TREE MANAGEMENT PLAN

BROKEN HILL

AUSTRALIA'S FIRST HERITAGE LISTED CITY

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ASSOCIATED DOCUMENTS

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EXECUTIVE SUMMARY

This plan provides the framework for the ongoing maintenance, protection, renewal and risk management of Broken Hill City Council (BHCC) trees. It is aligned with the Tree Management Policy and the proposed Parks and Open Spaces Asset Management Plan both of which recognises that Council trees are a significant asset that are of high value to the environment and community and contribute greatly to the liveability of the city.

It applies to all trees under Council's management within the 40 km to 80 km per hour speed limit zones.

The presence of trees in public areas can present a degree of risk to people, property and services and the benefits provided by these trees comes at a considerable cost in terms of installation, maintenance and impacts on infrastructure such as drainage, roads and footpaths. This plan documents the management strategies that Broken Hill City Council either has currently in place or are proposed to be implemented to ensure the longevity and quality of trees within the Councils urban environments and the risk management practices used to ensure minimal adverse impact on both Council and private property due to the presence of Council managed trees.

PURPOSE

The purpose of this plan is to;

- Provide a comprehensive framework for the conservation and management of street, roadside and parkland trees within the Councils boundary to ensure the long-term protection and enhancement of the urban forest and maximise the benefits of an existing asset.
- Provide a clear and consistent method for managing trees including maintenance and condition inspection schedules, replacement planning and the ongoing development of township streetscapes in alignment with proposed Cultural Master Plan.
- Determine priorities for maintenance, removal, replanting and associated works.
- Ensure the accurate, informative and easily understaood information is available to Council staff and contractors, the local community, service providors and local government organisations.

RELEVANT DOCUMENTS

- Electricity Supply Act 1995
- Electricity Supply (General) Regulation 2014
- Environmental Planning & Assessment Act 1979 No 203
- Heritage Act 1977
- Road Act 1993 No 33
- BHCC Proposed Parks and Open Spaces Asset Management Plan
- Australian Standard AS4373-2007 Pruning of Amenity Trees
- Australian Standard AS 4970 2009 Protection of Trees on Development Sites
- Essential Energy Vegetation Plan 2019

COMMUNICATIONS PLAN – TREE MANAGEMENT				
Where	What	Frequency/When	Measure	
Social Media	Concerned about a tree? Outline the process for raising concerns about street trees.	As resource allow	Annual completion.	
Social Media	Tree work in your area.	Ongoing	Consistency of completion.	
Council Newsletter	Tree management update and reminder of reporting process.	Annually	Annual completion.	
Council Website	'Report an Issue'.	Ongoing	Timely receipt and response to requests.	
Road Show	Tree management process, service levels for trees.	The first year of incoming council		
Customer Request Module (Civica)	Customer requests received by phone are recorded and actioned according to tree management plan processes.	Ongoing	Timely response to request.	
Various	Landcare to provide a means of communication and link to interested parties in consultation with Council.	Ongoing consultation with Council	Requested responded.	

DEFINITIONS

Street Tree:

- A plant that is at least three metres high.
- Has a canopy spread of at least two metres.
- Has a trunk circumference of at least 300 mm measured at 1.5 m above ground level.
- Located on a road reserve within the 40 km 80 km speed limit zones.

Significant Tree:

- As defined by the National Trust four criteria Horticulture, Social, Aesthetic and Cultural.
- A mature native plant that is at least five metres high;
- Has a canopy spread of at least four metres;
- Has a trunk circumference of at least one metre measured at 1.5m above ground Level; or
- A mature established exotic species located in a high risk area;
- And/or whose planting can be linked to a significant event or person;
- A tree nominated as significant by a member of the Broken Hill City Council community and approved by Council

Significant Tree Avenue:

• A series of trees planted in a symmetrical formation along an urban roadside.

High Risk Areas:

An area in which Broken Hill City Council is the responsible authority or the designated committee of management and is of high use by the public on either a regular of one off basis. These areas may include but are not limited to;

- Shopping precincts, excluding privately owned and developed.
- Playgrounds.
- Parks and gardens.
- Swimming pools.
- Recreation and sports facilities.
- Lookouts.
- Reserves.

Reactive Response:

Inspection and/or maintenance of trees prompted by a resident or staff request.

Proactive Maintenance:

Regular planned maintenance to mitigate risk to trees, infrastructure and citizens.

Tree Management Responsibilities:

The tree management responsibilities defined within this document are applicable only to those areas directly under the control of Council.

Plan Review and Amendment:

This Tree Management Plan is open to the process of continuous improvement and will be reviewed every four years.

1. INTRODUCTION

1.1 Council Plan

Council's Asset Management Strategy and Tree Management Policy includes the following relevant asset management objectives:

- Prepare an Parks and Open Spaces Asset Management Plan (inclusive of trees).
- Prepare an Trees Asset Management Plan, this has been update to Tree Management Plan.
- Review the method of performing condition assessments.
- Complete condition assessments for road and non-road asset.
- Develop a Tree Asset inventory database.

1.2 Benefits of Trees

Trees are an essential part of the urban and rural fabric, providing significant economic, social and ecological benefits.

Trees:

- Create more desirable streetscapes and recreation areas.
- Provide the opportunity to establish regional presence and a distinct neighbourhood character.
- Assist in creating a unique identity and structure to town and with inclusion into the Nation Heritage List.
- Ameliorate the extremes of noise, temperature, air pollution and climate change.
- Maintain important habitats particularly for native birds and small mammals utilising the use of tree hollows.
- Form corridors for movement and refuges for native wildlife.
- Reduce the impacts of rainfall and run-off and reduce erosion.
- Contribute to the overall livibility of the city.
- Act as a carbon sink in lessening the effect of the urban environment.

1.3 Tree Management Issues

Trees are not transitory and should not be subject solely to the preferences of the residents or individuals of the time. Decisions made today are going to determine the quality of the urban environment for several generations to come. They do not behave evenly over their life and are prone to many factors outside the control of the tree owner/steward such as drought, weather, disease and ageing. They take many years to develop to maturity and provide maximum benefits. Climate variation and extremes have substantial impact on the health of trees in urban areas.

Given that trees may live for a period of up to one hundred years or more, pre-empting possible changes is important. Controlling the diversity in age and species is very important in creating a 'sustained amenity' approach and future proofing the amenity of streetscapes. Reviewing the species that were planted locally and their performance over time provides useful data on which to evaluate the future use of these species or alternate similar species.

A programmed approach to managing an asset is essential. Residents expect a professional level of response to tree problems or requests. Weather and vehicle accidents for example can also create a need for unplanned tree works. Proactive and reactive maintenance will always be present and needs to be managed carefully when the level of resources is limited.

Risk mitigation is the determining factor in balancing proactive versus reactive works. Power line works, infrastructure development, disease, climate and tree maturity are all factors.

2. TREE MANAGEMENT

Trees provide net benefits to communities and form an essential part of existing and newly developed areas. Public trees can however conflict with other essential infrastructure. General infrastructure management must serve to minimise these conflicts without serious detriment to the tree assets. Trees are just one component within a network of assets that Council has management responsibility for. Many activities or works can significantly affect the condition of the public tree assets.

All works within or adjacent to public land needs to be properly planned and implemented to avoid or minimize any detrimental impacts on public trees.

2.1 Policy

Broken Hill City Council (Council) has a designated Tree Management Policy which can be accessed separately to this document upon request to Customer Service or the Council's Website

3. RISK MANAGEMENT

The Council has a designated Enterprise Risk Management Policy, which can be accessed seperately from this document upon request from Customer Services or the Council's Website.

Any tree asset comes with a level of inherent risk. Identifying and managing (minimising) that risk is essential.

In urban environments in particular, people, buildings and other infrastructure will be in close proximity to trees. In public areas containing trees Council and some other authorities, have a duty of care to provide residents and visitors with a safe environment. The risk associated with trees is a combination of the condition of the tree and the use around and in the vicinity of the tree including bushfire management strategies and overlays.

Council has a duty of care to reduce the level of risk to the public and potential financial burden on ratepayers.

Insurance companies require a certain standard for identifying all trees and their hazards, recording information and developing tree management strategies, plans and maintenance programs. The cost to Council of not correctly managing their various assets can be significant. Insurance premiums and legal duty of care responsibilities have the potential to impact significantly on the finances of Council.

Trees in high risk areas correspond to areas where members of the public congregate such as such shopping precincts, swimming pools, parks, playgrounds, lookouts, Council controlled sports grounds, Council maintained reserves, kindergartens, school bus stops and significant walking tracks. A risk analysis is completed as part of regular tree condition assessments.

Risk assessment/potential is the overriding factor in determining priority for works and allocating resources. Risks include hazardous trees, deadwood, falling items, sight and distance issues and powerlines clearance.

All trees reported as being unsafe or of concern by the public or identified as being of concern by staff are to be inspected by an appropriate staff member as a level one visual inspection and an assessment report provided to the Strategic Asset Manager within one week of notification. The results of the report will determine whether further external investigation and action is required. **Appendix 1:** Tree inspection report, hazard rating section should be used for these purposes. Requests should be actioned in these time frames.

4. TREE INSPECTIONS AND ASSESSMENTS

Risk level	Recommended Time Frame for Remedial Action	Maximum time frame for remedial action based on resource availability	
Critical	Within 12 hours	Within 24 hours	
Urgent Within 24 hours		Within 48 hours	
High	Within 3 days	Within 5 days	
Medium	Within 1 month	Within 2 months	
Low	Within 3 months	Within 6 months	
No work required, monitored		No work required, monitored as per inspection	
Negligible	as per inspection schedule	schedule	

Council trees are inspected and assessed on a regular basis. The frequency of these inspections is determined by the location of the trees and their potential for public risk.

Tree type	Inspection frequency	Inspection type
High Risk Areas	Every six months	Proactive level 1 internal
	Every five years	External inspection
Significant Trees	Every six months	Proactive level 1 internal
	Every five years	External inspection
Significant Tree Avenues	Every 12 months	Proactive level 1 internal
	Every five years	External inspection
Street Trees	Every two years	Proactive level 1 internal
All trees	By customer or internal	Reactive inspection only
	request	

Inspections and Risk Assessments are conducted according to the standardised and documented procedures within this Plan.

Inspections are undertaken as per the inspection frequencies above. A level one inspection consists of a visual inspection from the ground only. This inspection regime is intended to satisfy Council's risk management responsibilities, develop a proactive management strategy and tree replacement program.

The Council personnel conducting the tree assessments will be inducted in Council's Tree Assessment and Inspection processes as per this document. At any time deemed necessary by Council inspection, an Arborist will be engaged to conduct follow up investigations and remedial works that are beyond the scope of Council employees. Every five years an external expert will be engaged to conduct inspections of High Risk Areas, Significant Trees and Street Trees. Data on Council's trees is to be collected and recorded in the Tree Inventory database. The same issues have been identified and recorded as part of the the Tree Inspection Report.

This information has been used to inform the prioritisation of works, replacement planning and selection of suitable tree species.

It is proposed that the Council tree database includes the following data for each tree:

- Inspected by
- Date inspected
- Tree number
- Location
- Botanical Name
- Common Name
- Ownership
- Age
- Diameter at Breast Height (DBH)

- Height
- Structure
- Health
- Risk Category
- Type of Work Undertaken
- Date Work Completed
- Works Completed by
- Works Priority

Existing and proposed walking tracks should be maintained to ensure that the outer reaches of any trees canopy does not extend within one meter of the edge of the track. This is especially important where Eucalyptus are present due to the tendency for them to drop limbs.

All trees overhanging footpaths or pathways should be under pruned to a minimum height of 2.1 metres from ground level.

5. TREE SELECTION

Street, parkland and roadside tree planting is best done in a programmed and sustainable manner. This approach is sound both environmentally and economically. It is also necessary to pre-plan what tree stock will be needed to be assured of obtaining the good quality stock of the right species at the right time.

A 'Sustained Amenity' approach to provide a balanced diversity of tree ages and sizes should be followed to achieve long term stability of the tree population and landscape character.

The right mix of species and age diversity are vital components of a sustainable tree population. A general methodology for achieving this is for no particular Genera to make up a predominant percentage of the whole tree population. The age of the trees should also be spread evenly across concentrated planting areas to lessen the impact of the removal of whole areas of trees.

5.1 Priority for tree planting should be given to:

- Sites where trees have been removed.
- High profile and high use areas.
- Areas where there are high percentages of old aged trees, low species diversity and/or trees in poor condition.
- Areas with a lack of trees.
- Areas where residents or community groups have requested trees and are prepared to be involved in tree establishment and after-planting care.
- New developments.

Selection of tree species should take advantage of the wide range now available. A diversity of species spread across the Council has multiple benefits eg disease tolerance, visual and seasonal variation, lower maintenance and habitat creation and diversity.

When selecting tree species for street, parkland and roadside tree planting the following factors must be considered:

- Adopted Master plans, strategies, planning overlays and development plans.
- The significance of previous history of tree planting.
- Anticipated ongoing maintenance requirements.
- Drought tolerance/water usage.
- Longevity, durability, hardiness and amenity.
- Growth habit, size and structural integrity.
- Tolerance to harsh urban or structural environments.
- Soil type.
- Root growth characteristics and tolerances.
- Pruning requirements.
- Amount and type of organic debris shed.
- Proximity and form of surrounding existing and future infrastructure.
- Solar radiation/orientation.
- Pests and Disease susceptibility or tolerance.
- Existing and future use of the surrounding area.
- Environmental and Habitat value.
- Possible poisonous or health effects.
- Weed potential.

Only high quality tree stock should be used and planted correctly as substandard trees or planting can increase maintenance costs significantly and conversely good quality stock and planting techniques dramatically increases establishment rates and the community's appreciation of trees.

Council must be consulted and give approval for any tree planting within road reserves, nature strips, parklands and roadsides it controls or will take control of as Council ultimately becomes responsible for the ongoing tree maintenance and any conflict with Council and private assets.

The following guidelines will govern tree selection:

- Appendix 5A provides a list of tree species deemed suitable for planting within the areas covered in this plan. Other species may be considered upon approval of the appropriate Strategic Asset Management staff member.
- Council will consider trials of other species to determine their suitability for planting in order to expand the range of urban trees available given the increasingly challenging climatic conditions
- Annual tree planting programs undertaken for Broken Hill (to be developed).
- Tree planting programs developed for specific areas to achieve sufficient numbers of trees in one area over time.
- Trees needed to make up the shortfall in desired total numbers.
- Replacements for trees removed.
- Estimated useful life (whichever is greater).
- An extra 20 percent to allow for expected losses from vandalism and natural attrition.
- Master planning and town beautification documents.
- No more than two different species generally to be used in any one street, or specific and definable sections of the street.

- For the overall urban Council tree population: aim to have any one genus limited to no more than 30% and have an even spread of 'age' classifications. One general exception to this policy is the genus Eucalyptus owing to their natural dominance in the area.
- Trees to be planted in conformance with the Councils proposed 'Tree Planting procedure'.
- The species selected for planting should have as large a mature size as possible within the constraints of the site to create a definite visual impact on the site and provide for the necessary physical clearances as well as providing maximum canopy benefits of shade, carbon sequestration and habitat.
- Where The provision of tree planting and establishment, for a minimum period of five years, to be at the developers cost.
- Where a tree has been planted by Council, the ongoing watering will be for a minimum of five years.
- Any person or organisation wishing to plant trees, shrubs, herbaceous plants, or undertake any landscaping within a road reserve, park or other land under the control of Council must have permission in writing from Council.
- Any trees or shrubs planted without Council permission and not in conformance with Section 6, Guidelines for Tree Planting on Council Managed Land, principles and policies will be removed in accordance with Council's Tree Removal Procedure (refer Section 7).
- All tree planting within a Transport for NSW (TfNSW) controlled road to be undertaken in consultation with TfNSW and as far as practical comply with their planting procedures and within the Transport Administration Act, 1988 (NSW).

5.2 Street Trees

Uniform tree planting within a street or block, in terms of species, age and spacing, provides the most appropriate planting within the central and older urban areas. Trees should generally be centred on each building lot and planted opposite one another. The planting of deciduous trees, rather than evergreen, should be considered in east-west streets to allow solar access and summer shade for north facing houses.

Planting in streets should be confined to trees only, not shrubs, to be able to satisfy clearance or setback requirements. Generally speaking trees should be selected and maintained to provide a clear single trunk (Excurrent Form) for approximately two metres. Multi-stemmed (Decurrent or Deliquescent Form) trees are also viable in the appropriate context.

The location and selection of street trees needs to take into account the possible effect on all other infrastructure and services. It is essential that the trees proximity to electricity lines is considered for the whole of its useful life.

Street trees provide many benefits and establish much quicker and grow faster when residents take responsibility for their care in the early stages. Residents are encouraged to be involved in the maintaining of new trees eg by watering, mulch (not weed clippings) and weed control.

New or replacement street trees should be an integral component of any new development or subdivision site. Council and developers need to work together to determine the appropriate tree planting and implementation programs. Generally tree planting should be done at the earliest practical stage of any project/ development to get the maximum benefit.

5.3 Park Trees

Park tree planting should not take place without proper consideration and consultation with Heritage Overlays and user groups; for major parks and reserves this ideally should be in the form of a site-specific Master plan. Propsed and existing Master plan's, historic evidence and various precedents or existing management plans are to be used to guide tree planting, species selection, locations and priorities. Parks should contain large growing trees as large trees provide the most environmental and cultural benefits. A mixture of deciduous and evergreen should also be encouraged. Parks are one of the few spaces within urban environments where there is sufficient space to grow large trees to offer cultural, historic, botanic and local amenity whilst minimising conflicts with other infrastructure.

Tree planting in parklands is becoming more important to ameliorate effects of climate change eg increased temperatures and solar radiation. Provision of adequate shaded areas in high use areas should be a priority. Tree planting in parklands is also important to maintain, uphold and promote botanical, historical and cultural diversity.

6. GUIDELINES FOR TREE PLANTING ON COUNCIL MANAGED LANDS

6.1 Location

- Tree planting includes the preparation of planting areas, the planting of a specified quantity, size and approved quality plant species.
- All trees to be supplied shall be first approved by the Strategic Asset Manager.
- Tree planting in streets will be as in the Tree Planting Detail and Diagram **Appendix 9** or as directed by the Team Leader.
- Trees will be planted only in locations designated by a member of Asset Planner Parks and Open Space.
- All roads, street and car park designs should include capacity for tree planting whilst minimizing conflicts with other infrastructure to the satisfaction of Council.
- All new development sites incorporate new tree planting within the adjoining street frontages and any open space areas where appropriate subject to the approval of Council.

The location of new trees is to be determined by distance and existing features;

a) Distance Apart

Trees should be located as per the following criteria:

• the total number of trees on any section of nature strip (including existing trees) does not exceed two for each property frontage, except where the General Manager may determine that additional trees are warranted, where the property frontage is Significantly longer than normal or other unusual circumstances exist.

b) Existing Features

Trees shall be located as per the following criteria:

- Minimum of 2.5m from driveways.
- Minimum of 3.0m from electricity poles.
- Minimum of 10.0m from corner of property boundary at intersections.
- Minimum of 2.0m from hydrants.
- Minimum of 3.0m from vertically underneath service wires.
- Minimum of 2.5m from a property boundaries or over incoming gas and existing water service.
- Minimum of 1.0m from kerb and gutter.

6.2 Tree Planting and Establishment Specification

a) Streets and Parks

- Council will nominate/approve all viable tree-planting sites.
- The Contractor/Council is responsible for the preparation of planting areas, the planting of a specified quantity, size and approved quality plant species.
- All trees to be supplied shall be first approved by the Strategic Asset Manager. The Contractor/Council are to provide a storage site for the plants.
- Tree planting in streets will be as in the Tree Planting Detail and Diagram.

6.3 Tree Planting Detail

a) All Trees

- Crown growth shall be vigorous and well formed. Variation of crown bulk on opposite sides of any stem axis shall not exceed 10%.
- Trees shall have straight trunks. Trees with co-dominant stems shall not be used.
- Tree stems shall have a good even taper.
- Trees shall have healthy, vigorous, well developed root systems and shall not be pot-bound, ie no coiling of the main structural roots, less than 10% coiling of the fibrous roots and the root system not being matted to the extent that it is retarding tree vigour.
- Unless otherwise specified by the Work Manager, all trees shall be a minimum two metres high (excluding root ball).

6.4 Excavation

- Prior to any works commencing 'Dial Before you dig' process is to be undertaken with any identified underground utility services marked for the proposed dig site.
- The Contractor/Council shall excavate the tree planting hole either physically or mechanically ensuring no underground services are damaged. The hole shall be square and of the diameter no less than two times the diameter of the root ball width and a depth of equal to the tree root ball.
- Sides of the hole, near the top, shall be tapered to better accommodate the horizontal growth pattern of the tree's root system. In poorly drained clay soils, the planting hole shall be 50mm shallower, so that the root ball is slightly above grade. Sides of the hole should be thoroughly scarified before the tree is planted to avoid glazing of the planting hole.

6.5 Planting

- If the root ball is contained, it shall be removed from the pot, spring ring or hessian wrap ensuring all ties, strings and bindings are removed from the root ball.
- Any girdling roots are to be teased out or cut upon placement into the planting hole to interrupt the growth pattern.
- The tree, when in the hole, should be level with the natural ground level or, in poorly drained sites, up to 25mm above the natural ground level.
- The tree shall be able to stand in a straight, vertical position without support. Any soil that has been placed under the root ball of the tree to position the tree at the right height shall be firmed to ensure that no sinkage occurs after the planting process has been completed.
- All trees shall have installed a water well or root director installed as part of the planting process.

6.6 Irrigation Tube

This applies to Street Trees only or as required by the Works Manager;

• As part of the planting process place a 1.5 m length of AgFlow pipe, coiled around the root ball, with one end of the pipe protruding no more than 50mm above the soil level on the road side of the tree hole.

Тгее Туре	Root Ball Diameter mm	Pipe Diameter mm
Advanced trees	>100	500
Street trees	<75	500

6.7 Backfilling

The planting hole shall be backfilled with indigenous soil removed from the tree planting hole. Backfill is not to be incorporated with any other materials such as sawdust, bark, potting mix or similar. If backfill other than indigenous soil is required, the soil texture shall be consistent with that of the indigenous soil.

Where excavated soil is heavily compacted, clods shall be broken up to approximately a 25mm maximum diameter prior to backfilling. The backfill shall be lightly firmed to eliminate any voids or air pockets and to ensure close contact with the tree's root mass and soil.

All new planting shall have 'water wells' or 'root' directors installed as part of the process.

6.8 Stacking and Tying

Supply and install two hardwood tree stakes. These stakes shall be positioned either side of the tree so that they are parallel with the side of the road - street trees only. The stakes shall be driven into the soil at the side of the root ball and not driven into the root ball mass. A tree tie of black plastic or rubber material, no less than 50 mm diameter will be stapled or nailed with galvanised clouts to the stake and wrapped around the trunk to allow sufficient freedom of movement (100mm) after staking.

Guy wires are not acceptable.

6.9 Mulching

Mulch, approved by the Supervisor shall be spread around the entire area of the planting hole to a minimum compacted depth of 75mm and a maximum compacted depth of 100mm. Mulch should not be in direct contact with the main stem to avoid the risk of collar rot.

6.10 Watering

Water all newly planted trees within 24 hours of planting taking place and will be water for the first 5 years of its life or at such a time that the tree becomes self sufficent

6.11 Formative Pruning

Prune the tree immediately after planting in order to remove any broken or damaged branches or unwanted lateral growth or twin leaders within the crown.

6.12 Site Clean-Up

The site shall be left in a clean, tidy manner, safe for pedestrians and road users. All debris, soil and rubble is to be removed from site and all paved areas, kerbs, footpaths and roads swept clean of clay and soil.

7. GUIDELINES FOR REMOVAL OF TREES ON COUNCIL MANAGED LAND (PARKS, RESERVES AND ROAD RESERVES)

7.1 Introduction

Trees are a valuable asset and should only be removed as a last resort.

Tree removal can affect significant and non significant trees.

Removal can be necessary for reasons such as, poor condition, risk management, traffic hazards, access problems.

These guidelines are to enable decisions to be made in a fair and consistent manner.

7.2 Structure of Procedure

Strategic Asset Manager may authorise the removal of:

- Trees that are **Non-significant**.
- Trees identified as **Significant** after referral to Executive Leadership Team (ELT).

7.3 Definitions

- **Dead** greater than 50% of the crown dead.
- Hazardous may cause injury or property damage if not removed.
- **Structurally unsound** high chance of failure within the next five years, (eg Bifurcation V Crotch excessive borer activity).
- Exposed roots high potential as a trip hazard.
- **Inappropriately located** trees inside distance and existing features restrictions defined in the Guidelines for Street Tree Planting whose form cannot be corrected by pruning (eg tall species with structural defects under wires, a tree leaning over road/paths)
- Major damage to infrastructure signifcant interference to Council, public utility or private infrastruture services.

7.4 Procedures

Assessments will be by visual inspection using a standard inspection sheet in digital form and is to be based on the individual merits of the situation. These situations will involve judgment based on a combination of the related arboriculture issues combined with such factors as safety, political, social, historical, economic, budgetary or environmental considerations.

Removal is to be the last resort when alleviating tree related problems. Other options are to be assessed and considered in preference to removal wherever reasonable (eg root barriers, pruning, sweeper services, drain cleaning, infrastructure modification, identification of the issue with a CCTV camera or other management programs).

Examples for considering alternative treatments include:

- Where a tree is significant to the area, but it has some structural defects that cannot be remedially pruned, yet may not cause significant problems for a number of years.
- Where a tree is frequently affected by disease or pests (sooty mould, root fungus, borers, and psyllids) that are obviously affecting the health of the tree.
- Where a tree is shedding levels of leaves, bark, fruit or seed-pods seasonally and causing significant general litter problems far in excess of that expected from a tree of the species and size.
- Where tree roots are causing significant damage to Council, public utility or private infrastructure services and where this has the potential to increase significantly.

7.5 Removal of Non-Significant Trees

Standard inspection and determination based on the merits of the case.

7.6 Removal of Significant Trees

- Refer to register of significant trees **Appendix 6A**.
- Standard inspection and determination based on the merits of the case.
- All trees, assessed as being significant, are to be photographed and archived.
- with a written assessment provided.
- An Arborists report will be prepared when deemed necessary by Strategic Asset Manager.
- Advise ELT (Executive Leadership Team) of the proposal.

7.7 Notification of Works

Parties likely to be affected by the works being undertaken are to be given no less than four days written notice of the proposed action, including arrangements for stump removal, reinstatement and tree replacement.

In emergency situations notification prior to removal may not be possible, but follow-up advice, including notification details, must occur within the following 48 hours.

7.8 Procedures to be Followed

- Stump removal within 6-8 weeks of tree removal.
- Tree replacements as soon as possible the following planting season, depending on practicality/availability.
- No works related to Council trees are to be undertaken by staff on private property unless appropriate permission or disclaimer has been approved by the property owner.
- Where removal of a tree is on private land approval and advice is to be sought from the Councils Planning Department.

7.9 Appeal

Where a resident, committee of management or member of the public insists on the removal or retention of a tree following notification of tree removal.

The Strategic Asset Manager will refer the matter to the ELT. The referral will include;

- A brief 'over-view' report and recommendation for action.
- Any independent report from a qualified Arborist that may have been obtained.
- Details of reasons for the objection.
- Any other information relevant to the request.

The Strategic Asset Manager will write to the resident to;

- Advise the decision on the matter.
- Invite the resident to obtain alternative independent advice at their own cost in order to have the matter reconsidered.

8. TREE VALUATION

When the removal of a public tree is deemed necessary for construction, development or works, all costs associated with its removal and replacement must be paid by the property owner, utility or developer prior to removal. See Tree Valuation Annexure 13.

8.1 Tree Removal

Costs - The costs associated with the removal of a public tree include:

- a) Tree Amenity Value Calculated in accordance with therevised Maurer-Hoffman method adapted for Council.
- **b)** Removal Costs Costs associated with the removal of the tree including stumps, disposal of debris and any community engagement.
- c) Tree Replacement Costs Costs associated with the suitable replacement of the tree being removed. The level of reinstatement required will be determined by the City and include a 24-month maintenance period. Opportunities to improve soil conditions and increased water capture will be explored.

A Tree amenity value **a)** will not be charged in the following instances;

- Trees that are dead(except in cases of intentional vandalism or poisoning).
- Trees with a ULE of less than fiveyears.
- Where the tree is a declared weed species for a particular location.
- Trees that have been assessed by a qualified arborist that pose a medium, high or very high level of residual risk in accordance with the Counci's risk management framework (Based on Australian Standard for Risk Management ISO 31000:2009).
- Trees proven to be causing damage to private infrastructure or services where all interventions to retain the tree have been exhausted.
- Trees proven to be causing damage to private infrastructure or services where all interventions to retain the tree have been exhausted.

9. TREE PROTECTION

Trees and infrastructure are essential items in a modern environment. Trees are regularly subject to damage from civil works. When civil works are proposed in the vicinity of trees an assessment and works plan is necessary to ensure tree damage is avoided or minimised. There are various guidelines for determining what can be classed as in the 'vicinity' of a tree. The age, size and/or vigour of the tree are usually the determining factor. For example, guidelines to avoid unacceptable root damage may include 'exclusion zones' equal to a radius 12 times the trunk diameter or the area contained within the 'Drip line' of the tree.

All protection issues should be identified at the design stage with any protection plans finalised prior to any works commencing. Successful protection of trees relies on a commitment from all parties involved in the project. Council will not accept the responsibility for any trees below an acceptable condition/standard. Any development or works within a street, parkland or roadside should take all practical steps to preserve existing trees in a healthy and safe condition. Trees growing beyond the 'scope of works', due to the potential extent of their root system and changes to drainage patterns, can be seriously damaged. Capital and maintenance works should be designed and managed to avoid private trees being impacted by Council works and Council trees being impacted by private works.

Many authorities and private contractors have responsibility for conducting works adjacent to Council trees, particularly in streets. All parties need to give due consideration to all tree assets that they are likely to impact upon.

Overhead electrical cables have the greatest impact on trees. The issues involved are complex and are covered in Section 10.

- All works likely to impact on Council trees are to be referred to the Strategic Asset Manager at the planning/design stage.
- All works likely to impact on Council trees should be identified in the Development Application.
- Tree condition information including photos is to be provided for all Council projects where trees (public and private) may be impacted by works.

- A 'Tree Protection Plan' may need to be provided at the request of the Strategic Asset Manager and implemented to the satisfaction of Council for all projects likely to impact on trees. All works within the vicinity of a Council tree (or trees that will become the responsibility of Council) should include actions to minimise any negative impact to the tree.
- Trees identified to be retained and that are damaged either deliberately or through neglect or by works be rectified where practicable and as soon as possible. Costs associated with this are the responsibility of the person/contractor who caused the damage and will be subject to compensation where applicable.

10. INFRASTRUCTURE PROTECTION

- All proposed tree planting or tree maintenance works likely to impact on, or affect, Council infrastructure, must be referred to Council's Strategic Asset Manager for comment at the design or planning stage.
- All tree selection and planting programs must conform to the Guidelines for tree planting on Council Managed Land Principles listed in Section 6 and the Nominated Species List **Appendix 5A**.
- Any person or organisation wishing to plant trees, shrubs, herbaceous plants, or undertake any landscaping within a road reserve, park or other land under the control of Council must have permission in writing from Council. Refer to the Landscaping on Nature Strip Policy a copy of which may be source from Customer Service.
- All designs for roads, streets, and/or parklands under, or that will become under the control of Council, must include adequate capacity for tree planting and growth whilst minimising conflicts with other infrastructure to the satisfaction of Council.
- Where it is cost effective in the long term, infrastructure is to be selected and/or constructed to a standard that is capable of withstanding damage from existing and any future trees for example the installation of trip stops in foot path joints and root barriers to encourage a preferred root growth direction.

10.1 Tree Root Complaints

Refer to Guidelines for Issues Related to Trees Roots on Council Managed Land **Appendix 11** for further details.

Typical Responses:

Should tree roots from a tree planted on public or Council owned land encroach into a private residence, the rate payer will be required to submit a report of the alleged damage so that a Council Officer can assess the situation and determine the appropriate course of action. Such action may include tree root extraction or, where there is no other option, the removal of the tree.

Where the damage is to sewerage pipework the responsibility for the rectification works is between the relevant Water Authority and the resident.

Any claim for damage to private property from tree roots will, in the first instance, need to be submitted to the property owners insurer.

10.2 Fallen Tree/Branch Complaint

- **a)** Identify tree in question.
- **b)** Obtain Arborist's Report which should include:
 - cause of fallen tree/branch (ie storm);
 - details of tree maintenance program and inspection program;
 - tree healthy or diseased;
 - if diseased would defect have been evident on routine external inspection;
 - weather conditions on day of incident;

- previous complaints regarding tree;
- street tree, reserve tree or private property;
- photographs (before repairs are started);
- signed by a suitably qualified Arborist.

Respond to customer by telephone and follow up letter to be issued within five days of initial investigation.

Typical Responses:

If a Council tree has caused the problem either within the road reserve or on private property then repair damage to drainage infrastructure is between the relevant Water Authority and the resident.

If the investigation report identifies a non council tree as causing the damage then issue a letter to the customer stating that an investigation has been completed and detail the findings.

11. ELECTRIC LINE CLEARANCE

The Council is not the responsible body for power-line clearance works. There are no declared zones/areas within the Council where Council is responsible.

Requests for power-line clearance should be forwarded to the responsible authority/party.

Namely Essential Energy for the majority of power-line clearance requests in public areas and property owners are responsible for clearance around the section of service lines within their property.

Refer to Work near overhead power lines – Essential Energy. Work near overhead powerlines - Essential Energy

12. GUIDELINES FOR TREE MAINTENANCE ON COUNCIL MANAGED LANDS

The maintenance of trees in Broken Hill City Council is to ensure that the areas designated and maintained for regular public use will remain as safe as practicable. These guidelines apply to all of the Parks, Reserves and Road Reserves managed by Council for regular public use.

Definition

Hazardous trees – trees with deadwood greater than 30mm in diameter , poor structural form, major cavities and other defects. The location of the tree and the extent of the defects will determine the hazard potential and priority rating of the tree.

Responsibility

- The Parks and Opens Space Planner is to ensure that the annual maintenance program is adopted and periodically reviewed.
- The development and co-ordination of the maintenance program will be the responsibility of the designated Team Leader Parks and Open Spaces. The Parks and Gardens team members are to complete the designated works within the specific time and to the required standards directed by instruction on the issued work order.

Guidelines

- All dead branches, with a diameter of 30mm or greater, are to be removed when overhanging pathways, roads, park furniture and playgrounds.
- In relation to pathways all trees are to be remeddially pruned where their height and physical characteristics could threaten designated path and track users (see pruning of trees statutory/distance pro-forma).
- In relation to seats, tables play areas and other park facilities and designated car parking areas all trees for a distance of five meters from the outer edge of any single item/area to be remedially pruned depending on their hieght and physical characteristics.

13. PEST AND DISEASE CONTROL

Trees are subject to a range of pests and diseases. The concept of eradication is not practical in most cases and harm minimization should be seen as the best approach.

Pests and diseases do not recognise boundaries so a co-operative approach is required between land owners/managers. Where pests and diseases have the potential to affect Council's tree asset or 'Significant Trees' Council should seek to assist residents and other land managers where possible in being aware of potential problems and control options.

Many of the surrounding Councils and local communities deal with similar issues and opportunities to assist each other should be explored. For example Elm Leaf Beetles, white ants do not respect boundaries, wildlife corridors should not stop at boundaries, Land Care and community groups do not limit themselves to Council boundaries.

White ant treatments for trees are delivered on request following the inspection procedure in **Appendix 12.**

All trees that are to be planted must conform to the Nominated Species List **Appendix 5A** to ensure that newly introduced species are resilient to pests and diseases.

Many trees have the potential to become environmental weed species. A tree's weed potential needs to be an important consideration when selecting species.

14. SIGNIFICANT TREES

There are some trees or groups of trees within Council area that are of local significance. These are designated as significant in the Tree asset database and include the;

- Ficus macrophylla (Moreton Bay Fig) located in Sturt Park;
- Ficus macrophylla (Moreton Bay Fig) located on the Crn Sulphide and Argent Street;
- Jacaranda mimosifolia Alba (White Jacaranda) located Crn South and Patton Street;
- Pinus brutia (Lone Pine) located in Memorial Oval.

Protection measures for significant trees are critical. There are a variety of ways to ensure their protection eg including them within the Local Environment Plan Assessment and agreement of what is considered to be significant is subjective and applications for the registration of significant trees should always be referred to Council. A process of nomination and registration may be best undertaken by a panel of people with a wide range of expertise and viewpoints; this should assist in creating community stewardship of these trees.

Community awareness of significant trees and the implications of having a Significant Tree Register are important. It will be the Community in most cases that identifies what trees are significant and what best helps to protect them.

The range of selection criteria in the Significant Tree Assessment Matrix **Appendix 4** can act as a valuable educational resource and assist in determining the significance of nominated trees.

These criteria are sourced from the National Trust of Australia (New South Wales). In using this matrix a greater emphasis on what is particular or important to the local community rather than what is important at a state level should be considered.

14.1 Trees of High Amenity Value

Distinguished from significant trees, trees of high amenity value are designated so by Council as established mature trees those contribute to significantly to the amenity of a public space managed by Council.

A decision to remove or conduct substantial pruning on trees such as these must be approved by the Strategic Asset Manager.

15. EXISTING TREE CONTROL REGULATIONS

There are currently existing State and Local laws and regulations that control the removal and pruning of both native and exotic vegetation on private and public land. The policies and procedures in this Plan are in support of those laws and regulations and need to be viewed as being in addition to those laws and regulations.

It is the responsibility of all persons to ensure they do not do anything that is in contravention of any existing laws and regulations. The following information is provided to assist in determining what laws and regulations may apply noting that these may change over time.

More information on this and also the Department of Environment, Climate Change and Water (DECCW) National Framework for the Management and Monitoring of Australia's Native Vegetation can be found at http://www.environment.gov.au.

15.1 Local Government

The Council does not have any planning scheme overlays and/or local laws that specify what may or may not be undertalen with certain types of vegetation.

The overlays may include:

- Heritage Overlays with Tree Control;
- Heritage Act 1997 includes trees of State Cultural Heritage Significance;
- Significant Landscape Overlays;
- Environmental Significance Overlays;
- Public Acquisition Overlays;
- Vegetation Protection Overlays.

Other relevant authorities would include but not limited to:

- Transport for NSW;
- Essential Water;
- Essential Energy;
- NSW National Parks;
- AusNet Services.

15.2 Resource Allocation

It is understood and acknowledged that Council has limited and finite resources which restricts Council's capacity to inspect and maintain all trees to the same level. Given the above, Council has adopted a risk based approach in tackling problems relating to its trees and allocates a significant proportion of its resources on inspection and maintenance. Council evaluates the works required to establish and maintain a healthy and appropriate tree population, and periodically engages qualified Arborists to perform reassessment of tree condition and work practices to determine the most appropriate and timely actions and allocation of resources.

It is ensured that staff structure and expertise is appropriate for developing and maintaining a healthy and appropriate population of urban trees.

16. TREE REPLACEMENT PLANNING

Across the Council there are number public spaces containing trees that provide high amenity value. Historically as these trees have aged and deteriorated some have been removed as a risk mitigation measure and in the absence of a strategic replanting plan, they have not been replaced. An action required from the development of this plan is to now develop a staged 10 year annual tree replacement program for all Council Areas identified as high risk and have been defined as such because they are areas where the general public congregate and are of high amenity value.

These areas are the priority for the development of tree replacement plans. Incorporated into these plans will be an approximate annual cost to implement the planting. This information will be incorporated into the long term financial plan to ensure that adequate funding is allocated. The actioning of these plans over a number of years is intended to ensure the longevity of existing trees and to replace trees that have died or have been removed in the past.

These plans should include both recommendations for annual tree maintenance plus removal and replacement. Council will undertake a proactive approach to tree replacement based on the estimated useful life of the existing trees. The aim is to ensure adequate trees canopy cover and consistent distribution of established trees and suitable species.

The proposed objectives of the tree replacement plan are:

- Increase canopy cover in townships to 40% by 2030;
- Increase township tree diversity so that there are no more than 5% of any one tree;
- Species, no more than 10% of any one genus and no more than 20% of any one family.
- Improve township vegetation health to ensure that 90% of the Councils tree;
- Population will be healthy by 2030.

The actions required to achieve this include;

- Develop a tree database;
- Data collection to extend the database to include all trees, beginning with significant and high risk trees;
- Mapping the location and condition of trees in the database;
- Mapping areas identified for future planting and designating species preferences;
- Develop a framework for planting priorities based on vulnerable and low canopy coverage areas, existing master plans and customer requests;
- Complete a financial assessment to sustainably spread the cost and workload of establishing these trees across a 10 year period.

17. ENVIRONMENTAL AND COMMUNITY IMPERATIVES

Residents generally have an interest and often strong view on tree issues that are close to their properties as well as public spaces generally. Consultation with residents and community groups can create a much better understanding of tree issues and a wider acceptance of the role and works undertaken by Council.

The community are generally aware of works and other activities that are or are about to be happening around their area. They are on site more often than Council staff and can quickly identify issues or threats to trees.

Many trees throughout the Council provide a range of habitat for fauna eg hollows, nesting sites and roosting sites. Preserving these values can conflict with normal tree management practices. Alternative tree management practices may be warranted for trees with high habitat or ecological value.

Trees as ameliorators of air pollution and climate change will be an increasing area of value. Large trees are the most effective sinks of old carbon and their protection and further planting is important in overcoming greenhouse effects.

Recycling of material from tree maintenance operations such as woodchip, leaves, stump grubbing tailings and timber can reduce costs and provide a valuable source of materials to gardens, craft and trades people. The Council's trees contain a valuable timber resource with the reusing of this material valuable in reducing dependence on landfill.

The objectives are:

- The Council will seek to consult with adjacent residents when new or major tree works are being proposed or undertaken.
- The Council seek to encourage the wider community to be aware of tree issues and to contact Council for information or when matters of concern are noticed.
- Protection and planting of large growing trees be actively encouraged and Council's tree planting programs aim at providing maximum community and environmental benefits.
- A list of tree species that have a high weed potential if planted in the Council area be developed with this information made available to the community.

BROKEN HILL CITY COUNCIL	COUNCIL TREE RISK ASSESSMENT FORM	
1. INSPECTION D	ETAILS	

Assessor: Jarred Paul		Date:		
2. TREE IDENTIFICATION				
Location (Nearest real property o	address)			
Description of location if not adjacent				
Species;(Scientific and Common	name)			
3. SIZE; Existing size at time of	inspection			
Height (m):		Spread (m):		
Trunk diameter at 1.4m (mm):				
4. AGE CLASS	~			
Young - having lived less than 25	-	-		
Semi Mature – having lived betw		, ,		
Mature – having lived between 5		. ,		
Over Mature – having lived more				
5. VITALITY; Overall health and	d capacity to g	row and resist	physiological stress	
High	Mode	erate	Low	
6. OBVIOUS DEFECTS (refer to	reference guid	e)		
Root Failure		Rec	ent Cracks/Splits	
Large Fruiting bodies		Advance tree decline		
	S	Adv	ance tree decline	
Large Fruiting bodie 8. RISK ASSESSMENT	S	Adv	ance tree decline	
8. RISK ASSESSMENT	Failure Immine	nt or highly like		
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9 INFRASTRUCTURE - Encroachment and risk to surrounding infrastructure

e.g. Describe nature of any encroachments i.e. Causing existing infrastructure/property damage to services, e.g. roadway, sewer, stormwater, walls, and underground cables.

10. RECOMMENDED ACTION

10.1 HIGH PRIORITY REMOVAL OF TREE/TREE PART REQUIRED (explain reason)

10.2 ARBORIST INSPECTION REQUIRED (explain reason)

10.3 OTHER ACTION:

11: REPLACEMENT PLANTING CONSIDERATIONS

12: COORDINATOR APPROVAL TO NOTIFY REMOVAL

13: MANAGER APPROVAL TO REMOVE

APPENDIX 2 – TREE INSPECTION DEFINITIONS

Tree Number: Each tree will be assigned a unique asset number that corresponds to the trees record in the tree inventory.

Tree Size

Diameter at Breast Height (DBH): The diameter of the trees main trunk at a height of 1.5m above ground level.

Height: Distance measured vertically between the horizontal plane at the lowest point at the base of the tree, immediately above the ground and a horizontal plane immediately above its uppermost point.

Growth Patterns:

- **Bifurcation**: The process of division of roots or branches at one end into two parts.
- **Codominant:** Two or more first order structural branches or lower order branches of similar dimensions arising from about the same position from a trunk or stem.
- **Epicormic**: Shoots arising from latent buds or adventitious buds.
- **Sparse:** Reduced leaf density in the crown, often a precuser to dieback and may imply stress or decline. This may occur as a response to drought, root damage insect damage, herbicide or toxicity.
- Trifurcation: The process of the division of roots or branches at one end into three parts.
- **Vigour:** Good, Fair or Poor. This describes the ability of a tree to promote extension growth and wound-callus effectively; this is directly related to the annual progress of tree growth, including root systems, which are dependent on in-situ and environmental conditions.

Health and Condition Rating: A trees vigour as exhibited by crown density, crown cover, leaf colour, presence of epicormic shoots, ability to withstand predation by pests and diseases, resistance and the degree of dieback.

CONDITION RATING	EQUIVALENT CONDITION MEASURE	DEFINITION
Excellent	1	 Tree exhibits: Good growth. A healthy full canopy. Good resistance to pests and disease attack. Good overall structure and vigour. The trunk, scaffold branches. Lateral branches and branch unions do not exhibit any serious defect.
Good	2	 Overall appearance of good health: Relatively stress free. Good coverage of foliage throughout the canopy. Good vigour, and wound wood development. Reasonable seasonal growth evident throughout the canopy. Deadwood and epicormic growth <20% of the canopy. Trunk and scaffold branches don't exhibit any serious. No evidence of any serious pests/disease attack.

CONDITION RATING	EQUIVALENT CONDITION MEASURE	DEFINITION
Fair	3	 Overall growth is adequate but may require maintenance to prevent further failing. Some evidence of: Stress. Areas of dead wood may be present. Little or no seasonal growth evident. Deadwood >30% of canopy. Epicormic growth >20% in canopy. Evidence of attack from pest/disease. Dieback in the canopy may be evident. Minor canopy dieback, foliage generally good colour, some discolouration may be present. Typical growth indicators, eg extension growth, leaf size, canopy density for species in location may be slightly abnormal.
Poor	4	 The health of the tree is deteriorating. Evidence of; Stress. >50% of canopy have dead/dying limbs. Little or no foliage in canopy. Large volume of epicormic regrowth. Poor branch unions, cross over branches. Limb shedding and poor branch growth. No seasonal growth evident. Fungal fruiting bodies and associated decay. Heavy pest and or disease attack evident. Disturbance of soil evident.
Dead/Hazardous	5	 Tree no longer viable, it has died. Little or no live foliage. Little or no live tissue identified under bark. Tree is unstable in the ground.

MATURITY				
Age	Description			
Young	Juvenile tree recently planted. Last 1-5 years.			
Semi-mature	Tree still growing.			
Mature	Specimen has reached expected size in current situation.			
Senescent	Tree is over mature and in decline.			

Damage

Mistletoe: Parasitic and epiphytic evergreen angiosperms that grow on the stems of trees by the use of cell structures called haustoria. They comsume nutrients and water produced by the host but most produce their own sugars by photosynthesis.

Wound: Damage inflicted upon a tree through injury to its living cells, from biotic or abiotic causes, eg where vascular cambium has been damaged by branch breakage, impact or insect attack.

STRUCTURE	STRUCTURE DEFINITIONS				
Rating	Equivalent Number	Definition			
Excellent	1	 Excellent branch attachment. No structural defects. Trunk sound. No damage to roots. Good root buttressing present. 			
Good	2	 Good branch attachment, canopy full , symmetrical. No major structural defects. Trunk sound or minor damage. No damage to roots. Good buttressing. 			
Fair	3	 Minor structural defects, some asymmetry and canopy. Suppression. Minor trunk damage. Bark may be missing. Cavities present. Minor root damage. 			
Poor	4	 Major structural defects. Trunk damage. Girdling present. Damaged roots that are problematic. Canopy suppressed, major asymmetry. Stump re-growth. Tree poses immediate hazard and should be rectified as soon as possible. 			

Tree Components

Canopy: Of an individual tree all the parts arising above the trunk where it terminates by its division forming branches eg the branches, leaves, flowers and fruit; or the total amount of foliage supported by the branches.

Scaffold limb: First order or other orders of branches elongated to form a permanent framework of branches supporting the crown, persisting beyond the trees maturity.

Trunk: A single stem extending from the root crown to support or elevate the crown, terminating where it divides into separate stems forming first order branches.

Useful Life Expectancy (ULE): Useful Life Expectancy (ULE) means that in a planning context the length of time a tree can be maintained as a useful amenity and not a liability is by far the most important long-term consideration. ULE is contingent on a number of obvious management assumptions and the fundamental principles of public safety and usefulness in the landscape.

Street trees: Tree lives are dependent on a number of factors including species, location of planting, vicinity of overhead power lines and maintenance requirements. A particular tree may well be healthy with considerable growing life remaining but has become an inappropriate size for its location and/or too expensive or impractical to maintain shape and clearances. Of particular note is that some street trees are impacted on by overhead powerlines while most will also potentially impact on footpaths. Adopted tree lives reflect the average 'useful life' of street trees rather than total life expectancy.

Parks trees: While these have similar issues to street trees their location is often less restrictive on growth and size patterns. As such these trees will often not be replaced until their health deteriorates or they become excessively maintenance intensive.

Estimated remaining useful life categories: 1-5 yrs 6-10 yrs, 11-15yrs, 16-20 yrs, 21+

Tree Hazard Control Measures

Strategy	Description
Monitor Trip Points	Perform regular footpath inspections, grind and or fill trip points as per Council's Road Management Plan parameter. Where no other practical method can be employed footpath sections are to replaced.
Flexible Pathways	Use of flexible material such as paving, or rubber compounds for footpaths and tree surrounds, will reduce the occurrence of trip points and is less expensive and easier than concrete to maintain or replace when necessary.
Install Trip Abatement Measures	Install products such as Tripstop at the time of construction or reconstruction on all footpath joints near existing, established trees.
Root Pruning	Non-structural roots could be pruned on a predetermined basis under the guidance of a qualified Arborist. This practice could be combined with installation of root barriers where appropriate.
Root Barriers	Where future problems are perceived, barriers could be installed to deflect roots away from pavement or services.
Preventative Tree Maintenence	Trees in public areas should be regularly inspected and maintenance, such as dead-wooding and developmental pruning carried out as prescribed. Pruning should always be undertaken in accordance with AS 4373-1996.
Enlarging Root Zone	Where space allows, a designated area above the root zone of the tree should be enlarged/created to accommodate surface roots. Rather than turf, this area could be formed into a garden bed, mulched or covered with a suitable tree grate.
Formative Pruning	Early pruning will reduce the development of structural weaknesses in older trees. Refer to AS4373 Pruning of Amenity Trees.
Remove Target	In some situations it is preferable to remove a potential target, such as a seat rather than to remove a tree in order to abate a hazard.
Remove the Defect	This could include pruning of live or dead branches or the removal of co-dominant stems.
Tree Removal	In some situations it may be preferable to remove a tree and replace with a more suitable species, perhaps in an alternative location. In all cases of tree removal it is necessary to ensure that the removal is mitigated in order to ensure the future integrity of the urban forest.

APPENDIX 3 – WORK NEAR OVERHEAD POWERLINES – ESSENTIAL ENERGY

The relevant documentation may be seen by visiting the Essential Energy web site via <u>www.essentialenergy.com.au</u>

- Vegetation Management Plan Home/Our Net Work/Managing Network/Vegetation Management.
- Working near power lines PDF. Work near overhead powerlines Essential Energy

APPENDIX 4 – SIGNIFICANT TREE ASSESSMENT MATRIX

Any tree nominated as an addition to the Broken Hill City Councils significant tree must be eligible under at least one of the below categories:

BROKEN HILL CITY COUNCIL SIGNIFICANT TREE MATRIX					
Category	Title	Description	Types		
1	Horticultural Value	Any tree that is of outstanding horticulural value and could be an important value and could be an important source of propagating stock, including specimens that are particularly resistant to disease or exposure.	 Tolerance selection (pest and diseases). Propagating potential. Scientific value. 		
2	Location or context	Any tree that occurs in a unique location or context and so provides a major contribution to the landscape, including important land marks and trees that form part of an historic garden, park, precinct or rural landscape.	 Historic garden or park. Historic cemetery. Important landmark. Contribution to landscape. Historic planting style. 		
3	Rare or localised	Any tree of a species or variety that is rare or of very localised distribution.	Only known species.Rare species.		
4	Particularly old	Any tree that is particularly old or venerable and is unique to the surrounding area.	Old Specimen.		
5	Outstanding size	Any tree of outstanding aesthetic significance or unusual shape or form.	 Height. Circumference. Canopy spread. Combinations of above. 		
6	Aesthetic value	Any tree adding significantly to the amenity of an area.	Substantial shade tree.Only tree in the street.		

BROKEN HILL CITY COUNCIL SIGNIFICANT TREE MATRIX						
Category	Title	Турез				
7	Historical Cultural Value	Any tree commemorating a particular occasion, including plantings by notable people, or having associations with an important event in local history, or having a generational history of commemoration.	 Cultural group. Public welfare. WW1/WW2. British or other royalty. Visiting dignitary. Australian public figure. Victorian public figure. Local public figure. Group or family tree/s. 			
8	Aboriginal Content	Any tree that has a recognised association with historical aboriginal activities.	Scarred tree.Corroboree tree.			
9	Outstanding example of species	Any tree that is an outstanding example of its species.	• Botanically.			
10	Outstanding habitat value	Any tree that has outstanding value as habitat for indigenous wildlife, including providing breeding, foraging or roosting habitat, or forming part of a wildlife corridor.	Breeding habitat.Foraging habitat.Wildlife corridor.			

APPENDIX 5A – NOMINATED SPECIES LIST

Recommendations for Street tree choices in Broken Hill City Council.

BOTANICAL NAME		STREET		HIGHWAY				
Genus	Species	Common Name	Narrow	Medium	Wide	Yes	No	Image
Eucalyptus	brockwayi	Dundas Mahogany (Highway Tree)	No	No	Yes	Yes		
Eucalyptus	campaspe	Silver-Topped Gimlet (Highway Tree)	Yes	Yes	Yes	Yes		
	BOTANICAL NAM	ΛE		STREET		HIGH	IWAY	
------------	---------------	--	--------	--------	------	------	------	-------
Genus	Species	Common Name	Narrow	Medium	Wide	Yes	No	Image
Eucalyptus	dundasii	Dundas Blackbutt	No	No	Yes	Yes		
Eucalyptus	intertexta	Gum-Barked Coolibah (Highway Tree)	No	No	Yes	Yes		

	BOTANICAL NAM	ΛE		STREET		HIGH	IWAY	
Genus	Species	Common Name	Narrow	Medium	Wide	Yes	No	Image
Eucalyptus	populnea	Bimble Box or Poplar Gum (Highway Tree)	No	No	Yes	Yes		
Eucalyptus	erythronema (Var marginata)	Lindsay Gum (Street Tree)	Yes	Yes	Yes	Yes		

	BOTANICAL NAM	ΛE		STREET		HIGH	IWAY	
Genus	Species	Common Name	Narrow	Medium	Wide	Yes	No	Image
Eucalyptus	erythrocorys	Red Cap Gum (Street Tree)	Yes	Yes	Yes	Yes		
Eucalyptus	Ficifolia (Corymbia)	Western Australian Red Flowering Gum (Street Tree)	Yes	Yes	Yes	Yes		

	BOTANICAL NAME	:		STREET		HIGH	WAY	
Genus	Species	Common Name	Narrow	Medium	Wide	Yes	No	Image
Corymbia	Ficifolia (Grafted Gum)	Summer Red (Street Tree)	Yes	Yes	Yes	Yes		
Eucalyptus	Forrestiana	Fuchsia Gum (Street Tree)	No	Yes	Yes		No	

	BOTANICAL NAME	:		STREET		HIGH	IWAY	
Genus	Species	Common Name	Narrow	Medium	Wide	Yes	No	Image
Eucalyptus	Leucoxylon (sppmegalocarpa)	Large Fruited S.A. Blue Gum (Street Tree)	No	Yes	Yes		No	
Jacaranda	Mimosifolia	Jacaranda (Street Tree)	No	Yes	Yes	Yes		

	BOTANICAL NAME	:		STREET		HIGH	VAY	
Genus	Species	Common Name	Narrow	Medium	Wide	Yes	No	Image
Lagerstroemia	Indica x L	Crepe Myrtle (Street Tree)	Yes	Yes	Yes		No	
Fraxinus	Oxycarpa 'Raywoodii'	Claret Ash (Street Tree)	No	Yes	Yes		Yes	

	BOTANICAL NAM	ΛE		STREET		HIGH	WAY	
Genus	Species	Common Name	Narrow	Medium	Wide	Yes	No	Image
Fraxinus	Excelsior Aurea	Golden Ash (Street Tree)	No	Yes	Yes		Yes	
Fraxinus	Griffithii	Flowering Ash (Street Tree)	No	Yes	Yes		Yes	

	BOTANICAL NAME			STREET		HIGH	WAY	
Genus	Species	Common Name	Narrow	Medium	Wide	Yes	No	Image
Robinia	Pseudoacacia	Mop Top (Street Tree)	No	Yes	Yes		No	
Callistemon	Viminalis	Weeping Bottlebrush (Street Tree)	Yes	Yes	Yes		No	

	BOTANICAL NAME			STREET		HIGH	WAY	
Genus	Species	Common Name	Narrow	Medium	Wide	Yes	No	Image
Callistemon	Viminalis (Dawson River)	Weeping Bottlebrush (Street Tree)	Yes	Yes	Yes		No	
Viburnum	Finus	Laurestinus (Street Tree)	Yes	Yes	Yes		No	

	BOTANICAL NAMI	E		STREET		HIGH	IWAY	
Genus	Species	Common Name	Narrow	Medium	Wide	Yes	No	Image
Koelreuteria	Paniculata	Golden Rain Tree (Street Tree)	Yes	Yes	Yes		No	
Melaleuca	Nesophila	Western Honey Myrtle (Street Tree)	Yes	Yes	Yes		No	
Ulmus	Parvifolia	Chinese Elm (Street Tree)	No	Yes	Yes		No	

	BOTANICAL NAME	E		STREET		HIGH	IWAY	
Genus	Species	Common Name	Narrow	Medium	Wide	Yes	No	Image
Prunus x	Blireana	Double Flowering Cherry Plum (Street Tree)	Yes	Yes	Yes		No	
Acacia	Notabilis	Notable Wattle (Park Tree)	Yes	Yes	Yes		No	

	BOTANICAL NAME	E		STREET		HIGH	IWAY	
Genus	Species	Common Name	Narrow	Medium	Wide	Yes	No	Image
Hymenospor um	Flavum	Native Frangipani (Park Tree)	No	Yes	Yes		No	
Brachychiton	Acerifolius	Illawarra Flame Tree (Street Tree)	No	Yes	Yes		No	

	BOTANICAL NAME	E		STREET		HIGHWAY		
Genus	Species	Common Name	Narrow	Medium	Wide	Yes	No	Image
Brachychiton	Populneus	Kurrajong (Street Tree)	Yes	Yes	Yes		No	
Malus	Tschonoskii	Crap Apple (Street Tree)	Yes	Yes	Yes		No	

	BOTANICAL NAM	E		STREET			IWAY	
Genus	Species	Common Name	Narrow	Medium	Wide	Yes	No	Image
Pyrus	Calleryana	Ornamental Pear (Street Tree)	Yes	Yes	Yes		No	
Ulmus	Procera	English Elm (Park Tree)	No	Yes	Yes		No	

Platanus	Acerifolia	Plane Tree (Park Tree)	No	No	Yes		Νο	
Callitris	glaucophiia	White Cypress Pine	No	Yes	Yes	Yes		
Casuarina	pauper	Belah	Yes	Yes	Yes		Νο	

Eucalyptus	gracilis	Yorrel	Yes	Yes	Yes	Yes	
Eucalyptus	oleosa	Red mallee	Νο	Yes	Yes	Yes	
Eucalyptus	dumosa	Congoo mallee	Yes	Yes	Yes	Yes	
Eucalyptus	gillii	Curly mallee	Yes	Yes	Yes	Yes	
Eucalyptus	socialis	Pointed mallee	Yes	Yes	Yes	Yes	

Eucalyptus	torquata	Coral Gum	Yes	Yes	Yes	Yes	

Acacia	aneura	Mulga (Small street tree)	Νο	Yes	Yes	Yes	
Acacia	brachystachya	Umbrella mulga (Small street tree)	Yes	Yes	Yes	Yes	
Acacia	cyperophylla	Minni ritchie	Yes	Yes	Yes	Yes	
Acacia	ligulata	Sandhill wattle (Small street tree)	Yes	Yes	Yes	Yes	

Acacia	oswaldii	Miljee, Ram's horn wattle (Small street tree)	Yes	Yes	Yes	Yes	
Acacia	papyrocarpa	Western myall (Small street tree)	Yes	Yes	Yes	Yes	
Acacia	pendula	Myall (Small street tree)	Yes	Yes	Yes	Yes	
Acacia	rigens	Needle wattle (Small street tree)	Yes	Yes	Yes	Yes	

Geijera	parviflora	Wilga (Small street tree)	Yes	Yes	Yes	Yes	
Melaleuca	lanceolata	Moonah (Small street tree)	Yes	Yes	Yes	Yes	
Melaleuca	nesophila	Western honey myrtle	YES	YES	YES	Yes	

APPENDIX 5B – UNDESIRABLE PLANTS OR SHRUBS

COMMON NAME	BOTANICAL NAME
Oleander	Nerium Oleander
Athel Pine	Tamarix Aphylla
Bamboo	Bambusa Species
She-Oaks	Casuarina Species
River Gum	Eucalyptus Camaldulensis
Sugar Gum	Eucalyptus Cladocalyx
Salt River Mallet	Eucalyptus Sargentii
Swamp Mallet	Eucalyptus Spathulata
Stricklands Gum	Eucalyptus Stricklandii
Liquidamber	Liquidamber Species
Palms	Palm Species
White Cedar or Cedar Tree	Melia Azedarach
Pepper-corn Tree	Schinus Molle
Norfolk Island Hibiscus	Lagunaria Patersonii
Pine Trees	Pinus Species
Broughton Willow	Acacia Salicina

APPENDIX 5C – UNDESIRABLE PLANTS OR SHRUBS UNDER OR NEAR POWER LINES

COMMON NAME	BOTANICAL NAME
Wattle	Acacia Species (large)
Maples (not Japenese)	Acer Species
Lilly Pilly or Bush Cherry	Acmena Species (Large)
Black and Evergreen Alder	Alnus Species
Buny Bunya, Hoop or Norfolk Island Pine	Araucaria Species
Bamboo	Bambusa Species
Banksia	Banksia Species (Large)
Cypress Trees	Cupressus Species
Poinciana or Flamboyant	Delonix Regia
Coral Tree	Erythina Species
Gum Tree	Eucalyptus Species
Fig Tree	Ficus Species
Ash	Fraxinus Species
Honey Locust	Gleditsia Species
Silky Oak	Grevillea Robusta
Native Frangipani	Hymenosporum Flavum
Jacaranda	Jacaranda Mimosifolia
Privet	Ligustrum Species
Liquid Amber	Liquidamber Species
Brush Box	Lophostemon Confertus

COMMON NAME	BOTANICAL NAME
Bull Bay Magnolia	Magnolia Grandiflora
Paper Barks	Melaleuca Species (Large)
White Cedar	Melia Azedarach
Palm	Palm Species
Pine	Pinus Species
Plane Tree	Platanus Species
Poplar	Populus Species
Oak	Quercus Species
Willow	Salix Species
Peppercorn Tree	Schinus Species
Queensland Firewheel tree	Stenocarpus Sinuatus
Turpentine	Syncarpia Glomulifera
Lily Pilly or Bush Cherry	Syzygium Species
Athel Pine	Tamarix Aphylla
Linden or Lime Tree	Tilia Species
Racehorse Tree	Tipuana Tipu
Elm	Ulmus Species
Japanese Elm	Zekova Serrata

APPENDIX 6A – SIGNIFICANT TREES

Common Name	Botanical Name	Location	Comments
Moreton Bay Fig	Ficus Macrophylla	Sturt Park	
Moreton Bay Fig	Ficus Macrophylla	Corner of Sulphide and Argent Streets	
Jacaranda	Jacaranda Mimosifolia 'Alba'	Patton Street	
Lone Pine	Pinus Brutia	Memorial Oval	

APPENDIX 6B – HIGH RISK

High Risk Tree Area Number	Description	Street	Quantity of Trees (Estimates only, to be confirmed in development of the Tree Replacement Plan)
1	Eucalyptus Camaldulensis	Ryan Street	20
2	Eucalyptus Camaldulensis	Williams Street	50+
3	Eucalyptus Camaldulensis	Lane Street	20+
4	Ficus Hillii 'Flash'	Silver Street – Jubilee Oval	20 (estimated)
5	Eucalyptus Spathulata	Blende Street	15 (estimated)

APPENDIX 7 – DRIVEWAY APPLICATIONS – IMPACT ON TREES

A proposed course of action to be taken to ensure that conflict does not occur between the installation of a crossover (drive-way) and street trees.

Prior to the issue of any permit it should be determined if that there is no street tree within **2.5 metres** of any proposed crossing. If a tree has a diameter at breast height (DBH) greater than 300 millimetres then an inspection by the Strategic Assets and Works department is required.

Request for Council Inspection of Tree

In event of there being any doubt as to the effect upon any tree, arrangements must be made for Councils Asset Planner Parks and Open Spaces to inspect the location and provide a ruling in accordance with the Tree Management Plan.

The inspection, where necessary, is to ascertain the amount of protection required around each tree; the larger the size and foliage density the greater the area the tree requires. Each case varies according to species, aspect, site and circumstances.

The Asset Planner Parks and Open Spaces will determine this based on:

- Tree Removal Procedure.
- Works in the Vicinity of Trees Guidelines and Procedure.
- Significant Trees (criteria for selection).

The tree is to be assessed for removal by the Arborist Spaces and is either recommended or not recommended for removal dependent on the criteria in Council's Tree Management policy.

APPENDIX 8 – SAMPLE LETTER FOR TREE REMOVAL

4 November 2015

To the Owner/Occupier

(Address)

Dear Sir/Madam

Re: (ADDRESS) – Tree Removal

I wish to take this opportunity to inform you of the intended removal of a Council owned tree presently situated in the road reserve outside (Address).

As a result of Councils tree maintenance inspections, this tree (Photinia Robusta) has been

recommended for removal for the following reason.

(remove as appropriate)

🛛 Dise	eased
🛛 Stru	ucturally Unstable
🛛 Sigh	ht distances
0 Oth	her
The removal	of the tree will occur in
Given the end	nclosed Tree Planting Guidelines, a replacement tree can be planted.
Replacement	t will occur in
The tree spec	cies selected will be a
-	require any further information regarding this matter, please do not hesitate to contact me 0 within five working days.

Yours faithfully

on

APPENDIX 9 – PLANTING GUIDE SEMI ADVANCED TREES





Tree Planting

OFFICE USE ONLY

Request Form

Work Order No:

This form is used to request a Tree/Shrub to be planted on nature strips or median strips on public land.

APPLICANT DETAILS

Title:	□Mr	□Mrs	□Ms	□Other:	
Applicant's Nar	me:				
Company Nam	e/Contact:				
Postal Address:					
Suburb: Post Code:					
Email:					
Phone No:		Мс	bile:		
PROPERTY/LOCATION DESCRIPTION					
Address or location of BHCC land where tree/s are requested to be planted.					
Unit/Street No: Street:					
Suburb:				Post Code:	
Owner's Name:	: Surname (oi	r Company):			
Give	en Name:				
Additional Deta	ails (If required	d):			

SITE DETAILS

(Please select all that apply/Please tick appropriate box)

Overhead Wires	Overhead powerlines YES/NO
□ Grass/Turf	Pavement (concrete/pavers)
Existing Trees/Shrubs	
□ Other (please specify)	

NATURE STRIP DETAILS

□ Narrow □ Medium □ Wide □ Corner Block

Broken Hill City Council will perform a Dial Before You Dig (DBYD) service check on all granted applications.

REQUEST DETAILS

Broken Hill City Council is happy to plant an appropriate number of trees on the requested nature strip/median strip free of charge. However, any street tree planting on public land must be suitable for its current streetscape.

Applicants must select species that appear in Broken Hill City Councils preferred species list. This list can be found in the link below. Any final decisions on species and planting approval will be made by Broken Hill City Councils Asset Planner for Parks and Open Spaces.

Number and Preferred Species of tree/s requested.

Number of Trees	Requested Species
1.	
2.	
3.	

Comments:	 	

HOW TO LODGE THIS FORM

Email: <u>council@brokenhill.nsw.gov.au</u>

Over the counter: Council Administration Building 240 Blende Street BROKEN HILL NSW 2880

APPENDIX 11 - GUIDELINES FOR ISSUES RELATED TO TREE ROOTS ON COUNCIL MANAGED LAND

Customer Service

- All Customer complaints/requests in relation to tree root issues are to be recorded on Councils Customer Request Module (CRM) which will refer the matter with details of the request to the responsible officer (Asset Planner Parks and Open Spaces) for investigation.
- Customer will be informed within two working day of how long it will take enquires to be dealt with and an indication will be given of the date when an inspection will take place. Customers will be given a CRM or an OMNI Work Order Number reference number so at any stage they can quickly find out the status of their enquiry.
- Following this inspection, enquirers will be informed of what action is planned and when work, if any, is to be carried out.
- Where trees are identified for action, affected residents are to be notified in accordance with section 5 of Guidelines for Removal of Trees on Council Managed Land.

Tree Roots Damage to Private and Public Properties and Infrastructures

Should tree roots from a tree planted on public or Council owned land encroach into a private residence, the ratepayer will be required to submit a report of the alleged damage so that a Council officer may assess the situation and determine an appropriate course of action.

Any claim for damage to private property from tree roots, will in the first instance, need to be submitted to the property owners insurance.

Trees will be assessed using the Tree Inspection Form. Information relating to tree will be identified including:

- Position in relation to its surroundings ie Road Reserve, Median or Park.
- Nearby services (Overhead Mains Power, service wires, water or sewer).
- Information on the location of tree in relation to the point of blockage, damage or problem.
- Status (Significance).
- Species.
- Height.
- Health.
- Aspect.
- History of previous complaints.
- History of remedial works in relation to previous complaints.
- Photographs to be taken of any damaged area where appropriate.

Where structural damage is suspected of being done to privately owned buildings by roots from Council controlled trees, the following data may be required of the property owner in order to reasonably assess Councils responsibility in the matter:

- Plan of all existing on-site and surrounding vegetation within past 10 years;
- Investigation of soil at the base of the buildings to determine the presence, size, depth and amount of roots present;
- Identification to genus level of any roots found as a result of the root investigation;
- Structural Engineers investigation of the building to determine:
- Recent history of pattern of movement in the affected building(s).
- Age and condition of building; and
- Depth and condition of building footings.
- A geotechnical investigation of the site to determine:
- Soil moisture levels around the site and the building;
- Soil moisture tension, soil bulk density, and soil load bearing capacity; and
- Conditions and discharge point of stormwater from site.

Upon receiving of the aforementioned report(s) and structural damage is suspected to be as a result of soil subsidence in conjunction with Council controlled trees, an additional structural engineers report may be considered in order to clarify the cause and prescribe the best remedy.

In consultation with Strategic Asset Manager and the Risk Coordinator accept or deny liability.

Disputes which cannot be resolved shall be referred to the ELT who may seek extra external advice.

At all times the Council staff will undertake all necessary action to protect Council's interest and assets whist following the procedures and guidelines set out in this and other Council policies.

Depending on the circumstances and in accordance with Councils Guidelines for Control and Treatment Selection and Implementation on Tree Root Issues, the Arborist, in consultation with the Strategic Asset Manager and after assessment of the tree using the Tree Inspection Form may organise removal of the tree, installation of tree root barrier, fence repair/replacement, kerb and channel replaced or no action taken.

Stormwater Drain Suspected of being blocked by roots from Council Tree:

- If blockages are suspected of being caused by roots from Council Trees, the responsible officer is to engage a contract plumber to undertake a CCTV inspection of the affected pipework and provide a written report and recommendation.
- At all times the Council staff will undertake all necessary action to protect Council's interest and assets whist following the procedures and guidelines set out in this and other Council policies.

- Council has no obligation to dig up any pipeline, replace any line, install inspection openings or carry out works.
- Depending on the circumstances and in accordance with Councils Guidelines for Control and Treatment Selection and Implementation on Tree Root Issues, the Aborist, in consultation with Strategic Asset Manager and after assessment of tree using the Tree Inspection Form, may organise removal of tree, installation of tree root barrier, replacement of the damaged section of kerb and channel or no action taken.

TREATMENT/CONTROL OPTIONS

Roots damaging private/public infrastructure

The removal of trees should be the last resort and the use of tree root barriers should be considered. The selection of root roots barriers and its suitability should be determined by referring to Council's Guidelines on the Selection and Specification of Tree Roots Barriers.

Tree root barriers should be installed as per manufacturer's specification and generally should be installed at no closer than 50% of the drip-line of the offending tree and 1.5m-3m deep depending on the tree species, age and root size.

Dead, dying and Dangerous Trees

The Council will remove dead, dying and dangerous trees. Works are to be carried out in accordance with Guidelines for Tree Removal of Tree on Council Managed Land.

Dangerous Branches

A dangerous branch is one which is dead, shows signs of decay or damage, or weak attachment to the tree. Where a dangerous branch is identified it will be removed or reduced to a safe point in accordance with Guidelines for Tree Maintenance on Council Manage Land.

Obstruction of Light to House Solar Panels

Leaf debris or shading of solar panels area not considered to be valid reasons for the removal or pruning of trees.

Overhanging Branches

The Council has a similar responsibility to a private land owner or neighbour in respect of overhanging branches and will cut them back if damage to property is being caused or the tree is unsafe.

In case where branches of a Council controlled tree are overhanging private properties, residents have a legal right to cut back the branches in question. However, Council has no obligation in carrying out any work in relation to this matter.

Falling Leaves or Debris and fruit problems

The Council is not legally responsible for fallen leaves, debris and fruits, such as cones, seeds and blossoms. Pruning of trees is not an appropriate solution to this problem and Council is unlike to remove a tree as a result of leaf litter.

Where a tree is found to shed an excessive amount of fruit, special considerate may be given.

Branches obscuring Signs or Street Lighting Columns

Where trees are blocking street signs and jeopardise public safety the Council will consider carrying out work to alleviate the problem while retaining the tree. In extreme cases removal of the tree and replacement with a more suitable species may be appropriate.

Branches affecting Telephone Lines

Effective use of telephone lines is the responsibility of the service provider.

Television Reception

The Council normally do not carry out pruning work or tree removal in order to improve television reception. At the time of installation of television reception dishes, considerations should have been given to the growth of trees.

RESPONSIBILITY

The Strategic Asset Manager is responsible for ensuring Councils Parks and Open Space Planner complies with the requirements set out in this policy.

The Councils Parks and Open Space Planner is responsible for upholding and following this policy.
APPENDIX 12 – TREE ASSESSMENT PROCEDURE

Tree Assessment Procedure

Step 1: Determine the Hazard and Surroundings.

Note the number of pedestrians and local traffic, record the patterns of use, length of stay.

Step 2: Determine the Hazard.

The Hazard assessment is to be undertaken by Level 5 Arborist, accredited by the International Society of Arboriculture with Tree Assessment Risk Qualifications and Strategic Asset Team member.

Step 3: Assess the Tree Risk

Using Broken Hill City Council Tree Risk Assessment Form (Appendix 1 of the Broken Hill City Council Tree Management Plan) and the Councils tree software, Tree Plotter.

- a) Undertake a risk assessment against the hazards.
- b) Assess the risk to property and person.
- c) Determine the priority.

Step 4: Determine the Management Response

Select an appropriate option considering the documentation of the Tree Risk Assessment Form and the output of the Tree Plotter software

Step 5: Document the response and implement any actions.

Raise a work order in BHCC Asset Management System, I Am Omni, to undertake the works in the period specified within the Tree Management Plan.

APPENDIX 13 – TREE VALUATION – TO BE DEVELOPED

APPENDIX 14 – TREE REMOVAL PROCEDURE

This procedure is to be used when considering the removal of any trees under the control or management of Broken Hill City Council.

Many public and private trees will be under the control or protection of local and/or state planning schemes. When considering removing these trees the Statutory Planning Department should be contacted to determine any additional requirements.

Tree removal decisions will not be based purely on the preferences of those consulted.

Decisions to remove, or not to remove, a tree must be in conformance with the principles listed in the Councils Tree Management Plan Section 7 'Guidelines for the removal of Trees on Council Managed Land'.

The removal of trees in health and/or structure and from any relevant Unsuitable Street Tree Species List will generally not require referral but must be fully documented.

No person is allowed to remove any tree on land owned or managed by Council without first obtaining written permission from Council. This permission is obtained by submitting a Tree Removal request form for the removal of the tree(s).

Council may seek compensation, using an agreed and proven amenity tree valuation method, for an trees removed without permission.

Many trees are planted and landscaping installed on public land without Council permission and do not comply with the principles as stated in the Tree Management Plan Section 6 'Guidelines for tree planting on Council Managed Lands' of these trees and associated landscaping is often necessary for safetye, policy and maintenance issues. When considering removing these trees and landscaping the required procedures will be followed.

1.0 Trees Assessed as Being Hazardous or an Immediate Risk

Only trees that present a Hazardous or Immediate Risk can be removed without prior consultation with adjacent residents or owners. Only a qualified Arborist should use to make this assessment; except in an emergency defined as be:

Usually a situation with serious implications of damage (or worse) to persons or property within 24 hrs of its notification.

A Hazardous or Immediate Risk relates to risk where the danger is to be present, immediate or imminent and not remote either as to likelihood or as to time of occurrence (in other words something not expected for years to come). A written and photographic record must be made by a qualified arborist (or experienced and responsible person) detailing the reason/s for the removal of the tree/s. The record is to be provided to the Strategic Asset Manager as soon as possible is practicable and kept in the Records Management system.

In the case of trees listed on the Broken Hill City Council Significant Tree or remnant native trees that present a Hazard or Immediate Risk the area under threat is to be isolated from use or access if practicable. The Works Mnager is to be notified as required to determine the appropriate action to be taken. Tree Management Plan The Harzardous or Immediate Risk Dangerous Tree Flow Diagram gives a visual outine of the tree removal procedure for hazadous trees.

2.0 Trees Assessed as Being Non-Dangerous Trees

Non-Dangerous Trees Flow gives a visual outline of the tree removal procedure for non-hazardous trees.

3.0 Consultation Procedure Tree Removal

If reasons for the removal request are purely as per Section 7.7 'Guidelines for the removal of Trees on Council Managed Land ' no further removal consideration will be undertaken.

4.0 General Consultation procedure

The responsibility for carrying out this procedure lies with the Staff.

When considering removing a street, roadside or parkland tree adjacent residents, property owners and, in the case of parkland trees, committees of management must be consulted and their opinions taken into consideration when determining an appropriate course of action. Adjacent residents and property owners are those that could be reasonably expected to be affected by the removal of the subject trees.

The residents and owners are to be provided with a clear assessment of the trees condition, the Councils preferred option and the full range of options that were considered in writing.

If the immediate adjacent resident and owner plus a majority of the residents consulted agree with Councils preferred option then the work can proceed after seven working days.

Any residents who did not agree with the majority should also be informed seven working days prior to commencing the works.

If the immediate adjacent resident and owner plus a majority of residents disagree with Councils preferred option the Councils Arborist or Council officer must try to resolve the matter through discussion with the affected parties. If consensus cannot be reached the Councils Arborist or Council officeris to provide a report to the Startegic Asset Manager, detailing the trees condition, options for remedial action, list of people consulted and their opinions and a recommendation.

The relevant Manager has delegated authority from Council to make a final decision.

The people consulted are to be informed of the final decision at least seven working days prior to performing the works.

Where no adjacent residences exist no consultation procedure is required unless the adjacent property owners have specifically requested to be consulted about trees abutting their properties. The Council Arborist or Council Officer will keep the Strategic Asset Manager informed about these locations and the residents contact details.

If the immediate adjacent resident and owner plus a majority of residents disagree with Councils preferred option the Senior Arborist or Council officer must try to resolve the matter through discussion with the affected parties. If consensus cannot be reached the Council Arborist or Council officer is to provide a report to the relevant Manager, detailing the trees condition, options for remedial action, list of people consulted and their opinions and a recommendation.

In the case of trees that may be listed on the Broken Hill City Council Significant Tree List the Council Arborist Council Officer will consult, where possible, with those people (including absentee owners), organisations or groups having a direct relationship with the tree.

Diagram 1 : 'Hazardous' or an 'Immediate Risk ' - Dangerous Tree Flow Diagram



Diagram 2 : 'Non Dangerous ' – Dangerous Tree Flow Diagram



Tree Pruning Request Form



Application to Remove or Prune Trees

If you want trees pruned or removed on your nature strip, you need to apply to Broken Hill City Council.

More Information

• If you remove, prune, damage or injure a tree without approval from your council you may have to pay a fine.

• Your council will contact you directly to let you know the outcome of your application, or if they need any further information to process your application.

• For a quicker turnaround, include a photo of the tree in the application to make it easier for the council to identify the location of the tree. Make sure the photo is in focus and shows the entire tree as the primary subject of the photo.

Applicant's Details

First Name Required Middle Name (optional) Last Name Required

Residential Address Required

Daytime Phone Number Required

Mobile Phone Number (Optional)

Email Address

Preferred Contact Method

(Select 1 option) Required

Mail Daytime Phone Number Mobile Phone Number Email

Number of Trees to be Removed or Pruned

Please select the number of trees related to this application (Select 1 option) Required

1 2 3 4 5

$Provide \ details \ on \ the \ location \ of \ the \ tree(s) \ Required \ More \ than \ 5 \ Trees$

If your application is for more than 5 trees, please contact Broken Hill City Council on 08 8080 3300 or via email at <u>council@brokenhill.nsw.gov.au</u>.

Tree 1 Details

Do you want to prune or remove? (Select 1 option)

Prune

Remove

Tree Species

If you don't know the tree species, you can enter a brief description.

Tree Height (optional)

Tree Canopy Width (optional)

Reason for tree to be removed or pruned

Upload a photo

Please attach all files to the end of this form before submitting it.

For a quicker turnaround, share a photo of the tree to make it easier for the council to identify and assess the tree. Make sure the photo is clear and in focus and shows the entire tree. You can upload JPEG, PNG, TIF or PDF files under 8MB

Tree 2 Details

Do you want to prune or remove? (Select 1 option)

Prune

Remove

Tree Species

If you don't know the tree species, you can enter a brief description.

Tree Height (optional)

Tree Canopy Width (optional)

Reason for tree to be removed or pruned

Upload a photo

Please attach all files to the end of this form before submitting it.

For a quicker turnaround, share a photo of the tree to make it easier for the council to identify and assess the tree. Make sure the photo is clear and in focus and shows the entire tree. You can upload JPEG, PNG, TIF or PDF files under 8MB.

Tree3Details

Do you want to prune or remove? (Select 1 option)

Prune

Remove

Tree Species

If you don't know the tree species, you can enter a brief description.

Tree Height (optional)

Tree Canopy Width (optional)

Reason for tree to be removed or pruned

Upload a photo

Please attach all files to the end of this form before submitting it.

For a quicker turnaround, share a photo of the tree to make it easier for the council to identify and assess the tree. Make sure the photo is clear and in focus and shows the entire tree. You can upload JPEG, PNG, TIF or PDF files under 8MB.

Tree4Details

Do you want to prune or remove? (Select 1 option)

Prune

Remove

Tree Species

If you don't know the tree species, you can enter a brief description.

Tree Height (optional)

Tree Canopy Width (optional)

Reason for tree to be removed or pruned

Upload a photo

Please attach all files to the end of this form before submitting it.

For a quicker turnaround, share a photo of the tree to make it easier for the council to identify and assess the tree. Make sure the photo is clear and in focus and shows the entire tree. You can upload JPEG, PNG, TIF or PDF files under 8MB.

Tree 5 Details

Do you want to prune or remove? (Select 1 option)

Prune Remove

Tree Species

If you don't know the tree species, you can enter a brief description.

Tree Height (optional)

Tree Canopy Width (optional)

Reason for tree to be removed or pruned

Upload a photo

Please attach all files to the end of this form before submitting it.

For a quicker turnaround, share a photo of the tree to make it easier for the council to identify and assess the tree. Make sure the photo is clear and in focus and shows the entire tree. You can upload JPEG, PNG, TIF or PDF files under 8MB.

Check Your Details

Please check that your details are correct before submitting your application.

Privacy Statement

Council is collecting your personal information in accordance with the Privacy and Personal Information Protection Act 1998.

The purpose for collecting your personal information is to obtain and record details to assess your application.

The intended recipients of the personal information collected include Council officers or other agents contracted by Council. If necessary, for reporting purposes, your name will be made publicly available via Council's Business Papers and on Council's website. Your contact details will not be made public on Council's website and will be removed from all applications and reports in Council's Business Papers.

The supply of your personal information may be by law or voluntary. If you cannot provide or do not wish to provide the information sought, Council may not be able to process your application.

You may make an application for access or amendment to information held by Council. Council will consider any such application in accordance with the Act. Enquiries concerning this matter can be directed to the Public Officer by email council@brokenhill.nsw.gov.au mailto:council@brokenhill.nsw.gov.au or addressed to Broken Hill City Council, 240 Blende Street, Broken Hill NSW 2880.

Your information will be collected and stored, in accordance with the State Records Act 1998, by Broken Hill City Council, 240 Blende Street, Broken Hill NSW 2880.

I am the owner of the property described in this application.

End of form

Don't forget to attach all files before submitting this form



www.brokenhill.nsw.gov.au