

A G E N D A

Infrastructure and Sustainability Committee Agenda

Notice is hereby given pursuant to the provisions of the Local Government Act, 1999, that a meeting of the Infrastructure and Sustainability Committee will be held in the Council Chambers, 181 Unley Road Unley on

Tuesday, 7 June 2016 at 6.30pm

for the purpose of considering the items included on the Agenda.



**Peter Tsokas
Chief Executive Officer**

INFRASTRUCTURE AND SUSTAINABILITY COMMITTEE

MEMBERS:

Councillor Michael Hewitson – Presiding Member
Mayor Lachlan Clyne – ex officio
Councillor Peter Hughes
Councillor Rob Sangster
Councillor Bob Schnell
Rod Hook
Peter Croft
Gavin Brennan

ACKNOWLEDGMENT:

We would like to acknowledge this land that we meet on today is the traditional lands for the Kurna people and that we respect their spiritual relationship with their country.

We also acknowledge the Kurna people as the custodians of the Adelaide region and that their cultural and heritage beliefs are still as important to the living Kurna people today.

APOLOGIES:

CONFIRMATION OF MINUTES:

MOVED:

SECONDED:

That the minutes of the meeting of the Infrastructure and Sustainability Committee held on Tuesday, 12 April 2016 as printed and circulated, be taken as read and signed as a correct record.

DEPUTATIONS

PRESENTATION:

WRITTEN REPORTS FROM REPRESENTATIVES

Nil.

OFFICER'S REPORTS

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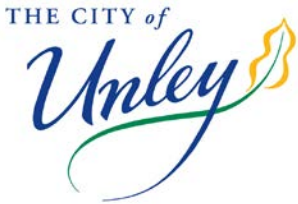
NEXT MEETING

Tuesday, 9 August 2016

CONFLICT OF INTEREST

TITLE: CONFLICT OF INTEREST
ITEM NUMBER: 24
DATE OF MEETING: 7 JUNE 2016
ATTACHMENT: 1. CONFLICT OF INTEREST DISCLOSURE
FORM

Members to advise if they have any material, actual or perceived conflict of interest in any Items in this Agenda.



CONFLICT OF INTEREST DISCLOSURE FORM

I, _____ have received a
[insert name]

copy of the agenda for the (Ordinary / Special) **Council / Committee / Board**
[delete that which is not applicable]

meeting to be held on _____
[insert date]

I consider that I have a ***material** conflict of interest pursuant to section 73 / ***actual** or ***perceived** conflict of interest pursuant to section 74 *[*delete that which is not applicable]* of the *Local Government Act 1999* (“the LG Act”) in relation to the following agenda item:

[insert details]

which is to be discussed by the ***Council / *Committee / *Board** at that meeting.
[delete that which is not applicable]

The nature of my **material** conflict of interest is as follows *[ensure sufficient detail is recorded, including the reasons why you (or a person prescribed in section 73(1) of the LG Act) stands to obtain a benefit or suffer a loss depending on the outcome of the consideration of the matter at the meeting of the Council in relation to the agenda item described above].*

OR

The nature of my **actual** conflict of interest is as follows *[ensure sufficient detail is recorded, including the reasons why the conflict between your interests and the public interest might lead to a decision that is contrary to the public interest in relation to the agenda item described above].*

I intend to deal with my **actual** conflict of interest in the follow transparent and accountable way *[ensure sufficient detail is recorded as to the manner in which you intend to deal with the actual conflict of interest in a transparent and accountable way]*

OR

The nature of my **perceived** conflict of interest is as follows *[ensure sufficient detail is recorded, including the reasons why you consider that an impartial fair-minded person could reasonably consider that you have a perceived conflict of interest in the matter]*

I intend to deal with the **perceived** conflict of interest in the following transparent and accountable way *[ensure sufficient detail is recorded as to the manner in which you intend to deal with the perceived conflict of interest in a transparent and accountable way]*

Signature

Date

INFORMATION REPORT

REPORT TITLE: INFRASTRUCTURE AND SUSTAINABILITY
COMMITTEE ACTION RECORDS

ITEM NUMBER: 25

DATE OF MEETING: 7 JUNE 2016

AUTHOR: KELLEY JAENSCH

JOB TITLE: EXECUTIVE ASSISTANT ECONOMIC
DEVELOPMENT AND PLANNING

EXECUTIVE SUMMARY

To provide an update to Members on information and actions arising from previous resolutions of the Infrastructure and Sustainability Committee.

RECOMMENDATION

MOVED:
SECONDED:

The Committee recommends to Council that:

1. The report and updated actions be noted.
-

I&S – Outstanding Items

Date	Item and report title	Resolution	Update
3/11/15	Item 8 Deferred Item 4 – 8 September 2015 – Second Tier Greening (August 2016 Committee meeting)	2. The Second Tier Greening initiative be strongly supported and its continuation as part of the Footpath Replacement Program be supported. 3. A further report be prepared, taking into consideration the comments made by the Committee.	Report and strategy being prepared for August Committee meeting.
3/11/15	Item 10** Motion on Notice – Open and Green Spaces	1. To help achieve our strategic aims of maintaining the current level of tree shade and permeability across the City that Council ask staff to prepare a report on exploring the costs, benefits and mechanisms to encourage developments that achieve significant areas of green space. This will include the following: <ul style="list-style-type: none"> • The use of price mechanisms such as special rates open to Council. • The merits of a Green Fund or other means by which funds collected can be used to maintain the overall extent of green cover, particularly in relation to the new Planning, Development and Infrastructure Bill. • The impacts of any mechanism on low-income members of the community. 2. New developments impacted would include two for ones, extensions covering more than 50% of the site and removal of trees, as well as multi-storey developments.	At the current time it is not clear when Administration (policy planning area) will have the in house capacity to produce such a report. If the committee requires the report to be produced in the near future, then it is suggested that funding be sought from Council to engage an external consultant for that purpose. It is suggested that a sum of \$20 000 be used for budgeting purposes.
8/12/15	Item 11 City of Unley Walking and Cycling Plan 2015-2020 – draft for consultation (Item 21 in April 2016 agenda)	2. The Draft City of Unley Walking and Cycling Plan (WCP) 2015-2020 as amended be supported for community engagement. 3. A report outlining the outcomes of the community	The community engagement received 97 responses,

		engagement be provided to Council in early 2016.	Administration is analysing the feedback and final which will be brought back to Council meeting in July 2016.
9/2/16	Item 17 Motion without notice Environmental planning options – development strategy and policy committee (Items 2 and 5 – follow up)	<ol style="list-style-type: none"> 1. The matter be referred to the Development Strategy and Policy Committee with our suggestion that the Council should write to the Minister for Planning; 1.1. To draw his attention to the attached report, namely the Residential Apartments Sustainability Plan for the City of Sydney, asking him to refer the report to his department for review and to determine policies relevant for the development plan across Local Government areas throughout Adelaide. 1.2. The Minister also be advised that the City of Unley is cooperating with the Government and other Councils to implement the Minister’s development plan policies. We have a vision in Unley for development to be sustainable but we understand our Council cannot proceed independently on this matter. However, we believe there are measures in this report that are relevant for Adelaide and should be applied across our City. 	Draft letter to be tabled at the next DSP meeting (18 July 2016).
12/4/16	Item 17 Motion without notice Environmental Planning Options – Development Strategy and Policy committee	<ol style="list-style-type: none"> 1. The matter be referred to the Development Strategy and Policy Committee with our suggestion that the Council should write to the Minister for Planning; 1.1. To draw his attention to the attached report, namely the Residential Apartments Sustainability Plan for the City of Sydney, asking him to refer 	Next DSP meeting – 18 July 2016.

		<p>the report to his department for review and to determine policies relevant for the development plan across Local Government areas throughout Adelaide.</p> <p>1.2. The Minister also be advised that the City of Unley is cooperating with the Government and other Councils to implement the Minister's development plan policies. We have a vision in Unley for development to be sustainable but we understand our Council cannot proceed independently on this matter. However, we believe there are measures in this report that are relevant for Adelaide and should be applied across our City.</p>	
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DECISION REPORT

REPORT TITLE: GREENING OUR VERGES
ITEM NUMBER: 26
DATE OF MEETING: 7 JUNE 2016
AUTHOR & JOB TITLE: KAT RYAN, COORDINATOR
ENVIRONMENTAL PROJECTS & STRATEGY
TREVOR STEIN, SUSTAINABLE
LANDSCAPES SPECIALIST
MARK CLARKE, MANAGER, OPERATIONAL
SERVICES

1. EXECUTIVE SUMMARY

The City of Unley's urban forest contributes greatly to the City's character and is integral to making Unley a green city. Streetscapes, including street trees, play an important role in the aesthetic quality of our City. Verges (or nature strips) can form a key component of residential streetscapes and contribute to both amenity value and improving environmental outcomes.

Verges filled with compacted dolomite are not water permeable. If these are replaced with loam and low plantings or with lawn maintained by the residents, it will help improve the soil moisture, reduce reflected heat, add to the cool, green feel of the City and improve the aesthetic quality of our streets. Currently through the Second Tier Greening project in conjunction with the Footpath Replacement Program, dolomite verges, are converted to permeable 'green' spaces, where requested. Community engagement and commitment has been critical in achieving these sustainable benefits.

In 2016/17, the City-wide Bitumen Footpath Replacement Program will be completed. The Infrastructure and Sustainability Committee at its meeting on 3 November 2015 reviewed the Second Tier Greening Project and requested the administration consider how greening of verges could be continued beyond the Footpath Replacement Program. The Greening our Verges program decision report is now provided before the committee for discussion, input and feedback

Greening our Verges program proposes a combination of 4 projects to encourage dolomite conversions in a number of ways;

1. Recognition of existing green verges
2. Greening verges around council owned buildings & demonstration verges
3. Streetscape works opportunities
4. City wide ad-hoc incentive invitation – "Greening Our Verges"

2. RECOMMENDATION

MOVED:
SECONDED:

That the Committee recommends to Council, that:

1. The report be received.
 2. The council endorse the new Greening Our Verges initiatives to be considered in the 2017/18 Budget cycle and be included in the Long Term Financial Plan as a key element to the Environmental Sustainability and Open Space strategies.
-

3. RELEVANT CORE STRATEGIES/POLICIES

3.1 Strategy

Greening is one of the four main themes in The City of Unley *Community Plan 2033* with the following strategic objective;

- *Functional open green space throughout the City of Unley*

Guiding the delivery of the greening theme is the draft Environmental Sustainability Strategy which includes a target to;

- *Convert 400 verges from dolomite to planted by 2020.*

Improving the understory space of street trees also aligns with the Draft Tree Strategy, particularly section 2.6;

- *Research and consider contemporary trials to determine the value and impact of growth fertilisers, water retention initiatives and other environmental sustainable treatments.*

Open Space Strategy, The Living City has a relevant direction to;

- *Increase biodiversity corridors and habitat creation across the City, making greater use of the Living Streets Network, as well as respecting and celebrating the heritage of local suburbs.*

3.2 Policy

Verges are owned by council and provide and maintain a street tree where practicable. Currently any understory plantings are the responsibility of the adjacent property owner as per the Vegetation and Nature Strips policies (refer attachments 1 & 2). A few key extracts are provided below;

COU77 Vegetation Policy

4.9 (c)

Planting of low growing shrubs and ground covers by residents on nature strips fronting their properties shall be permitted providing that:

- plants do not exceed 600 mm in height;
- plants do not interfere with vehicular or pedestrian visibility;

- no hazard is created;
- no weed species are used;
- plants do not contravene an approved planting or Streetscape Plan;
- the planting style is compatible with the surrounding streetscape;
- vegetation is maintained by the resident to a standard approved by the Council;
- the resident formally requests and receives authorisation from the Council pursuant to Sections 221 and 232 of the Local Government Act 1999 for the planting to proceed; and
- the resident accepts in writing that no recourse is available for damage to the vegetation by service authorities or by Council activity.

COU76 Nature Strips Policy

2.1 (d) that the adjacent owner undertakes to advise any purchaser of the property of the conditions associated with the maintenance of the nature strip.

2.3 (a) Where a road or footway is to be reconstructed the Administration shall ascertain from owners of all properties adjacent to the reconstruction work whether they wish to have a dolomite or a loam nature strip. Residents are to be encouraged to consider Council's Environmental Policy and implementation plans, when making their choices.

(b) The Administration is authorised to install the nature strips requested at no cost to the adjacent owners, provided that the owners agree to undertake the maintenance of the nature strip, as set out in this policy.

4. **DISCUSSION**

In the interests of our future wellbeing, the City of Unley wishes to encourage verges that are waterwise, aesthetically pleasing and that reflect our natural environment. Street verges perform the important tasks of allowing room for public services such as water and power, creating ecological corridors and visually linking a streetscape. They also provide a significant opportunity to capture and retain local property storm water to assist the growth of Council's important street tree asset by increasing soil moisture.

The majority of the City's verges comprise of dolomite which provides limited ecological benefit. More attractive and usable verges can be created with local native plants. Choice of plants should be waterwise, reduce the need for fertilisers, provide usable habitat for birds and insects and include local native plants. Verges can help develop our City's individual character and form a "sense of place".

Currently, the City of Unley provides and maintains a street tree in verges where practicable but does not plant and maintain the understory area. Residents can request to plant verges through the Nature Strips Policy at their own cost, if they adhere with the guidelines in the Vegetation Policy and agree to maintain the plantings.

Through the Second Tier Greening project residents along streets which are a part of the current years Footpath Replacement Program have been offered loam instead of dolomite at no cost to encourage more greening and take advantage of operational efficiencies (since contractors are already onsite).

Successes and learning from the Second Tier Greening of Unley program can be built on in an extended Greening Our Verges Program. Refer to review report and relevant attachments from meeting on 3 November 2015. Costings for a standalone program are provided in Table 1.

Table 1: The cost for delivering this initiative as part of a 'stand-alone' program per property:

Loam provided to the nature strip area scalloped to provide a water holding capacity to the nature strip area – water capture in rain events. Average nature strip approximately 20 square metres, loam to depth of 100mm at \$35 00 per square metre (SQM).	\$700.00
Access to a complimentary 'start-up kit' of up to ten (10) tube stock indigenous grasses and ground cover plants.	\$20.00
Mulch provided to ensure moisture retention is provided to the nature strip thus assisting ground cover plant and street tree growth (supply and delivery).	\$50.00
A complimentary bucket and small packet of slow release fertiliser to assist soil nutrition and plant growth.	\$10.00
Total	\$780.00

There are a range of considerations that need to be taken into account when planting verges including plant selection, plant height, room for kerbside bin placement, access for parked cars, trip hazards, protection and care working around street tree roots, Crime Prevention Through Environmental Design (CPTED), maintenance and property turnover.

Currently, these are managed through the guidelines in the Vegetation Policy (see section 3.2 of this report) which is currently being reviewed. This review is timely as it can be updated to reflect and compliment the verges program. For example changing the language from permitted to encouraged.

Non dolomite options for verge treatments were also explored as an alternative solution to loam and planting that was water permeable. No cost effective option was found. These alternatives are summarised in Attachment 3

5. ANALYSIS OF OPTIONS

The suggested approach is multi-faceted to allow both targeted and opportunistic incentives to run concurrently. Therefore a range of project options are proposed below.

This list is not exhaustive and within each proposed project a range of criteria, scale and detail still need to be decided. Discussion, feedback and new ideas are sought from the Infrastructure and Sustainability Committee

Project 1: Recognition of Existing Green Verges

While the focus is on increasing the proportion of planted to dolomite verges, it is important to recognise those residents that already have green verges.

A range of simple garden gnomes spray painted gold (photo 1) could be awarded to properties with existing, well maintained verges such as the property in Dover Street Malvern below (photo 2).

Either a council wide competition with specific categories or a range of 20 gnomes per ward (as an example) could be presented by respective Ward Councillors at their discretion. Alternatively, a Verge Recognition group could be established. As an example this group could consist of a Council staff representative, local community member and the relevant Ward Councillors.

A small tag could be tied around the gnome thanking them for helping to keep the streets of Unley cool and green. A quirky recognition program can also be an excellent mechanism to start conversations and promote the broader Greening our Verges initiatives.



Photo 1: Golden Garden Gnome



Photo 2: Example well maintained planted verge.

Indicative Cost: \$1,000

Requirements to be developed: Criteria, nomination process, judges, frequency.

Suggested Implementation Date: November 2017 when Jacarandas flowering.

Discussion Points: Would this be better as a formal competition or broader appreciation/thank you approach?

Would exploring with Potters Club about making the gnomes be worthwhile?

Project 2: Council Verges

Project 2a: Greening Around Council Buildings

To lead by example Council could green the verges around their properties. As these adjacent properties would be council owned, on-going maintenance would need to be added to council maintenance programs.

Not all sites are suitable as some are fully paved, but those that are not could be greened. Example sites could include Oxford and Edmund Avenue around the Civic Centre and Everard Park Reserve

Indicative Cost: \$5,000 + on-going maintenance

Verges Per Year: 7 (based on 20SQM average verge size)
Requirements to be developed: Locations and plant selections.
Suggested Implementation Date: 2017/2018

Discussion Points: Is it important to green the verges around Council owned buildings that are not fully paved for pedestrian access?
Is it important to green the verges around our parks and reserves?
What type of verge planting would be preferred?

Project 2b: Demonstration Verge Treatment Street

To encourage and assist residents meet the guideline requirements for acceptable verge plantings a demonstration site could be provided. A variety of native, non-native and lawn treatments could be planted as examples for residents considering greening their verges. A simple verge booklet could be developed in conjunction outlining the plant types, spacing and layouts used.

The seven council owned property verges along Edmund Ave Unley (between Unley Road and Rugby Street) could be a suitable opportunity for such a demonstration street. Booklets could be available at the Civic Centre and Museum. With adjacent properties being council owned, on-going maintenance would need to be included in council's recurrent maintenance programs.

Indicative Cost: \$5,000 + on-going maintenance for greening verges
\$2,500 for booklet design and printing

Verges Per Year: 7 (based on 20SQM average verge size)
Requirements to be developed: Locations and plant selections.
Suggested Implementation Date: 2017/2018

Discussion Points: Should some of the Green Infrastructure budget from 2016/17 be used to complete this as a new green space and so that it can establish ahead of the broader program? What plant types/styles should be used?

Project 3: Streetscape Works Opportunities

Building on the success of the Second Tier Greening project which works alongside the Footpath Replacement Program, opportunities to convert dolomite verges could be offered to residents during other general streetscape renewal and upgrades (including tree replacements, water sensitive urban design works, significant road works etc).

The existing developed documents, letter templates and processes from Second Tier Greening would be modified where necessary and used. With this option, the whole cost of loam replacement and a complimentary starter kit of 10 tube stock are offered.

At the same time, Council will continue to assess potential for water wells, raingardens and other improvements to capitalise on efficiencies and value adding when already working in a streetscape.

This opportunistic project would vary year to year in the number of verges and cost depending on number of suitable projects, locations and the uptake by residents. An initial estimate of 50 verges per year is provided as a baseline and would contribute half of the annual target in the Draft Environmental Sustainability Strategy.

Indicative Cost: \$39,000

Verges Per Year: 50 (based on 20SQM average verge size)

Requirements to be developed: Re-use Second Tier Greening package
Suggested Implementation Date: 2017/2018

Discussion Points: Do we continue to replace verges with dolomite where residents are not interested in planting verges?

Project 4: Open Invitation City Wide – “Greening Our Verges”

A new stand-alone initiative not linked to any other program.

Currently an average of 10 residents per year are completing the “Alter Public Road” form available on the website, selecting “create nature strip” and paying full cost at rate of \$35/SQM. Potentially others are planting their verges at their own cost without informing Council. Considering this it is likely that many more property owners may be willing to contribute if it was more widely advertised and subsidised, possibly by 50%. With property owners contributing financially to the dolomite conversion there is likely to be a higher assurance of commitment to on-going maintenance of the planted verge compared to when 100% set up cost is covered by Council.

Potentially a large number of residents would accept such an offer if extended Council wide, so some details and criteria need to be developed so that applications can be prioritised for roll out across the City.

Register of interest forms for assisting the City of Unley to Green Our Verges would be sought, requesting information on width and length of verge and what type of vegetation would be planted (tick box options of common types).

A filter would also be applied to any application on a street with a known streetscape upgrade planned within the next five year cycle - these properties can be alerted that a whole conversion will likely be offered in the next few years so they can choose to wait for the project to commence if they prefer.

Indicative Cost: \$22,500 for subsidising greening verges

\$5,000 for promotional design, printing and advertising

Verges Per Year: 56 (based on 20SQM average verge size)

Requirements to be developed: Guidelines, criteria, letter templates, policy updates, project management.

Suggested Implementation Date: 2017/2018

Discussion Points: Would verges over 50cm wide and opting to plant Waterwise natives take priority over narrow verges and/or those opting to plant lawn? Should Council provide more support for large verges over 200cm wide?

Summary

As many projects are opportunistic it is proposed the program budget be flexible to reallocate across the project lines to match uptake.

Table 2: Summary of Proposed Projects for Greening Our Verges Program

	Project	Verges Per Year (based on 20SQM verge)	Cost 2017/18	Maintenance per annum
1	Recognition of existing green verges	-	\$1,000	n/a
2a	Greening verges around council owned buildings	7	\$5,000	\$500
2b	Demonstration street Verge planting booklet	7 – once off -	\$5,000 \$2,500	\$500
3	Streetscape works opportunities	50	\$39,000	n/a
4	City wide incentive– “Greening Our Verges”	56	\$27,500	n/a
	Total	120	\$80,000	\$1000

Discussion Points: Is the scale and distribution of proposed budget appropriate?

Options

Option 1: Full suite of projects 1-4

The Council endorse the new Greening Our Verges initiatives to be considered in the 2017/18 Budget cycle and be included in the Long Term Financial Plan as a key element to the Environmental Sustainability and Open Space strategies.

Discussion and feedback from the Infrastructure and Sustainability Committee will be incorporated into a program ready for further review as part of the 2017/18 budget cycle process.

Option 2: Any combination of above projects

The Council endorse the new Greening Our Verges initiatives (#insert selected project numbers#) to be considered in the 2017/18 Budget cycle and be included in the Long Term Financial Plan as a key element to the Environmental Sustainability and Open Space strategies.

Discussion and feedback from the Infrastructure and Sustainability Committee will be incorporated into a program ready for further review as part of the 2017/18 budget cycle process.

Option 3:

The Council note the new Greening Our Verges initiatives being developed by the Infrastructure and Sustainability Committee for considered in the 2017/18 Budget cycle and inclusion in the Long Term Financial Plan as a key element to the Environmental Sustainability and Open Space strategies.

Discussion and feedback will be reviewed and a revised program be put back before the Infrastructure and Sustainability Committee for further detail review.

6. RECOMMENDED OPTION

Option 1 is recommended option

7. POLICY IMPLICATIONS

Greening our Verges would create a new program directly contributing to the target within the Draft Environmental Sustainability Strategy to convert 400 verges from dolomite to planted by 2020.

The Vegetation and Nature Strip policies are currently being reviewed so can incorporate any required changes to align with the projects selected.

8. FINANCIAL IMPLICATIONS

The new Greening Our Verges program will require budget funding to cover the cost of delivery from 2017/18.

The proposed \$80,000 per annum has been based on the current dolomite conversion component of the Footpath Replacement Program and ability to meet the target of 100 verges per year.

Maintenance of one standard sized verge (20SQM) adjacent to council owned building is estimated at \$80 per annum.

9. REPORT CONSULTATION

This report has been collaboratively developed within the Assets and Environment Division across Strategic Assets, Sustainable Landscapes and Operational Services.

Successful implementation and delivery of the program will depend on community engagement, building on the success of the Second Tier Greening project.

10. ATTACHMENTS

- Vegetation Policy
- Nature Strip Policy
- Non dolomite options for verge treatment

11. REPORT AUTHORISERS

<u>Name</u>	<u>Title</u>
John Devine	General Manager Assets and Environment

Vegetation Management

Policy Type:	Council policy
Reference Number:	COU77
Responsible Department:	City Services
Responsible Officer:	General Manager City Services
Legislation	Local Government Act 1999 Development Act 1993 Road Traffic Act 1961
Relevant Delegations:	Delegation 64 - Roads and Highways Delegation 75 Planting Trees and Vegetation
Related Policies and Procedures	Community Consultation Policy Open Space policy Environmental Policy
Community Goal	3.5 Ensure the protection, enhancement, and management of the natural and built environment of the City in order to strengthen its environmental sustainability. 3.7 Ensure the long term management of all Council assets.
Previous Policy No:	COU 70
Council Resolution:	
Date Adopted:	CSP 18 Oct (357/10) C 25 Oct (758/10)
Review Date:	October 2012

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2. Policy Objectives
3. Definitions
4. Procedures
 - 4.1. Biodiversity in Relation to Vegetation
 - 4.2. Indigenous Species
 - 4.3. Habitat Retention and Corridors
 - 4.4. Character and Retention
 - 4.5. Consultation
 - 4.6. Sustainable Landscape Strategy
 - 4.7. Streetscape Plans
 - 4.8. Planting and Replanting by the Council
 - 4.9. Planting and Replanting by Residents
 - 4.10. Narrow Footways
 - 4.11. Species Selection
 - 4.12. Pruning
 - 4.13. Significant Trees and Remnant Vegetation
 - 4.14. Tree Removal
 - 4.15. Tree Health
 - 4.16. Damage
 - 4.17. Recycling of Green Waste
 - 4.18. Valuation of Trees

1. POLICY STATEMENT

The City of Unley recognises the important contribution trees and vegetation make to its community.

Such assets provide environmental benefits by way of supporting flora and fauna, addressing the negative impacts of climate change while creating a living environment that adds character to the streetscape and economic value to property.

The City of Unley commits significant resources to ensuring it has the best possible streetscape and park environments through the effective management of its trees and understorey planting whilst encouraging its community to play an important part.

This policy aims to guide those resources to ensure these assets are protected and enhanced for current and future generations.

2. POLICY OBJECTIVES

The objectives of this Policy are to:

- (a) Recognise the important role trees and vegetation make in the City's character, amenity, environment and value.
- (b) Maximise the abundance and health of trees and vegetation on Council land while ensuring public safety and allowing controlled development.
- (c) Ensure the protection and maintenance of mature and significant trees in the City.
- (d) Acknowledge the Council's responsibilities in managing the City's vegetation as a significant asset for future as well as for present stakeholders.
- (e) Provide a visionary yet practical approach to the management of the City's trees in light of climate change; and
- (f) provide the Administration with a framework for more detailed operational plans and Guidelines regarding:
 - (i) trees and understorey planting in streets, including local and arterial roads;
 - (ii) trees and understorey plantings in reserves, parks and gardens;
 - (iii) the important role the community can play in protecting and enhancing trees and vegetation in the City.

3. DEFINITIONS

- (a) *Tree* means a perennial woody plant that has many secondary branches supported clear of the ground by a single multiple dominant stems or trunks which is, or which has the potential to grow to, 4.0 metres or more in height. Palms are included as trees in this definition. Dead trees are included in this definition.
- (b) *Street* means any highway, street, road, grove, place, avenue, drive, terrace, parade, crescent, court, lane, walk or walkway which has been declared or is a public road.
- (c) *Other Property* includes all land which is under the care, control or management of Council (except streets).
- (d) *A tree in poor health* means a tree deleteriously affected by insects, parasites, stress, damage or disease.
- (e) *A hazardous tree* means a tree identified as having a defect or growth characteristic that may cause injury or property damage if not removed (e.g. structurally unsound such as bifurcation with a high chance of failure within the next five years, poor form, included bark, dead etc; having exposed roots with a high potential as a trip hazard where no remedial action is possible; being inappropriately located such as a tall tree unsuited to adjacent infrastructure or which is leaning over a road/path and pruning cannot correct the tree's form; causing or likely to cause major damage to public or private property or services).

- (f) *A significant tree* means a tree:
- (i) having a trunk circumference of 2.0 (two) metres or more or, in the case of trees with multiple trunks, a total circumference of 2.0 (two) metres or more and an average circumference of 625 mm or more – measured one metre above natural ground level; and/or
 - (ii) meeting the criteria in sub-section (4) of the Development Act 1993.
- (g) *A valuable tree* means a tree which is not included in the above statutory definition of a significant tree, but which has been assessed by an independent, qualified arboriculturalist as being an important tree according to the criteria in **Significant Trees, Valuable Trees and Remnant Vegetation** clause (4.13) of this Policy.
- (h) *Biological Diversity* or *Biodiversity* means the vast variety of all life forms. It means the different plants, animals and micro-organisms, the genes they contain, and the ecosystems of which they form a part.

It is considered at three levels – species diversity, genetic diversity and ecosystem or habitat diversity. No forms of life from the micro to the macro scale occur in isolation. There is a myriad of connections between the uncountable life forms e.g. the disappearance of a minute insect can affect the survival of a whole tree species.

- (i) *Indigenous Species* are those which occupied the area prior to white settlement (sometimes referred to as Remnant Indigenous Vegetation), or which are descended from such vegetation (e.g. grown from locally collected seeds or cuttings). Plants generated from seeds or cuttings originating more than 20 km from a site, or from a significantly different environment, are not usually considered to be indigenous to the site (unless likely to have been wind-borne or dispersed by birds).

For the purposes of this Policy, any species that occurred in the Unley Local Government Area prior to white settlement, should be selected for indigenous planting. The preferred origins of species selected for planting or replanting of trees, are those that will preserve the local gene pool.

Indigenous plants are to be selected from the five distinctive vegetation areas that existed in the Unley Local Government Area as shown in the map and species lists published by the Department of Housing and Urban Development in January 1997, as amended by that agency or its equivalent, viz. “Forests and Woodlands of the Adelaide Plains in 1836: A Native Vegetation Planting Guide”.

- (k) *Sustainability* and *Ecological Sustainability* mean using, conserving and enhancing natural resources so that the ecological processes on which life depends are maintained, and the total quality of life, now and in the future, can be preserved or improved.
- (l) *Remnant Vegetation* means plants that have occupied the local area prior to white settlement.

4. PROCEDURES

4.1 Biodiversity in Relation to Vegetation

- (i) It is accepted that conserving biological diversity is essential to ecologically sustainable development and to maintaining the processes upon which life depends. Biodiversity is seen as an asset to be conserved and enhanced at every opportunity. The Council acknowledges the ethical basis for the conservation of biological diversity as an attitude of respect towards shared life forms which belong to future as well as to present generations.

As the custodian of a major public asset the Council's management of trees is recognised as a significant responsibility to plan for, conserve and enhance the long term sustainability of the City's trees by fostering as much biological diversity as possible, within the constraints and balance that underpin this Policy.

- (ii) Biological resources for preserving, restoring and enhancing the City's biodiversity are to be rigorously protected, particularly remnant trees and vegetation from pre-European settlement which reflect the ecology and aesthetics of the original "Black Forest" in this area.
- (iii) The General Manager City Services, Asset Manager and Operations Manager are to ensure that practices by the Council's Administration and Contractors will minimise the impact on significant vegetation and local biological diversity e.g. in operations such as:
- the construction of footpaths;
 - installation and maintenance works for public infrastructure such as overhead power lines, underground cables, stormwater and sewer infrastructure and roads;
 - herbicide and pesticide applications; and
 - the development of public facilities.
- (iv) The Council will proactively seek to establish partnerships and/or to negotiate agreements with property owners, developers and other agencies to promote the conservation, reclamation and enhancement of biodiversity, and to minimise threats to biodiversity from private development through the Development Application assessment process by:
- minimising the impact of construction of buildings and fences;
 - minimising the loss of significant and/or mature vegetation;
 - minimising the loss of vegetation habitats;
 - encouraging the retention and/or enhancement of significant understorey vegetation; and
 - encouraging the replacement of indigenous trees and vegetation with local provenance species;

and through the strategic and cooperative partnerships with neighbouring Councils to facilitate integrated approaches to restoration of "Black Forest" biodiversity.

4.2 Indigenous Species

- (i) The Council recognises the community's increasing interest in preserving and enhancing plants that are indigenous to this area.
- (ii) The Council believes that, given the City's history and character, a mixture of indigenous and non-indigenous trees is appropriate. The selection of trees to be planted or re-planted in any given area will be subject to the overall streetscape or landscape and the extent and nature of the area's use. However, where:
 - a choice is possible between suitable indigenous and non-indigenous species in accordance with this Policy's Guidelines and definitions,
and
 - the overall amenity, style and public use of the vicinity has been taken into account,

then there is to be a bias towards indigenous plantings.

- (iii) In order to explore the viability of indigenous plants for use in public areas, trial sites of indigenous vegetation are to be developed where opportunities exist, within Operational Plans. Horticultural staff are to observe and learn from these trials by keeping records of successful and unsuitable plant selections.
- (iv) As resources permit, the Council will encourage the community's understanding of the importance of biodiversity and indigenous plantings.

4.3 Habitat Retention and Corridors

- (i) The Council recognises its role and responsibility in the wider region as well as within its own boundaries, in tackling Australia's significant loss of biodiversity, with its attendant negative effects.
- (ii) Streetscape Plans and Community Land Management Plans are to provide the maximum possible extent of habitat retention and vegetation corridors across the City of Unley, as well as links to vegetation in adjacent areas, wherever and whenever opportunities become available or can be created.
- (iii) When removing or pruning trees hollow branches should be retained where possible, providing that public safety and reasonable amenity are not compromised.
- (iv) In appropriate instances dead trees may be pruned rather than removed, retaining stubs and hollows for birds and fauna.

4.4 Character and Heritage

- (i) The Council recognises the community's increasing demand for improved environmental practices. In responding to this through Corporate Plans and various associated Strategies, the Council wishes to find a careful balance between the historical character of Unley's inner-city urban environment and new expressions of social,

environmental and aesthetic values. Trees are a particular expression of this diversity and it is recognised that there are tensions involved.

- (ii) The Guidelines that are to accompany this Policy should therefore allow the Administration some flexibility in its management of trees in any particular area, so that the overall diversity and balance can be achieved. This delegation of responsibility to the Administration is provided in the context of requirements to consult the community, as detailed in clause (4.5) of this Policy.
- (iii) When it is difficult to discern the majority community view, or there is significant controversy regarding the management of trees, having followed this Policy's Guidelines and Council's Consultation Policy, the Administration is to present the matter to the Council for formal resolution through the democratic process.

4.5 Consultation

- (a) The Community Consultation Policy sets out the principles to be upheld and responsibilities for consulting the community.

The guidelines associated with that Policy provide a range of techniques and resources to assist in planning consultation, in the various circumstances that may arise. Consultation about trees is to be conducted within the framework of Council's Consultation Policy.

- (b) The General Manager City Services and Operations Manager are to ensure that residents are consulted effectively regarding the planting and replanting of street trees throughout the City.
- (c) The General Manager City Services, Operations Manager and Community Development Manager are to ensure that residents are consulted effectively regarding the landscaping, planting and replanting of trees in open spaces (parks and reserves) throughout the City in accordance with Community Land Management Plans (Local Government Act 1999) and Council's Open Space and Recreation Policy.
- (d) The General Manager City Services and Operations Manager are to ensure that residents are consulted regarding the removal of trees. The consultation process is to include:
 - written notice of the Council's intention, to at least the ten properties nearest to the tree in question, and to more properties than this when appropriate;
 - where it is proposed that more than three trees are to be removed from a street, all residents of that street (or section of the street between intersections) are to be consulted;
 - a minimum period of ten (10) working days for people to respond in writing to this written notice, following its receipt by the stakeholders;
 - a minimum period of ten (10) working days for people to lodge a written objection to this written notice, following its receipt by the stakeholders;

- definition of a property is to be a site with a single house number including multi-dwelling sites;
- the issue of the notice to all units within a multi-dwelling site;
- advice to the relevant Ward Councillors of the consultation process prior to or at the same time as residents receive the written notice;
- notification in writing to local community groups when applicable.

Any requirements under the Development Act or the Unley Development Plan with regard to Significant Trees which conflict with this Policy, take precedence.

- (e) Community consultation is not required regarding the removal, replacement and maintenance of trees which are:
- less than three metres in height; or
 - when Council officers are implementing approved Streetscape Plans in accordance with clause (4.6 and 4.7) of this policy.
 - Noxious weed trees as defined by the Adelaide and Mount Lofty Natural Resource Management Board.

When a hazardous tree needs to be removed for safety concerns without consultation, the community is to be advised of the circumstances as soon as possible following removal.

4.6 Sustainable Landscape Strategy (“SLS”)

- (a) The General Manager City Services and Operations Manager are to ensure that a SLS covering all of the City’s trees and vegetation is implemented, reviewed and regularly updated.
- (b) The SLS is to be based on a long term view of the optimum management and care of the City’s trees as an asset i.e. a three to twenty year timeframe. The Strategy is to be directed towards the beautification of streets, parks open space and private property as a whole rather than towards discrete properties.
- (c) A summary of the regular review of the SLS is to be included in the Environment Sustainability Plan and annual reporting of the relevant Business Unit to the General Manager City Services.
- (d) Any issues concerning the implementation of this Tree Policy through the SLS which are of significant concern, are to be reported to the Council as and when required (e.g. outbreaks of pests and diseases).
- (e) In addition to this Tree Policy the SLS is to take account of the following:
- (i) Community Land Management Plans (or Landscape Plans in use prior to full implementation of the Local Government Act Sections 196 to 199);
 - (ii) the Council’s Strategic Plans;

- (iii) the Council's Urban Regeneration Strategy and plans for specific precincts (e.g. Street Life Trust programs);
- (iv) the Council's Environmental Policy and Action Plans;
- (v) any Agreement that is in place with regard to ETSA Vegetation Clearance;
- (vi) Brownhill and Keswick Creek Stormwater Plans and similar requirements from the relevant Stormwater Authority, Natural Resources Management Board or State Authority
- (vii) the Development Act 1993 and the Unley Development Plan particularly in relation to significant trees.

4.7 Streetscape Plans

- (a) A Streetscape Plan is to be prepared annually which:
- takes account of the long term view in managing the City's trees i.e. the Vegetation Policy and SLS;
 - takes account of the overall impact of trees on the urban design of the area in question;
 - is consistent with budget provisions;
 - details how residents and other stakeholders will be consulted;
 - includes species of trees and other vegetation to be planted with commentary regarding dominant and/or indigenous species as appropriate;
 - details planting sites and numbers; and
 - includes post planting maintenance to be carried out.

The Streetscape Plan is to be included in the annual Business Plan of the relevant Business Unit.

- (b) Community Land Management Plans are to be prepared in accordance with Sections 196 to 199 of the Local Government Act 1999. Trees in open space are to be planted, replanted and maintained in accordance with the landscaping plans for these areas. Such plans are to be developed in accordance with relevant Council policies (e.g. Open Space, various Social Policies, Recreation, Cultural and Public Art Policies).

4.8 Planting and Replanting by the Council

- (a) The General Manager City Services and Operations Manager are authorised to plant and replant trees and vegetation on Council land in accordance with this Policy and its associated Guidelines.
- (b) No tree of a species with a mature height of greater than 6 metres shall be planted within 1.5 metres of a vehicle crossover.
- (c) Only trees with a clean trunk to 2 metres or shrubs lower than 600 millimetres shall be planted within 5 metres of a vehicle crossover.
- (d) Trees shall not be planted within 5 metres of an intersection or pedestrian crossing.

- (e) Shrubs over 600 millimetres in height shall not be planted within 10 metres of an intersection or pedestrian crossing.
- (f) Only trees with a clean trunk to 2 metres shall be planted between 5 metres and 10 metres from an intersection or pedestrian crossing.
- (g) No tree shall be planted within 5 metres of an existing tree unless it is proposed to remove the existing tree in the long term, or close plantings are consistent with the character of the streetscape/landscape.
- (h) No tree shall be planted below the overhanging branches of an existing tree which is growing either on public land or in an adjacent property, unless removal of the existing tree has been approved. Trees on private land are to be considered as part of the streetscape when developing Streetscape Plans.
- (i) Planting sites are to be chosen to comply with the existing landscape character of the street/park/reserve, and with the preferences of adjacent and nearby residents/stakeholders. Planting sites will allow for the functional limitations imposed by the street/park/reserve and by the principles and plans cited in this Policy.
- (j) Trees shall be planted in accordance with the Regulations associated with all relevant legislation such as the Sewerage Act and the Electricity Act. The requirements, requests and submissions of all service and public authorities are to be taken into consideration.
- (k) Trees shall not be planted:
 - within one metre of a stormwater drain
 - within one metre of a residential water service or ferule connection to water mains
 - within one metre of a Telstra inspection point
 - within two metres of an electricity pole – except for species which at maturity, have a canopy spread of less than four metres.

4.9 Planting and Replanting by Residents

- (a) Planting or replanting of trees and vegetation by residents on Council land may only be undertaken with the involvement of Council officers within a Streetscape Program or Community Land Management Plan. The participation of residents in the beautification of the City is to be encouraged, but unauthorised planting or replanting by residents is not permitted.
- (b) Unauthorised recent plantings may be allowed to remain provided that they are:
 - of a suitable species which is compatible with the streetscape and the principles of this Policy;
 - good quality specimens;
 - in a suitable location;
 - planted to Council standards; and
 - in compliance with all relevant legislation.

Where a planting does not meet these conditions, the adjacent resident will be asked to remove the tree/vegetation. If this request is not complied with, the tree/vegetation will be removed by Council staff and returned to the adjacent property in an appropriate container at the cost of the adjacent property owner.

- (c) Planting of low growing shrubs and ground covers by residents on nature strips fronting their properties shall be permitted providing that:
- plants do not exceed 600 mm in height;
 - plants do not interfere with vehicular or pedestrian visibility;
 - no hazard is created;
 - no weed species are used;
 - plants do not contravene an approved planting or Streetscape Plan;
 - the planting style is compatible with the surrounding streetscape;
 - vegetation is maintained by the resident to a standard approved by the Council;
 - the resident formally requests and receives authorisation from the Council pursuant to Sections 221 and 232 of the Local Government Act 1999 for the planting to proceed; and
 - the resident accepts in writing that no recourse is available for damage to the vegetation by service authorities or by Council activity.

Also refer to Policy 4.3.01 regarding Nature Strips.

4.10 Narrow Footways

- (a) Where the footways in a street (including any nature strips) are less than 1.6 metres in width between the face of the kerb and property boundaries, the General Manager, City Services shall select one side of the street to be the principle side for the provision of the footway, and the other side of the street is to be designated for the planting of trees.
- (b) Where footways in residential areas are too narrow for the planting of trees in the judgment of the General Manager, City Services, or where for any other reason a tree is unable to be planted, the residents of the properties abutting such locations shall be offered a tree or trees for planting in their front gardens. This offer of trees shall be based on an allocation of one tree for each 10 metres or part thereof of property frontage to the street concerned.
- (c) Where streets are too narrow to allow for planting of trees, alternative vegetation will be planted wherever possible.

4.11 Species Selection

- (a) The selection of tree species for planting and replanting shall be based on the likely ongoing impacts of water restrictions and climate change and:
- existing landscape/streetscape character
 - environmental conditions
 - the size and long term effect of the tree when mature, in the proposed site

- submissions by residents/stakeholders
 - effect on local fauna
 - a bias towards Australian indigenous species and biodiversity where choices exist within these parameters
 - reference to clause 4.8 (j) **Planting and Replanting By The Council** of this Policy.
- (b) The establishment or maintenance of an avenue of trees, or of a consistent planting theme, may require planting against the wishes of the resident immediately adjacent, or of a minority group. The Administration, will make a judgement regarding the benefit to the wider community when necessary e.g. to fill a gap in a strong, consistent planting theme that preserves the overall streetscape or park character.
- (c) Wherever possible, flexibility is to be exercised and residents' preferences are to be fully considered. Residents are to be encouraged to assist in the care of newly planted trees.
- (d) Lists of appropriate species of trees and vegetation for planting in public areas should be provided to the community upon request and promoted when opportunities arise.
- (e) Species contained in guidelines for officers and for the community must be within Regulations under the Sewerage Act, the Electricity Act and any other relevant legislation.

4.12 Pruning

- (a) The General Manager City Services and his/her delegate(s) are authorised to prune Council-owned trees according the operational guidelines, in order to:
- maintain public safety;
 - maintain the health and form of the trees;
 - maintain prescribed clearances for services and traffic thoroughfares;
 - ensure traffic safety and visibility of street signs; and
 - minimise future work requirements through the removal of potential problems at an early stage.

In all pruning operations, only skilled and suitably qualified staff or contractors are to undertake pruning of the Council's trees.

- (b) Where the growth of a Council-owned tree is causing concern to the owner or occupier of a private property, the Administration shall seek to alleviate the problem through judicious pruning and negotiation with the property owner/occupier.
- (c) Where the health or shape of a tree may be affected by pruning, the degree of cut back shall be as minimal as possible, but adequate consideration must be given to Council's responsibility and liability under Sections 244 and 245 of the Local Government Act 1999, and under any ETSA Vegetation Agreement.

- (d) Trees will normally be pruned to alleviate shading of private properties only if the pruning will have a genuine and long lasting effect and the form of the tree will not be adversely affected.
- (e) Pruning of Council-owned trees is not permitted by anyone other than Council staff or contractors approved by the Council.
- (f) A clear space of 5.0 metres is to be maintained above and along main roadways and 4.2 metres on local roads for the safe passage of vehicles. Vegetation and trees near roadways are to be maintained so as not to pose immediate or potential danger to life, property or road users (e.g. trees or limbs falling on to the ground). Sight distances, adequate drainage and waterway clearances are to be maintained. Potential damage to private property from trees and vegetation is to be minimised.

4.13 Significant Trees, Valuable Trees and Remnant Vegetation

- (a) Provisions under the Development Act 1993, the Unley Development Plan and any associated controls and resolutions of Council in relation to Significant Trees, take precedence over this Policy.
 - (i) The co-operation and involvement of those responsible for privately owned Valuable Trees and Remnant Vegetation is to be sought and encouraged. Staff should encourage residents to seek professional advice regarding the care and management of such trees and vegetation. The budget development process is to include consideration of resources to provide incentives and assistance to owners of Significant and Valuable trees.
 - (i) Trees given “State Significance” rating or which are listed in Schedules 7 (Endangered), 8 (Vulnerable) or 9 (Rare) of the National Parks and Wildlife Act 1972, are to be nominated for the National Trust of South Australia’s Register of Significant Trees.
 - (ii) Valuable trees can be either living or dead and are to be defined by the contribution they make to the local area, and the impact that their removal would have on the history, culture and amenity of the area and of the City as a whole.
- (b) Criteria for assessment of Valuable Trees are that a tree or group of trees:
 - Is of outstanding aesthetic beauty (especially pleasing form or shape or colour)
 - Is of outstanding dimensions in height, or trunk circumference, or canopy spread
 - Is very old or venerable
 - Commemorates or has associations with an important historical event
 - Is significantly associated with a well known public figure or prominent person; or with an aboriginal or ethnic group
 - Occurs in a unique location or context, and thus provides a special contribution to the landscape (e.g. avenues of trees), or is a landmark
 - Is an isolated remnant of indigenous vegetation or is a species or variety that is rare or of very localized distribution
 - Provides important habitat for native fauna

- Is part of a private or public historic garden or park or village precinct
 - Is an excellent example of topiary
 - Is of horticultural or genetic value, possibly important as propagating stock, or cultivars particularly resistant to disease or exposure
 - Has curious growth forms or physical features either from natural causes, or pruning
 - Is or has been of importance in the life of the local community.
- (c) Every effort is to be made to preserve and protect the City's significant trees and remnant vegetation as a high priority in the allocation of resources, within the principles of tree removal contained in this Policy. Items in the Significant Trees List – Table Un/7 of the Unley Development Plan - are to be the subject of special care and constraint.

4.14 Tree Removal

- (a) Prudent management of the City's trees is essential if the Council is to fulfill its responsibilities and manage its liabilities in relation to Section 245 of the Local Government Act 1999. In so doing, all reasonable effort is to be made to accommodate, or to find consensus within, the preferences expressed by the community in relation to the management of all Council-owned trees.
- (b) (i) It is acknowledged that trees are not permanent fixtures for all time. They have a life cycle and there comes a time when trees decline to a stage where they must be removed; or when disease or damage means that replacement of trees is the most responsible long term approach.
- (ii) It is also acknowledged that sensitive and skilled pruning of trees can greatly prolong their life and enhance trees' health, thus reducing the frequency and extent of tree removal.
- (c) Although the Council will generally consult with the community with regard to tree management, and will demonstrate respect for the importance of trees, it is acknowledged that in this urban environment the removal of trees is sometimes necessary to facilitate property development or the installation of infrastructure. In exercising its role as a Planning Authority through the Development Assessment Panel and Its Development Plan, the Council will place a high value on the retention of mature trees, and on new vegetation that enhances building developments within the legislative framework provided to it by the Development Act 1993.
- (d) When an application is made to remove a tree for the installation of a new vehicle crossover, the guidelines for removal shall be the same as those for other street trees, except that a tree which is in good condition and which is suited to its location, may be removed provided that:
- no alternative site (as deemed by an officer of Council) for the crossover is available;
 - affected residents have been notified; and
 - a suitable replacement tree is planted by the Council at the cost of the property owner/developer, if an appropriate planting site is available. The cost will include not only removal and replacement of the existing

tree but the amenity value (based on valuation methods outlined in clause 4:18 of this policy) of the tree being removed.

For the purposes of installing a cross over approval for the removal of Significant and Valuable trees which are in good condition, are suited to their location and which have a life expectancy of more than twenty years can not be approved under delegation.

- (e) When an application is made to remove a tree or trees for the installation or upgrading of physical infrastructure (e.g. drainage, road reconstruction etc.), the application may be approved providing:

- affected residents have been notified;
- there are no alternatives to the removal of the tree(s);
- the project budget provides for the replacement and maintenance of an appropriate tree or trees; and
- the project budget provides for all costs associated with the removal of the tree(s).

A Significant or Valuable tree which is in good condition and which is suited to its location, shall not be removed for infrastructure works unless approval is granted through a formal resolution of Council.

- (f) Before any Council-owned tree is removed it is to be assessed by an officer or contractor with arboricultural or suitable horticultural qualifications, who is to provide written assessment (Visual Tree Assessment – VTA) of the tree's condition, suitability and significance.

Assessment of *condition* is to be based on the tree's:

- health
- structure
- form
- life expectancy
- safety
- damage caused or potential for damage.

Assessment of the tree's *suitability* is to be based on:

- compatibility with the surrounding streetscape or landscape
- compliance with any existing Streetscape, Landscape or Management Plan for the area
- potential to cause damage or injury
- potential to cause nuisance
- suitability of species to the growing space and conditions
- potential response to arboricultural techniques available to preserve or enhance the tree

A tree will be considered *significant* if it meets the definition in clause (4)(f) of this Policy. A tree will be considered *valuable* if it meets the definition in clause (4)(g) of this Policy.

- (g) Dead trees may be retained where the tree provides, or has the potential to provide, nesting sites or other habitat benefits for birds and animals in

accordance with the **Habitat Retention and Corridors** clause (4.3)(iii) of this Policy, provided that there is no threat to public safety or to property.

- (h) A tree which is in good condition and which is suited to its location shall not be removed, unless clauses (6) **Tree Removals** (d) or (e) of this Policy apply.
- (i) A tree which is in good condition but which is not suited to its location, and which is not causing damage or nuisance, shall be removed only as part of a Streetscape Program or Land Management Plan, in accordance with **SLS** clause (4.6) of this Policy.
- (j) A tree which is in good condition but which is not suited to its location and which is causing damage or nuisance, may be removed only after the consultation required in clause (4.5) of this Policy has been carried out.
- (k) The General Manager City Services and Operations Manager are authorised to remove trees on the basis of professional assessment and advice regarding the factors in clause (f) above, provided that:
 - the consultation required in clause (4.5) of this Policy has been conducted; and

If a recommendation to remove a tree raises written objections which cannot be allayed through exploration of alternatives and reasonable consultation by the Administration, the matter is to be referred to the Council for resolution.

- (l) Clause (j) does not apply when a tree poses an immediate hazard which cannot be alleviated through any means other than removal of the tree. In these circumstances, the tree may be removed immediately, at the discretion of the most senior Council officer on the site at the time of the danger. Significant and valuable trees must pose an immediate and extreme hazard to warrant action under this clause.
- (m) Clause (l) does not apply when a tree is hazardous, but time is available to address the problem. Where the pollarding of the tree may enable it to re-establish itself, the Operations Manager is authorised to arrange such pollarding and to remove any danger to the public.
- (n) When a hazardous tree has been removed or pollarded without consultation, the community is to be advised of the circumstances as soon as possible.
- (o) Requests to remove trees must be in writing and must contain reasons for seeking the removal.
- (p) The General Manager City Services and Operations Manager are authorised to respond to written requests for the removal of trees in accordance with this Policy.

4.15 **Tree Health**

- (a) It is acknowledged that the natural defences of trees, which enable them to resist many common pests, are dependent upon the relative health of the trees. The Council will therefore adopt and maintain pro-active management techniques in order to promote the health of the City's trees, in order to implement this Policy's objectives. The Operational Guidelines are to include procedures to this end e.g. regarding the ordering, delivering, storage, planting, maintenance and formative pruning of trees.
- (b) When pests or diseases do become problems, treatment strategies are to be environmentally sensitive e.g. small scale spot spraying, horticultural oil treatments, soil stem injections, cultural practices or biological controls. When arboricultural tasks are undertaken on diseased trees, Council's "Clean Scheme" will operate. All problems regarding trees are to be reported to the relevant Business Unit Leader. Appropriate records of arboricultural work are to be maintained, and archived as necessary, so that the long term management of the City's trees is effective and consistent.

4.16 Damage

- (a) The General Manager City Services is authorised to institute proceedings against any person who destroys, damages or injures, or who causes the destruction, damage or injury of any Council-owned tree, in accordance with Section 233 of the Local Government Act 1999 or in relation to "tree damaging activity" as defined in the Development Act 1993.
- (b) Any tree which is perceived as causing damage to Council property or to adjacent private property is to be reported to the Council for further consideration.
- (c) The Council notes its responsibilities, and those of residents, pursuant to Section 245(1) of the Local Government Act 1999, regarding "liability for injury, damage or loss caused by certain trees".
- (d) Property owners or occupiers may make written requests to the Council asking that reasonable action be taken to avert a risk of damage to property from a tree, in accordance with Section 245(2) of the Local Government Act 1999. The Council acknowledges its responsibility and potential liability under this legislation. The General Manager, City Services and Operations Manager are to take prompt action in response to such requests to effectively manage the Council's liability under the legislation. Any difficulties that can not be readily resolved by the Administration pursuant to these provisions, are to be reported promptly to the Council for its determination.

4.17 Recycling of Green Waste

Cuttings resulting from the Council's maintenance of trees and vegetation are to be recycled except when disease or other contagion may be present. This may include use as mulch on Council plantings; sale to residents; leaving cuttings on site for residents' access or recycling through commercial green waste arrangements.

4.18 Valuation of Trees

Informal valuation of trees is to be based upon a method used within the horticultural industry, such as:

- the Boomsma Method
- the modified Burnley Method;
- the Australian Institute of Horticulture Inc. (A System of Assigning a Monetary Value to Amenity Trees – Technical Memorandum No. 2 Second Edition 1996); or
- the draft Australian Standard, Development Regulations 92100:R.

Formal valuation of the City's trees as an asset will not be included in financial statements until there is agreement across the Local Government industry and with Council's auditors, regarding an acceptable method for calculating this value.

Nature Strips

Policy Type:	COUNCIL POLICY
Reference Number:	COU76
Responsible Department:	City Services
Responsible Officer:	General Manager City Services
Legislation	Local Government Act 1999
Relevant Delegations:	N/a
Related Policies and Procedures	COU77 Vegetation Policy
Community Goal	3.1 Ensure the ongoing maintenance and development of the physical infrastructure of the City by meeting the agreed service requirements of the construction and maintenance program for footways, roads and drainage.
Previous Policy No:	COU69
Date Adopted:	CSP 18 Oct (367/10) C 25 Oct (758/10)
Review Date:	October 2012

1. POLICY STATEMENT

This policy provides clear direction for the management and maintenance of nature strips within the City of Unley.

2. PRINCIPLES

This policy aims to inform contractors, builders, developers and residents to minimise the impact to the local environment and potential future damage to private or public property associated with the construction, maintenance and or repair (including major or minor works) to crossing places and stormwater drainage.

2.1 General Conditions and Approval

The Administration is authorised to approve the installation of nature strips based upon the following:

- (a) that the owner of the property adjacent to the nature strip agrees to meet the total cost of the development to be undertaken either by Council or others;

- (b) that the adjacent 'owner' undertakes to indemnify the Council against any claim for compensation or damages arising out of the development of the nature strip, except when the work is undertaken by Council, and for any negligence of the owner or his/her agents during the maintenance of the nature strip;
- (c) that the proposed plantings will not, in the opinion of the Administration, cause interference to or loss of view to pedestrians using the footway or motorists entering the street from private property or entering the street from an adjoining street intersection or junction;
- (d) that the adjacent owner undertakes to advise any purchaser of the property of the conditions associated with the maintenance of the nature strip.

2.2 Unkempt Nature Strips and Removal

- (a) In the event that an adjacent owner fails to maintain the nature strip in front of his/her property to the satisfaction of the Administration, then the Administration is authorised to require the nature strip to be maintained in a satisfactory condition.
- (b) The adjacent owner is to be given fourteen days' notice detailing the requirements to satisfactorily maintain the nature strip.
- (c) If after the expiration of the notice the nature strip is not maintained to the satisfaction of the relevant officer, the Administration can authorise to require the removal of a nature strip by advising the owner of the adjacent property that he/she is required to remove the nature strip vegetation within fourteen days.
- (d) In the event that the adjacent owner does not comply with the notice to remove the nature strip within fourteen days the Administration may remove the nature strip and charge the adjacent owner the actual cost of the work involved with the removal.
- (e) If for any other reason the nature strip is required to be removed the Administration is authorised to remove the nature strip provided the fourteen days notice has been given to the adjacent owner stating Council's intention to remove the nature strip. The cost of such removal shall be met by Council.

2.3 Road or Footway Construction

- (a) Where a road or footway is to be reconstructed the Administration shall ascertain from owners of all properties adjacent to the reconstruction work whether they wish to have a dolomite or a loam nature strip. Residents are to be encouraged to consider Council's Environmental Policy and implementation plans, when making their choices.

- (b) The Administration is authorised to install the nature strips requested at no cost to the adjacent owners, provided that the owners agree to undertake the maintenance of the nature strip, as set out in this policy.

3. **POLICY OBJECTIVES**

To provide clear and consistent direction for the management and maintenance of nature strips within the City of Unley.

4. **DEFINITIONS**

'Nature Strip' describes the unpaved area of the footpath which lies between the back of the kerb and the paved footpath area which is not part of the crossing place to a property and is not being used for any other public service facility.

5. **REFERENCES**

N/a

6. **PROCEDURES**

This policy will be reviewed in keeping with Council's Policy Review process and will be managed by the Operations Manager.

Non dolomite options for verge treatments

In February 2016 the Coordinator Civic Works and Coordinator Environmental Projects visited Adami's Sand & Metal to explore any suitable alternatives to dolomite for verges which were water permeable. Prices are provided per ton as per publicly available rates in January 2016 for comparison purposes only.

The only potential alternative was 10-14mm metal screenings which could be moderately compacted and still allow water penetration. However it is almost twice the price of dolomite and likely after a period of dust and silt build up will allow weed growth.

	<p>Dolomite</p> <ul style="list-style-type: none"> • \$28/ton • Compacts well for sure footing • Little weed growth • Minimal loss from wind/water • Not water permeable
	<p>10-14mm metal screenings (white, brown or grey)</p> <ul style="list-style-type: none"> • \$58/ton • Could be compacted with vibrating plate, but still slightly loose footing • Medium weed growth • Minimal loss from wind/water • Water permeable
	<p>7mm metal screenings (white or grey)</p> <ul style="list-style-type: none"> • \$60/ton • Could be compacted with vibrating plate, but still slightly loose footing • Medium weed growth • Minimal loss from wind/water • Semi-water permeable
	<p>20mm metal screenings (white or grey)</p> <ul style="list-style-type: none"> • \$58/ton • Loose footing • Medium weed growth • Minimal loss from wind/water • Water permeable
	<p>Ocean pearl pebble</p> <ul style="list-style-type: none"> • \$120/ton • Loose footing • Medium weed growth • Minimal loss from wind/water • Water permeable
	<p>Quarry Sand - brown</p> <ul style="list-style-type: none"> • \$30/ton • Good compaction ability, but doesn't bind like dolomite • Medium weed growth • Moderate loss from wind/water • Semi-water permeable and can create mud
	<p>Soft fall (pine chips)</p> <ul style="list-style-type: none"> • \$58.50/ton • Loose footing • Medium weed growth • High loss from wind/water • Water permeable

INFORMATION REPORT

REPORT TITLE: TREE ECOSYSTEM SERVICES
ASSESSMENT, RIDGE PARK

ITEM NUMBER: 27

DATE OF MEETING: 7 JUNE 2016

AUTHOR: TREVOR STEIN

JOB TITLE: SUSTAINABLE LANDSCAPE SPECIALIST

1. **EXECUTIVE SUMMARY**

- Covering a land area of approximately 5 hectares, Ridge Park is Council's largest parcel of Open Space comprising many large majestic remnant trees.
- Council provided funding during 2015/16 to undertake a tree risk assessment audit of the trees within the reserve.
- Noting the environmental importance of Ridge Park, the Administration undertook (along with a tree audit) an ecosystem risk assessment of the trees within the park.
- The finalised report from this assessment provides important technical environmental data that will assist Council for the strategic management of this parcel of open space.
- The finalised report is provided to the Infrastructure and Sustainability Committee for information.

2. **RECOMMENDATION**

MOVED:
SECONDED:

That the Committee recommends to Council, that:

1. The report be received.
-

3. **RELEVANT CORE STRATEGIES/POLICIES**

- City of Unley 4 Year Plan – Greening Objective
- City of Unley Environmental Strategy (Draft – endorsed for Community Consultation)
- City of Unley Tree Strategy (Draft – endorsed for Community Consultation)
- City of Unley Vegetation Management Policy

2. **DISCUSSION**

Trees and associated green infrastructure are being increasingly recognised for the multiple benefits they can offer in urban areas, including for example to: human health and wellbeing, biodiversity, soil protection, property valuations, economic prosperity, wind control, urban heat island mitigation, and climate change adaptation. Such benefits have usually been understood intrinsically, but not usually readily quantified. This limits the ability to advocate for increased tree plantings, particularly given high demands for urban space, resources and funding from competing land-uses.

One of the most dominant elements of green infrastructure is trees – located in parks, public and private gardens, and lining streets and waterways. In addition to competition for space, a key barrier to increasing tree cover in urban areas is the difficulty in valuing their worth as an urban asset, as is done for built infrastructure (e.g. roads, buildings). The i-Tree Eco software provides a way to measure and value urban trees. Though not all services provided by trees are able to be valued, i-Tree assessments provide an initial baseline on which to build the business-case for increasing tree cover in urban areas.

Council engaged Seeds Consulting to undertake a detailed environmental assessment of the trees at Ridge Park.

The objectives of the report were to:

- Present and discuss the findings of an ecosystem services assessment of the trees of Ridge Park;
- Provide a high level discussion of the current biodiversity, landscape ecology, and climate benefits offered by Ridge Park's trees; and
- Make recommendations for actions required to maintain and/or improve the current services and benefits offered by the Park's trees.

A copy of the Tree Ecosystem Services Assessment, Ridge Park is provided as an attachment to this report.

Issues of note and outcomes from the report include:

- This is the first assessment of its type in South Australia, and only the second in Australia.
- Follows similar analyses conducted worldwide, most recently for London.

- Shows that the replacement value of trees in Ridge Park is approximately \$3 million.
- Trees are recognised for the positive impacts they have on human health, environmental health, local economy, property values, climate change adaptation and biodiversity – however, it has been difficult to cost these benefits which has meant, in urban areas in particular, it has been difficult to advocate for maintaining and increasing tree cover as they have been unable to be valued as urban assets in the same way we might value a building or a road.
- There are now tools available which help to value trees as urban assets – i-Tree Eco is a software tool which allows certain ecosystem services (e.g. air pollution removed, carbon stored and sequestered) to be quantified and costed.
- The City of Unley have been a leader in not only recognising the importance of urban trees for their multiple benefits to people, the economy, and the environment, but also in taking steps to start valuing their urban trees and planning for the future.
- The i-Tree Eco survey identified 683 trees in Ridge Park and found that these trees together provide approximately \$8,847 worth of ecosystem service benefits per year (i.e. functional value), and would cost over \$3M to replace (i.e. structural value).
- The services provided by trees varies among species and age, though benefits tend to increase as trees grow, for example, River Red Gums were the most abundant tree species in the park (132 trees), of these,
 - The smallest was 2.3m high, had a trunk girth of 3cm and a leaf area of 7.84 m² – it was calculated to provide \$0.07 worth of ecosystem service benefits per year and would cost \$68 to replace,
 - The largest was nearly 36m high, had a trunk girth of over 2m and a leaf area of 1,522 m² (this is the sign posted Gum near the dam wall – estimated to be between 300-400 years old) – it was calculated to provide \$147.49 worth of ecosystem benefits per year and would cost \$52,562 (not amenity value) to replace,
- The tree benefit valuations are conservative, as they consider only a small proportion of known benefits provided by trees (e.g. does not include biodiversity values, or local economy/property value benefits), but it is a starting point for helping to justify the cost-benefit value of trees in our urban areas.
- The findings from this study are being used to help inform tree planting activities, rehabilitation programs, and also to communicate with the general public.

Trees have long been recognised in the scientific field for the benefits they provide both to the environment and people. Being able to value trees as an urban asset allows Council to advocate for protecting and promoting more trees being planted. Furthermore, by acknowledging the economic value of trees provides Council with another tool to promote behavioural change in how the community see trees.

The data collected from the Ecosystem Services Assessment was used as an educational tool at the tree tag community activation event which was launched at Mud Central at Ridge Park on 21 April 2016. By using the data from the assessment, staff converted into fun facts information on tree tags hanging from 60 trees across the park. As an example the equivalent number of beach umbrellas worth of shade provided, air pollution filtered, oxygen provided, height and type of tree.



Tree Tag Example – Photo Credit: Jason Tyndall, Nature Play SA

The full report will provide critical resource and data material in driving any future development and rehabilitation works at Ridge Park.

The report is provided to committee members for interest and discussion.