that the 1943 aerial photos show a tall tree in this location and historical photos of the site show a mature tree in this location. There was trunk lean towards the west towards properties at #63 and #65 Louisa Road (Photo B, DS 537). The vigour was Good and condition Poor. The current safe useful life expectancy (SULE) of the tree is Short (5-15 years). This SULE could be lengthened through particular canopy management and restriction of people movements within the fall zone or limb drop zone. The tree is prominent in the landscape being a free-standing dominant canopy tree. There was a cluster of canopy trees with connecting canopies further to the north.

1.4.3 There was bark wounding to some of the surface roots on the low side, adjacent to the footpath. No significant decay was observed associated with this wounding. No fungal fruiting structures were observed in the rootcrown area or within the crown of the tree.

1.4.4 There was evidence of several 1st Order limb failures at varying heights above ground and there have been two such failures in recent years. The other 1st Order failures appear to have occurred over an extended period, first occurring approximately 20-30 years ago (wound at Point 2).

1.4.5 There was a basal cavity opening on the northern side of the trunk (Photo C, DS 534, Point 1) centred at approximately 650mm above grade. A Picus testing was undertaken at this level. There was another trunk major wound at approximately 5 metres above grade on the northern side of the trunk (Photo D, Point 2). This wound is likely to have resulted from a 1st Order branch failure 20-30 years ago. There was a hollow approximately 150-200mm diameter and 600mm deep within this wound.

1.4.6 There were three 1st Order limb failures observed between 10 and 15 metres above ground level. The lowest two were on the southeastern (Photo E, Point 3) and eastern side (Photo E, Point 5) respectively and the third was on the northern side (Photo F, Point 6).

1.4.7 There was a bee hive (Point 4) within a cavity at approximately 10 metres above grade on the northeastern side of the trunk between Points 3 and 5. It is likely that there is direct connection between the hollow at ground level and the hollows observed at Points 2 and the bee hive.

---

2 RTA 1943 aerial photos "From the Skies".
3 1st Order limbs arise from the main trunk. 2nd Order limbs arise from 1st Order limbs and so on.
1.4.8 There was wound on the top side of the 1st Order branch growing in a southwesterly direction (Photo G, Point 7) and there was some decay into the heartwood. This branch is predisposed to failure given the decay and the length and horizontal nature of the branch.

1.4.9 There was stress fracture in the bark of the vertical leader at approximately 20 metres above ground (Photo H, Point 8). This fracture is likely to have formed as a result of tortional forces applied during previous wind storms.

1.4.10 In addition to the 1st Order branch failures described above (Points 2, 3, and 6) the ends of the two lowest remaining limbs have failed. There were several other bark wounds of varying significance on 2nd and 3rd Order branches throughout the crown. Photos were taken of these wounds during the aerial inspection. Those photos were not included in this report.

1.4.11 The tree had been pruned several times, given several collar cuts were observed. It is not known whether the pruning was undertaken to repair storm damaged branches or whether the pruning was of a hazard-reduction, preventative nature.

1.4.12 There were hollows observed at Points 1, 2 and 4 and at several other points higher in the crown. No wildlife was observed within these hollows at the time of the aerial inspection.
2. SUMMARY AND CONCLUSIONS

2.1 THE OVERALL HAZARD POTENTIAL

2.1.1 The subject tree is displaying the characteristics of a tree in an Over-Mature age class: the history of 1st Order branch failures is such a characteristic.

2.1.2 There are wounds or stress fractures in other 1st Order branches at approximately 20 metres above ground which predispose these branches to failure in the near future.

2.1.3 The hollow/decay at near ground level is not on its own large enough to condemn the tree: whole tree fracture at near ground level is not imminent. The 1st Order branch heading in the southwesterly direction at approximately 20 metres above ground is the most likely, next branch to fail.

2.1.4 There are currently unrestricted people movements within the drop zone of the tree.

2.1.5 The tree is prominent in the landscape being a free-standing canopy tree visible from the eastern side of Birchgrove Park across the oval.

2.1.6 We consider there are two options for the management of the subject tree:

- Option 1: Complete tree removal
- Option 2: Tree pruning, exclusion zone fencing and retention

Our preferred option is Option 1 for the reasons outlined at 2.2 and 2.3. Regardless of which option is adopted by Council, we recommend that the work be undertaken immediately.

2.2 OPTION 1: COMPLETE TREE REMOVAL

2.2.1 Complete tree removal and replanting is the preferred option given the history of branch failure and Over-Mature age class. The Hazard Rating (see Section 3) of 12 out of a possible 14 supports tree removal or significant hazard reduction intervention.

2.2.2 Tree removal should be undertaken by Arborists with minimum qualification of AQF Level 3. The works should comply with WorkCover Code of Practice for Tree Work, 1998.

2.2.3 Seed could be collected from the tree prior to removal to allow for a continuance of the tree provenance. From an arboricultural perspective this is not recommended given the branch failure history of this specimen.
2.3 OPTION 2: TREE PRUNING, EXCLUSION ZONE FENCING AND RETENTION

2.3.1 If the tree is to be retained for historical, cultural or ecological reasons, significant crown pruning will be required in addition to fencing off the likely drop zone.

2.3.2 The pruning required would include:
   - The pruning (to branch collar at the main trunk) of the southwest growing 1st Order branch (see Photo G)
   - Crown thinning (<30% by leaf area) of the section of upper crown above the stress fracture illustrated at Photo H
   - Reduce (using reduction pruning as per 7.3.2 of AS4373, Pruning of Amenity Trees) canopy spread to east so that there is no direct overhang of the footpath.
   - Pruning of all deadwood >25mm diameter.

2.3.3 All tree pruning must be undertaken to Australian Standard, Pruning of Amenity Trees AS4373, 2007.

2.3.4 The restrictive fencing will be required at an alignment 5 metres beyond the dripline of the tree. This area may still be within 5 metres of the existing footpath. The restrictive fencing will need to be in place for the life of the tree.
3. FINDINGS IN DETAIL

3.1 EXPLANATORY NOTES FOR TREE DATA SHEET

A. Subject Tree and Location
The common name of subject tree and its location.

B. Picus Tomograph Image (from Moore Trees Report, Attachment B)
Tomograph at 650mm above grade showing internal wood characteristics.

C. Photo
As indicated all photos were taken of 16th June, 2005. The digital photo image has not been enhanced in any manner. The focal length of the lens is equivalent to 28 degrees in 35mm SLR format. Additional site photos are provided at Attachment A.

D. Common Name/Genus Species
The common name and genus species of subject tree.

E. DBH
Trunk diameter at breast height (1.4 metres above grade) in millimetres, measured over bark using a fabric tape which automatically converts to diameter and assumes a circular trunk cross section.

F. Age Class
Imaginary (I), Semi-mature (SM), Mature (M) or Over-Mature (OM). Assessment of the tree's current Age. A Mature (M) tree has reached a near stable size (biomass) above and below ground. Trees can have a Mature Age Class for > 90% of life span. Over Mature (OM) trees show symptoms of irreversible decline and decreasing biomass.

G. Height
Estimated overall tree height in metres.

H. Vigour
Good (G), Fair (F) or Poor (P). The general appearance of the canopy/foliage of the tree at the time of inspection. Vigour can vary with the season and rainfall frequency.

I. Condition
Good (G), Fair (F) or Poor (P). The general form and structure of the trunk/s and branching. Trunk lean, trunk/branch structural defects, canopy skewness or other hazard features are considered.

J. Application of Mathecek Strength Loss Formula
  * To quantify buckling strength loss associated with hollows in stems with circular cross-section.
  * All drill readings at 100-150mm above grade coinciding with likely weakest point in stem.
  * Bark thickness subtracted from R and t dimensions. Bark thickness varies with species.
  * Discoloured or "altered" wood not included in sound wood readings.
  * R = radius of trunk, t = average width of sound wood. In this instance an average was calculated of readings at sensors 1, 3 and 6 on the Picus Image.
  * See Picus Tomograph (B) for further detail.
For Mathecek formula readings up to and including 30% - 35% require drastic pruning or removal. This rate applies also for eccentric (notional) hollows where the cavity occupies >50% of the stem diameter and where cavity opening <33% of stem circumference.

K. Evidence of Fungal Fruiting Bodies
Number of separate fruiting bodies of wood decay fungi observed in the above ground sections of the tree.
L. Other Observed Pests and Diseases
Other detectable tree pests and diseases within canopy branches and trunk.

M. Other Risk Factors
Other tree hazard factors which might contribute directly or indirectly to failure of the 'part most likely to fail' (whole tree failure in this instance) or present as a separate hazard factor (e.g. deadwood, defective live limbs, bark inclusions, poor tree architecture, excessive epicormics, stem girdling, trunk lean and root problems).

N. Safe Useful Life Expectancy (SULE)
A systematic pre-development tree assessment procedure developed by Jeremy Barrell, Hampshire, England. It gives a length of time that the Arborist feels a particular tree can be retained with an acceptable level of risk based on the information available at the time of the inspection. SULE ratings are Long (retainable for 40 years or more with an acceptable level of risk), Medium (retainable for 16-39 years), Short (retainable for 5-15 years) and Removal (tree requiring immediate removal due to imminent hazard or absolute unsuitability). To have a SULE rating of Long in this context with high use areas beneath the trees, we have assumed a high level of tree maintenance to achieve the acceptable risk.

O. Tree Part Most Likely to Fail
The Hazard Rating (P) relates to the tree part most likely to fail; the part most likely to cause damage of injury during inspection period (assumed annual), e.g. whole tree or deadwood or co-dominated stem with bark inclusion. The "Other Risk Factors" (0-2) rating allows for the inclusion of additional factors. In this instance whole tree failure as 650mm a.g. is assumed to be the part most likely to fail.

P. Hazard Rating
Hazard Rating of tree part most likely to fail with an allowance for Other Risk Factors. This Hazard Rating modifies (with addition of other Risk Factors) the ISA Hazard Rating System. The rating is achieved by addition of the four hazard components with a possible range of 3-14.

<table>
<thead>
<tr>
<th>Rating Factor</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Size of tree part to fail ¹  (1-4)</td>
<td>&lt;15cmØ</td>
<td>15-45cmØ</td>
<td>45-75cmØ</td>
<td>&gt;75cmØ</td>
</tr>
<tr>
<td>Failure potential of tree part ²  (1-4)</td>
<td>Low (71-100%) ³</td>
<td>Medium (51-70%) ³</td>
<td>High (31-50%) ³</td>
<td>Severe (0-30%) ³</td>
</tr>
<tr>
<td>Target rating ³  (1-4)</td>
<td>Occasional</td>
<td>Intermittent</td>
<td>Frequent</td>
<td>Constant</td>
</tr>
<tr>
<td>Other risk factors ⁴  (0-2)</td>
<td>Separate factors from tree part most likely to fail: deadwood, defective live limbs, lean, excessive epicormic growth.</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

¹ Trunk diameter at drill level
² Other factors such as trunk lean may influence failure potential
³ I/R results

Q. Recommendations
Based on supplied information, and data collected. The Hazard Rating (P) should be used to guide/prioritise tree management. The aim is to reduce to an acceptable level the risk to the public of tree related injury or damage. Tree removal is to be a last resort. Abatement works i.e. pruning, moving of targets, fencing of fall/drop zones to be used if acceptable risk reduction can be achieved. Tree inspection (VTA) is assumed to be annual.
### 3.2 TREE DATA SHEET

<table>
<thead>
<tr>
<th>A.</th>
<th>Forest Red Gum – Birchgrove Park</th>
</tr>
</thead>
<tbody>
<tr>
<td>B.</td>
<td>Picus image (Moore Trees)</td>
</tr>
<tr>
<td>C.</td>
<td>Photo</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>D.</th>
<th>Common Name, Species Name</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Forest Red Gum, <em>Eucalyptus tereticornis</em></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>E.</th>
<th>DBH (mm)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1140</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>F.</th>
<th>Age Class</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Over-Mature</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>G.</th>
<th>Height (m)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>28</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>H.</th>
<th>Vigour</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Good</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>I.</th>
<th>Condition</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Poor</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>J.</th>
<th>Application of Mattock Strength Loss Formula (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>50%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>K.</th>
<th>Evidence of Fungal Fruitling Bodies</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>None</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>L.</th>
<th>Other Observed Pests &amp; Diseases</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>None</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>M.</th>
<th>Other Risk Factors</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>History of 1st, 2nd and 3rd Order branch failure. People movements within dripline. Dwellings within fall zone. Other trunk hollows.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>N.</th>
<th>SULE</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Short</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>O.</th>
<th>Tree Part Most Likely To Fail</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Whole tree failure at 660mm above grade.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>P.</th>
<th>Hazard Rating (3 - 14)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>12</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Q.</th>
<th>Recommendations</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Option 1: Complete tree removal. Option 2: Prune, exclusion fencing and retain.</td>
</tr>
</tbody>
</table>
Attachment A: Site Photographs
Photo A: Subject tree showing major defects.
Photo B: Subject tree viewed from the south showing tree lean towards 63 and 65 Louisa Road properties.

Photo C: Basal cavity and Picus test site at 650mm a.g.
Photo D: Trunk defect at 5m a.g. northside (Point 2).

Photo E. 1st Order failure southeast side (Point 5).
Photo F. 1st Order failure north side (Point 6).

Photo G. Wound on topside of south-western 1st Order branch (Point 7).
Photo H. Stress fracture in main upright leader at approximately 20m a.g. (Point 8).
Attachment B: Picus Sonic Tomograph Test Report, Moore Trees
Picus Sonic Tomograph Test Report

Birchgrove Park
Birchgrove NSW 2041

Prepared for
Tree Wise Men™ Australia Pty Ltd
84 Fuller Street
Collaroy Plateau NSW 2097

Prepared by
Paul Vezgoff
Consulting Arborist
Moore Trees
2009
Summary

This report has been commissioned by Tree Wise Men™ Australia Pty Ltd of 84 Fuller Street, Collaroy Plateau NSW 2097. The report concerns one (1) mature tree located at Birchgrove Park, Birchgrove NSW 2041 (Map 1). The subject tree is Forest Red Gum (*Eucalyptus tereticornis*).

For this report I have conducted a single ultrasound test on the subject tree. The test was conducted at six hundred and fifty (650) millimetres from ground level, bisecting an open cavity. This test has been undertaken with the use of the Picus® Sonic Tomograph. This instrument uses the velocity of sound waves to calculate the area of sound wood within the test site of the subject tree. Test results are shown as a colour coded two dimensional images.

The site visit and test were undertaken on the 30th June 2009 on the subject tree.

The test results showed that the subject tree has an area of unsound wood that extends from an open cavity. The test results show that there is sound wood of approximately 66% at the test site.

Based on the t/R ratio (Section 2.2 of this report) assessed against the test results the tree does not pose a risk of failure at the test site. The tree should be retested in 36 months time to ascertain any increase in unsound wood. Fencing has been recommended to limit the target area below the canopy, due to continuing branch failures.
Table of contents

Summary 2
1. Introduction 4
2. Methodology 5
3 Test results 7
4. Conclusions 9
5. Recommendations 10
Glossary 11
Appendix 1 12
Explanatory Notes
Appendix 2 13
Bibliography

Curriculum Vitae – Paul Vezgoff 14
1. Introduction

This report has been commissioned by Tree Wise Men™ Australia Pty Ltd of 84 Fuller Street, Collaroy Plateau NSW 2097. The report concerns one (1) tree located at Birchgrove Park, Birchgrove NSW 2041 (Map 1). The subject tree is mature Forest Red Gum (*Eucalyptus tereticornis*) located on the edge of a local sports oval. The subject tree is approximately 100 years old. The tree is likely to have been planted following contouring of the embankment for the creation of the oval.

For the purpose of this report an ultrasound test has been conducted at six hundred and fifty (650) millimetres from ground level. This test has been undertaken with the use of the Picus® Sonic Tomograph. This instrument uses the velocity of sound waves to calculate the area of sound wood within a tree. Test results are shown as a colour coded two dimensional image.

A visual tree assessment (VTA) was performed on the subject tree however no root excavations were conducted as a part of this report.

Map 1: Red arrow is the approximate location of the subject tree. (whereis.com.au, 2009)
2. Methodology

2.1 The Picus® Sonic Tomograph

The Picus® Sonic Tomograph was developed by The Company Argus Electronics GmbH, Germany. It is a device created to measure decay within trees. The device has been accepted worldwide as a leading method of near non destructive testing of trees. This instrument uses the velocity of sound waves to calculate the area of decay within a tree. These sound waves are activated from sensors placed around the tree.

*Image of a typical test set up.*

Ultrasonic velocity has been demonstrated to be very sensitive to the early stages of wood degradation (Wilcox, 1988). Test results are shown as a colour coded two dimensional images (Plate 3. The lower limit to the size of defect that the Picus can detect depends on the size of the tree, number of sensors, and type of wood. The higher density of the wood, the smaller the defect that can be detected (Gilbert & Smiley, 2004).

To date, Moore Trees has conducted numerous destructive tests (where the subject tree has been cut down) on many species of trees, both native and exotic. These tests have confirmed the accuracy of the Picus® Sonic Tomograph. Other independent studies have also confirmed the accuracy of this device (Schwarze, Rabe, Fener & Fink, 2004). Ultrasonic tomography has been compared with other Tomographic techniques (Nicolotti, 2003) and has been found to be very effective in finding small structural anomalies within a tree.

Unlike other instruments used for decay detection the Picus® Sonic Tomograph does not drill into the tree and breach the tree’s barrier zones that are created to help confine and slow the spread of decay. Studies have confirmed that other invasive decay detection devices, such as drilling devices, can aid the spread of pre-existing decay within a tree (Kersten and Schwarze, 2005).
2.1.2 Analyzing the Picus® Report

Please read the following points to help you understand the Picus Sonic Tomograph Report.

1. Sensor 1, unless otherwise stated, is located on the northern side of the tree.
2. The test height is always measured at sensor 1.
3. Depending on some species of fungi, the active fungus that has colonized cells will not be visible to the human eye.
4. In most cases the altering wood from the fungus cannot be seen by the human eye.
5. The circumference measurement of the Tomogram is created from the location of the tips of the pins.
6. With some readings the ‘Sound wood’ and ‘Unsound wood’ quantities will not total 100%. The unspecified quantity is wood density that cannot be measured. That means that it may be sound or it may not. It is considered to be altering wood.

The Tomogram produced by the Picus® Sonic Tomograph may at times vary to what will visually be observed when the test area is revealed. It is important that only trained professionals make comments and recommendations regarding any test results.

2.2 The t/R ratio

The t/R ratio is based on many years of study of over 1200 tree failures of broad leaved and coniferous trees (Mattheck & Breloer, 2003). This ratio is based on a 70:30 rule. The study found that when most trees achieved a decay linear measurement of greater than 70% (i.e. less than 30% sound wood) the tree had a high likelihood of failure. The theory and this study can be read in more detail in the book ‘The Body Language of Trees’, 2003 by Claus Mattheck and Helge Breloer, pages 36-37.

This t/R ratio has been used in combination with the Picus® Sonic Tomograph to assess the structural integrity and make recommendations for the future management of the subject tree.

2.3 Location of test

The test area was conducted at six hundred and fifty (650) millimetres from ground level. This area was selected due to the open cavity as the most likely area of the trunk to fail.

2.4 Report limitations

This report does not include root excavation or aerial inspection.
3. Test results

Tree 1

PICUS test by: Paul Vezgoff
Test Height at sensor ten (10), north: 650mm
Tree Circumference: 3990mm at test height
Botanical Name: Eucalyptus tereticornis
Location: Birchgrove Park, Birchgrove NSW 2041
Date of test: 30.06.09

Plate 1: The subject tree, Eucalyptus tereticornis.
The asymmetrical nature of the canopy is evident. P. Vezgoff.

Summary
The tree is a mature Forest Red Gum (Eucalyptus tereticornis) growing on a grass embankment. The tree is in fair health and has an asymmetrical canopy with a westerly bias (Plate 1). The canopy of this tree is dominant in the surrounding area. There is evidence of storm damage and multiple branch failures. There is no evidence of fruiting bodies however there is an open cavity at the base of the tree approximately six hundred (600) millimeters from ground level (Plate 2). The perimeter of the cavity is producing large amounts of wound wood, an indication that the tree is photosynthesizing well.

The target area below the canopy currently consists of garden area and lawn area.

One (1) ultrasound test has been conducted on this tree. Test 1 was conducted at six hundred and fifty (650) millimeters from ground level (Plate 2). The test was undertaken to assess the structural integrity of the base of the tree due to the presence of the large open cavity, evidence of termite activity and a large stem wound on the north eastern side of the trunk.

The test results show that the tree has 66% sound wood at the test location and 21% is showing as unsound wood (Plate 3).

The open cavity occupies 38.1° of the circumference of the tree (Plate 3) This is well under the 120° where fracture is probable (Matcheck & Breloer, 2003).
Plate 2: Red line is the approximate location of the test. The cavity is located between sensors eight (8) and nine (9). P. Vezzoff.

Plate 3: Tomogram of the test location. Sensor 10 is north. The red line is indicative of the 70/30 ratio taken as a radial measurement from the centre of the trunk to each sensor. The blue angle is the degree of opening measured from the centre of the trunk.
4. Conclusions

The following conclusions can be made from the test results.

1) The subject tree has an open cavity. Based on the t/R ratio (Section 2.2 of this report) assessed against the test results the tree does not pose a risk of failure at the test site.

2) The subject tree has 66% sound wood at the test location.

3) Good quantities of wound wood are forming around the cavity.

4) The subject tree is in fair health however there have been several branch failures.

5) A walking track is below the canopy and the tree is situated in a location that is likely to have a large number of people below it during sporting events.

The tree has clear evidence of a central cavity. The combination of the quantity of wound wood forming and the percentage of sound wood present, I have concluded that the tree is structurally sound at the test site. An aerial inspection of the canopy and upper branches has been conducted by Tree Wise Men however I am not aware of these results.
5. **Recommendations**

Based on the tomogram results I have made the following recommendations for this tree.

1) Although the test site has shown the lower portion of the tree to be structurally sound, evidence would suggest that the tree is prone to branch failure. It should be remembered that this report does not include an aerial inspection of the upper canopy.

2) Due to the target area below the tree and the previous history of branch failure, this tree should be fenced off in such a way that if upper branches were to fail they would fall within the fenced area. A fence of this type would require signage so that the local and visiting pedestrians were aware of the reason for the fence. The Royal Botanic Gardens has implemented similar steps to a degree of success and public understanding for older trees located in the Gardens. Although an unusual step, it does allow Council to retain the tree in the short term whilst allowing for the planting of new replacement specimens.

3) The tree should be retested in 36 months time to monitor any change in the amount of unsound wood.

If you have any questions in relation to this report, please do not hesitate to contact me.

Yours sincerely,

[Signature]

Paul Vezgoff  
Consulting Arborist  
Moore Trees  
7th July 2009
## Glossary

**Barrier zone**
A chemically defended tissue formed by the still living cambium, after a tree is wounded or invaded by pathogens, to inhibit the spread of decay into new annual growth rings.

**Branch attachment**
The structural linkage between branch and stem.

**Branch Collar**
The area of raised tissue around a branch.

**Cellulose**
Complex carbohydrate found in the cellular walls of the majority of plants.

**Decay**
The process of degradation of woody tissues by fungi and bacteria through the decomposition of cellulose and lignin.

**Epilomis shoot**
A shoot that arises from latent or adventitious buds that occur on stems branches or the bases of trees.

**Flush cut**
Pruning cut through / or removing the branch collar, causing unnecessary injury to the trunk or parent stem.

**Hazard**
A hazard is anything with the potential to harm health, life or property. (WorkCover NSW 1996)

**Infrastructure**
Permanent manmade installations that could consist of footpaths, buildings, underground pipes or services.

**Lean**
Departure of trunk from the vertical or near vertical position.

**Lignin**
An organic substance that impregnates certain cell walls to thicken and strengthen the cell to reduce susceptibility to decay and pest damage.

**Risk**
Is the likelihood or probability that a hazard will cause damage to health, life or property. (WorkCover NSW 1996)

**Target Area**
The area below a tree, usually within the drip zone.

**Vigor**
Overall health; capacity to grow and resist physiological stress.

**Visual Tree Assessment (VTA)**
Where a qualified Arborist will complete a detailed assessment of the tree.

**Windthrow**
The forces of wind pushing a tree followed by upheaval of the root plate.

---

*Extract from the International Society of Arboriculture -
Glossary of Arboricultural Terms 2005*
Appendix 1
Explanatory Notes

• **Mathematical abbreviations:** $>$ = Greater than; $<$ = Less than.

• **Measurements/estimates:** All dimensions are estimates unless otherwise indicated. Measurements taken with a tape or clinometer are indicated with a '*' **. Less reliable estimated dimensions are indicated with a '?' **.

• **Species:** The species identification is based on visual observations and the common English name of what the tree appeared to be is listed first, with the botanical name after in brackets. In some instances, it may be difficult to quickly and accurately identify a particular tree without further detailed investigations. Where there is some doubt of the precise species of tree, it is indicate it with a '?' ** after the name in order to avoid delay in the production of the report. The botanical name is followed by the abbreviation sp if only the genus is known. The species listed for groups and hedges represent the main component and there may be other minor species not listed.

• **Height:** Height is estimated to the nearest metre.

• **Spread:** The maximum crown spread is visually estimated to the nearest metre from the centre of the trunk to the tips of the live lateral branches.

• **Diameter:** These figures relate to 1.4m above ground level and are recorded in centimetres. If appropriate, diameter is measure with a diameter tape. ‘M’ indicates trees or shrubs with multiple stems.

• **Estimated Age:** Age is estimated from visual indicators and it should only be taken as a provisional guide. Age estimates often need to be modified based on further information such as historical records or local knowledge.

• **Distance to Structures:** This is estimated to the nearest metre and intended as an indication rather than a precise measurement.
Appendix 2
Bibliography


p.417

p.165-181


p.34, 37, 38, 108, 185, 186

p. 66-77.


p.68-73
Curriculum Vitae

PAUL VEZGOFF - MOORE TREES  P O Box 114, Austimner  NSW 2515

EDUCATION and QUALIFICATIONS

• 2007 – Diploma of Arboriculture (AQF Cert V) Ryde TAFE. (Distinction)
• 1997 – Completed Certificate in Crane and Plant Electrical Safety
• 1996 – Attained Tree Surgeon Certificate (AQF Cert II) at Ryde TAFE
• 1990 – Completed two month intensive course on garden design at the Inichbold School of Design, London, United Kingdom
• 1990 – Completed patio, window box and balcony garden design course at Brighton College of Technology, United Kingdom
• 1989 – Awarded the Big Brother Movement Award for Horticulture (a grant by Lady Peggy Pagan to enable horticulture training in the United Kingdom)
• 1989 – Attained Certificate of Horticulture (AQF Cert IV) at Wollongong TAFE

INDUSTRY EXPERIENCE

Moore Trees Arboricultural Services  
Tree Consultancy and tree ultrasound. Tree hazard and risk assessment, Arborist development application reports
Tree management plans.

Woollahra Municipal Council  
ARBORICULTURE TECHNICAL OFFICER
August 2005 – February 2008
Tree asset management, programmed inspection, inventory and condition surveys of council trees, hazard and risk appraisal,
Tree root damage investigation and reporting, assessment of impacts of capital works projects on council trees.
ACTING COORDINATOR OF TREES MAINTENANCE
Responsible for all duties concerning park and street trees. Prioritising work duties, delegation of work and staff supervision.

TEAM LEADER
January 2003 – June 2005

TEAM LEADER
September 2000 – January 2003

HORTICULTURALIST
October 1995 – September 2000

Northern Landscape Services  
Tradesman for Landscape Construction business

Paul Vergoff Garden Maintenance (London, UK)  

CONFERENCES AND WORKSHOPS ATTENDED

• International Society of Arboriculture Conference (Brisbane 2008)
• Tree related hazards: recognition and assessment by Dr David Londsdale (Brisbane 2008)
• Tree risk management: requirements for a defensible system by Dr David Londsdale (Brisbane 2008)
• Tree dynamics and wind forces by Ken James (Brisbane 2008)
• Wood decay and fungal strategies by Dr F.W.M.R. Schwarz (Brisbane 2008)
• Tree Disputes in the Land & Environment Court – The Law Society (Sydney 2007)
• Barrell Tree Care Workshop- Trees on construction sites (Sydney 2005).
• Tree Logic Seminar- Urban tree risk management (Sydney 2005)
• Tree Pathology and Wood Decay Seminar presented by Dr F.W.M.R. Schwarz (Sydney 2004)
• Inaugural National Arborist Association of Australia (NAAA) tree management workshop- Assessing hazardous
trees and their Safe Useful Life Expectancy (SULE) (Sydney 1997).
APPROXIMATE 5M EXCLUSION ZONE MARKED IF TREE IS TO BE RETAINED.

*NB* MAJOR PRUNING REQUIRED BEFORE EXCLUSION FENCE ERECTED & THEREFORE WILL ALTER DRIPLINE OF THE CANOPY.
ENVIRONMENT & RECREATION COMMITTEE
OPERATION GUIDELINES

1. **Date & Time**
   - First Wednesday of every second month commencing in February.
   - 6:30pm – 8.30pm. The timing of the meeting can be extended by vote on the night.

2. **Location**
   - Leichhardt Town Hall Supper Room

3. **Chair**
   - Elected by Councillors and as determined

4. **Quorum**
   - Two Councillors (including chair)
   - In the absence of a quorum at the Environment & Recreation Committee meeting, it is proposed that the meeting proceed as long as one (1) Councillor is present (ERC10/05).

5. **Time period to wait for Quorum**
   - 30 minutes from starting time of meeting

6. **Councillor and Staff Attendance**
   - 4 Councillors
   - Manager Environment & Urban Planning and/or
   - Senior Environment Officer, Environment Officer
   - Senior Recreation Planner, Recreation Officer

7. **Community Representation**
   - Participation by community members, representatives of local community organisations and government agencies is to be actively encouraged.

8. **Decision made by Committee**
   - Decisions are made by majority vote of Councillors and community representatives.
   - Where a vote is tied the Chair shall exercise a casting vote.
   - Committee meeting minutes, including all decisions made by the Committee shall be referred to a meeting of Council to be endorsed.
   - Following the absence of a quorum at the Committee meeting, the Committee Agenda will be reported to the Ordinary Council meeting as a supplementary item (ERC10/05).

9. **Agenda and Report Availability**
   - Agendas and reports will be circulated to committee members by mail in the week prior to meeting.
   - Agendas and reports will be made available to the public 7 days prior to the meeting.

10. **Conflict of Interest**
    - At the commencement of each meeting the chairperson will ask all persons present to declare any conflicts of interest in relation to any items on the agenda. The chairperson will determine what action should be taken if such a conflict.