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ASSET MANAGEMENT PLAN

TREES - PUBLIC AND PRIVATE

INTEGRATED **PLANNING** AND
REPORTING FRAMEWORK

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EXECUTIVE SUMMARY

The Trees- Public and Private Asset Management (AMP) outlines all the tasks and resources required to manage and maintain Council's tree canopy across Fairfield City.

Trees and the associated tree canopy across Fairfield City provides a range of benefits for the community. Some of these benefits include shade, microclimate regulation, air quality, sense of wellbeing, diverse flora and fauna, storm water management and interception.

The livability of Fairfield City is greatly improved by having a sustainable tree canopy and green spaces.

This is Councils third Delivery Program (4 years). Trees as non-depreciable assets are prescribed a value and as part of any removal of public trees, there is a Policy position, which requires a replanting ratio or for the hypothecation of funds for replanting at appropriate locations.

This AMP identifies the resourcing Council requires for the inspection and maintenance of:

- Public Trees (Street Trees, Town Centre Trees and Park Trees)
- Private Trees (in line with Council's legislative requirements for the preservation of trees.

1. INTRODUCTION

Fairfield City Council is responsible for the management of trees, which includes trees in parks, streetscapes and in bushland settings. Council as an authority is also responsible for the preservation of trees on private property.

This presents significant challenges specifically to ensure the maintenance of tree canopy in Fairfield City recognising the conflicts between the built environment and responding to climate change challenges.

The cost of inspecting and retaining trees to ensure the meeting of environmental targets remains a significant challenge for Fairfield City Council.

This plan is focused on clarifying and defining key levels of service for the maintenance of trees in Fairfield City, the cost for current and future operations, maintenance, and replanting works required delivering a sustainable community benefit from trees.

1.1 Fairfield City Plan Link

The Fairfield City Plan goals and objectives in this Asset Management Plan are:

Table 1.1 Council Goals and how these are addressed in this Plan

Broad Theme	Goal	Outcomes	How objectives are addressed in AMP
Theme 1 - Community Wellbeing	Goal e: Strengthen relationships and partnerships	1 Community and Government organisation working together	Improve and promote local community groups services and events across the City
Theme 2 - Places and Infrastructure	Goal b: Inviting and well used open space	2 Improved park aesthetics through diverse landscaping and public art	Increase number of vibrant trees, colourful flowers, public art and water features in community places and parks
Theme 3 - Environmental Sustainability	Goal a: A sustainable natural environment	1 Natural environments are clean and preserved	-Plant trees to stablilise river and creek banks -Prioritise tree planting and diverse natural landscapes as part of town planning
Theme 4 – Strong and Resilient Economy	Goal b: Attractive and lively City	1 A unique and energetic city as a destination for food and leisure activities	Upgrade/improve - engaging with local community for input
Theme 5 – Good Governance and Leadership	Goal a: Decision making processes are open and transparent	1 Community interests are well represented	Develop plans based on feedback from the community. Provide open and transparent community consultation

1.2 Scope of this Plan

The Fairfield City Plan 2022-2032 is a key component of the Integrated Planning and Reporting Framework. It identifies the community aspirations through extensive community engagement which sets out the community's vision, goals, outcomes and community strategies.

In the Fairfield City Plan 2022/23 – 2031/32 the community asked for an increase in the number of vibrant trees in community places and park. The community also requested the prioritising of tree planting as part of town planning and to stabilise river and creek banks.

Council's "Right Tree – Right Place" – Tree Management Policy 0-044 outlines how Fairfield City Council ensures a consistent approach with respect to legislative controls for tree management within the Fairfield Local Government Area.

1.3 Documents that informed the Trees Asset Management Plan

- Fairfield City Plan 2010-2020
- Local Environmental Plan (LEP)
- Plans of Management
- Fairfield City Biodiversity Plan
- Fairfield City Open Space Strategy
- Community Engagement and Consultation Policy
- Fairfield Environment Strategy
- Urban Creeks Master Plan
- Council "Right Tree – Right Place" Tree Management Policy 0-044

2. LEVELS OF SERVICE

2.1 Legislative Requirements

Council has to meet many legislative requirements including Australian and State Legislation and State regulations. These include:

Table 2.1.1 Legislative Requirements

Legislation	Requirement
Local Government Act	Sets out role, purpose, responsibilities and powers of local governments including the preparation of a long term financial plans supported by asset management plans for sustainable service delivery.
Civil Liability Act 2002 and Civil Liability Amendment (Personal Responsibility) Act 2002	Protects the Council from civil action by requiring the courts to take into account the financial resources, the general responsibilities of the authority and the compliance with general practices and applicable standards.
Heritage Act 1977	An Act to conserve the environmental heritage of the State.
Workplace Health and Safety Act and Regulations	Sets out roles and responsibilities to secure the health, safety and welfare of persons.
Electrical Safety Act 2002	The Act sets out the installation, reporting and safe use with electricity.
Environmental Planning and Assessment Act 1979 (POPE)	This Act sets out the requirements in respect to environmental planning legislation.
Plant Protection Act 1989	This Act sets out the requirements in respect to Flora protection.
Water Management Act	Sets out responsibilities associated with the use of water.
NSW Threatened Species Act	Sets requirements in relation to fauna and threatened species (plant).
Commonwealth Environment Protection and Diversity Protection and Biodiversity Conservation Act	Sets out requirements associated with environment and utilisation.
State Environmental Planning Policy	Sets out specific requirements in connection with the remediation of land.
Contaminated Land Management Act	Sets out specific requirements in connection with the remediation of land.

2.2 Adopted Levels of Service

The adopted Levels of Service that are considered appropriate to Fairfield City Council are scheduled in Table 2.1.

Table 2.2.1 Current Service Levels – Tree Management

Key Performance Indicator	Level of Service	Target Performance	Performance Measure Process
Social Needs	Ensure that trees provide shade and amenity in park, sports fields and open space areas meet community needs	Importance and satisfaction levels are surveyed	Indicator Survey Results
Appearance	Trees are maintained in a healthy condition	>75% customer surveyed satisfied	Annual facility users survey
Legislative Compliance	Trees maintained in line with Australian Standards for pruning	100% compliance	Inspection program formulated and implemented
Quality	Apply “Right Tree Right Place” Tree Management Policy	<50 complaints per annum	Number of customer complaints per annum about new tree planting
Quantity	Does Tree Canopy meet identified environmental benchmarks	Benchmark Study	Planting and preservation of trees ongoing activity of Council
Reliability and Performance	Percentage of Tree maintenance requests completed	85%	Audit of Service Level delivery
Responsiveness	All maintenance relating to trees completed with reference to maintenance schedules and within agreed timeframes as per the risk rating	90% of work identified completed within designated response times	Customer Request Management statistics
Condition	Trees maintained in healthy condition	Maintenance removal when specified	Ongoing tree inspections
Environmental Impacts	Tree removal is matched or improved by Tree planting	Review tree removal and tree planting statistics	Ongoing tree management

Key Performance Indicator	Level of Service	Target Performance	Performance Measure Process
Financial Sustainability	To provide an appropriate and cost effective maintenance service	Benchmark against other authorities to inform target setting.	Annual cost of tree maintenance and removal

2.3 Desired Levels of Service

Council currently provides a reactive tree maintenance service responding to resident requests for tree pruning and removal.

Costing the provision of a proactive annual inspection of Council street trees is currently unfunded but an important service improvement for consideration.

3. FUTURE DEMAND

3.1. Demand Forecast

Currently work is being undertaken to prescribe appropriate tree plantings in Fairfield City.

This work will inform the species selections for planting on Council managed land.

There are a number of factors to consider in relation to tree species selection and supply including:

- Species selection
- National specification for supply of trees (NATSPEC)
- Selecting species appropriate to the site
- Selecting species suitable to the space
- Planting in accordance with best practice
- Ensuring adequate establishment and maintenance for the circumstance

3.1.1 Technological Change

Table 3.1.1 Changes in Technology and Forecast effect on Service Delivery

Technological Change	**Effect on Service Delivery**
Changes in efficiency and economic viability of solar electricity, water saving methods and water storage methods	Tree management can incorporate water saving measures in new and replacement projects
Propagation of drought tolerant species and improved irrigation techniques	Improvements to establishment costs and ongoing maintenance
Improvements to tree pruning services and equipment	Efficiencies of service delivery

3.1.2 Increased Demand for Asset Renewal and Maintenance

Newly installed trees, including drought tolerant species, are dependent upon watering or irrigation until established, typically for two years. The use of irrigation systems can

be problematic due to unreliable performance and can result in shallow root systems. Trees require watering to below the root ball depth to establish and sustain the root system and manual watering is to be undertaken.

The root ball of a new tree can only hold enough water for one day in summer and regular watering is critical to the establishment and survival of the tree. Conversely, in winter the root ball may hold sufficient water for up to six days. Therefore, it is vital that the frequency and amount of water is determined by the time of year that planting occurs, and is subject to soil moisture tests using a soil moisture probe prior to and during watering of both the root ball and surrounding soil.

Watering of the new tree is to be focused on the root ball through the early establishment period. However, additional watering of the surrounding planting bed soil can slow the loss of water from the root ball.

A proven method for rapid establishment and growth of new trees is contained in the information below which provides a guideline against which water budgets can be established:

Season	***Frequency from planting***
Late Spring to early Autumn	Daily first six weeks,
(includes Summer)	Every second day for 3 weeks
	Every third day for 3 weeks
	Weekly or as required.
Mid to late Autumn	Every second day for 3 weeks
	Every third day for 3 weeks
	Weekly or as required
Winter	Every third day for 3 weeks
	Weekly or as required
Early Spring	Every second day for 3 weeks
	Every third day for 3 weeks
	Weekly or as required

Trees are to be provided with a mulched bed at the base of the tree to prevent damage from mowing, pedestrian or vehicle movement.

Trees that conform to NATSPEC quality should not normally require staking. Some circumstances, eg. areas of high wind exposure, may require staking for protection during tree establishment.

The establishment maintenance period is essential to ensure the tree develops a healthy and mature canopy.

3.1.3 Change in Community Expectation

Council's policy is to maintain, replenish and over time increase the tree canopy in the Local Government Area.

Council's objective is to maintain, replenish and over time increase, the tree canopy in the LGA. In its Environmental Management Plan, Council has set a target to almost

double the LGA's existing tree canopy to 30% and plant 30,000 indigenous trees, shrubs and ground covers annually.

Council role is to comply with environmental legislation and advocate the important role trees play in the urban environment.

Council also recognises that inappropriate plantings can create a nuisance. Most tree problems are caused by misguided species selection or an unsuitable location however, once trees become established, Council has responsibility to ensure they are managed and maintained to minimise known risks to life and property.

As problems can arise with inappropriate planting, residents are not authorised to plant trees on Council land, including on the nature strip. Instead residents are encouraged to become involved in community events sponsored by Council and to care for approved plantings by Council.

Where Council identifies unauthorised plantings they may determine that removal is appropriate. In these instances effort will be made to educate and advise impacted residents.
Council will maintain checklists

Council maintains checklists/plans that assist to inform appropriate species and location for planting on public land.

Any tree planting will be subject to the application of a checklist to minimise future problems arising from poor site or species selection.

These plans will consider but not be limited by the following:

- location of existing services and easements, both above and underground;
- location of power lines;
- potential for development;
- pedestrian and vehicle vision and access;
- road verge widths;
- pruning and shaping adaptability of selected trees;
- local character and amenity;
- strategic management of tree stocks to replace aging and dying trees well in advance to maintain the tree canopy;
- creation of shade and enhance cooling;

- maintenance requirements including drought tolerance, soil quality and susceptibility to pests, disease, leaf drop, wind breaks and vandalism (graffiti screening)
- developing green corridors and clump planting to preserve or improve links in the natural environment;
- regenerate or recreate natural bushland i.e. Council's Creek Care Program;
- improving runoff and limiting erosion risk;
- creating and/or protecting a habitat for native birds and animals;
- Crime Prevention through Environmental (CPTED) principles applied.

4. RISK MANAGEMENT

In assessing a tree, it is necessary for an appropriately skilled and experienced person to systematically inspect the tree(s).

A record is kept of the inspection. An example of a tree inspection schedule and accompanying notes is included as an Appendix 2.

Hazard tree assessment is a systematic process for determining the potential for a tree or one of its parts, to fail and in so doing, injure people or damage property. Since trees are living, dynamic (ie constantly growing) organisms they do have the potential to cause damage or injury if a mechanical failure occurs.

The degree of hazard will vary with the size of the tree, type and location of defect, tree species, and the nature of the target.

Tree hazard assessment involves three components:

- A tree with the potential to fail,
- An environment that may contribute to that failure, and
- A person or object that would be injured or damaged (ie. the target).

Each of these components and their interactions must be considered.

Strategy	Description
Monitor trip points	Where no other practical method can be employed to prevent this occurring, a regular trip point inspection program should be instigated and pavement replaced or repaired as necessary.
Flexible pathways	Use of flexible material such as bitumen, 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.
Re-direct pathways	Where space allows, pathways should be re-directed away from trees/tree roots. It may also be beneficial to reduce the newly directed pathway width.

Bridging Footpaths	Self-supporting construction methods, such as pier and beam could be used to raise pathways above the roots, allowing for root expansion without damaging the pavement. Timber bridges are an effective option
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.
Tunnelling for services	Tunnelling (directional boring) rather than open trenching for underground services, will greatly reduce public risk as well reducing injury to tree roots. If located deeply, root contact with the pipeline may be minimised as the majority of roots of most species will remain within the top 1 metre of soil (based on a soil with medium texture).
PVC welded piping	Replacement of old porous clay pipe mains with PVC or polyurethane mainlines will significantly reduce the potential for tree root entry.
Preventative tree maintenance	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.
Raising pathways	Where appropriate, pathways could be raised to reduce direct root pressure on the pavement. Care must be taken not to build up soil against the trunk of a tree. Aeration piping, in conjunction with geo-textile fabric and gravel should be installed between root zone and new pavement to aid with gas exchange to roots. Care should be taken to shape the new surface to drain water away from the trunk of the tree.
Insulated (ABC) cabling	Replacement of uninsulated overhead powerlines with insulated & bundled cables will reduce both the clearance needed and the pruning costs and severity.
Underground power & communications cables	The initially high cost of installing power underground may in fact be a practical option when compared with the projected cost of repeated pruning, the risk that this work involves to operators, the negative impact on trees, loss of public amenity and of urban forest economic contributions.
Diverting services	Services could be diverted along roadways, rather than in the nature strip where a valuable stand of trees is present. To make this option more attractive to service providers, Councils may wish to consider waiving road opening fees.
Diverting kerb/gutter	When possible, kerb/gutter could be diverted around tree roots or further away from the trunk, creating an island around the tree.
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 then 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 engineering	In some cases cabling may be used to support tree structure or to control the direction of a possible failure. This is highly specialised work.
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.

In order to establish those risks that will be covered by the risk management program a table has been developed showing sources of risk, their potential impacts, current controls and action plans (refer to Table 4.1).

The risk register has established the responsibilities of the relevant departments (City Assets and Operations) and person.

Table 4.1 Tree Management

Hazards	Risk (what can happen?)	Likeli-hood	Consequence	Risk Score	Controls	Actions	Responsibility
Asset Condition	Injury as a consequence of deterioration of tree assets	3	3	9	Regular inspection and maintenance reports supported by resident reports inform repair	1. Regular condition assessments 2. Maintenance Reports (Parks) 3. Annual allocation of sufficient funding and resources	Asset Management
Insufficient Maintenance	Insufficient maintenance increases the risk of injury to users	3	3	9	Regular inspection and Service Levels for maintenance	Service Levels for preventative maintenance optimised	Asset Management
Vandalism	Injury as a result of poisoning or vandalism	2	3	6	Vandalism reported to Police and public advised Police informed of all vandalism for offender identification	Advise vandalism for enforcement	Asset Management
WHS Practices	Injury due to poor WHS practices	2	3	6	WHS procedures and policies applied	WHS systems continue to be implemented and educated	All

5. LIFECYCLE MANAGEMENT PLAN

5.1 Objective

The core objectives for the management of trees on Council land are to;

- The planting and management of trees in appropriate sites
- The preservation and management of existing trees , in a safe and healthy state
- The management and/or removal of trees in inappropriate places

5.2 Asset Inclusions/Exclusions and Hierarchy

5.2.1 Inclusions

The assets covered in this plan are shown below:

- Heritage or significant trees
- Trees in Parks
- Trees in Town Centres
- Street Trees
- Trees on Council Properties
- Trees on private property

5.2.2 Exclusions

Trees in bush regeneration areas are currently not included in this AMP.

5.2.3 Hierarchy

The maintenance of established trees plays a vital role in ensuring the viability and sustainability of urban environments.

Works undertaken to an individual tree will determine if the tree remains healthy or increases stress which may lead to decline.

All public tree maintenance activities including pruning and removal can only be undertaken by Council.

The hierarchy of tree management at Council is directly related to .

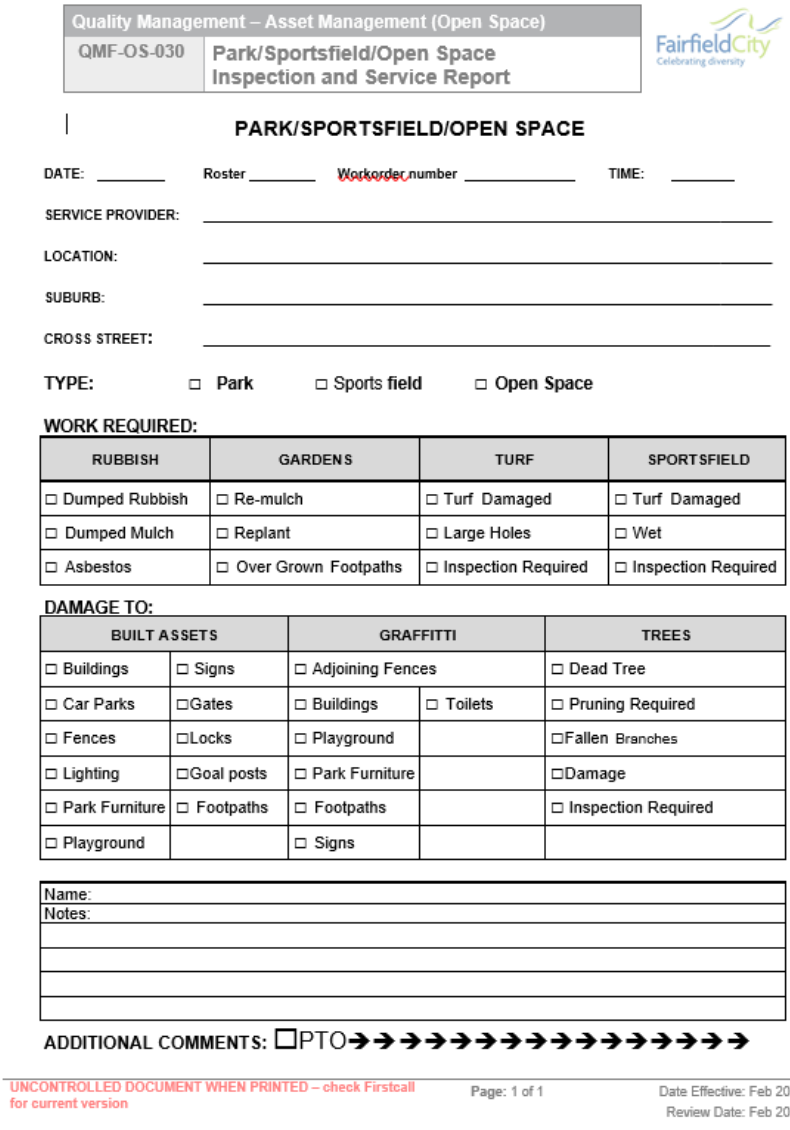
An annual inspection is undertaken of Council sites deemed to have a higher level of risk associated with trees, such as child care centres and the Fairfield Showground.

This proactive schedule of inspection ensures the annual prescription of the required maintenance work to maintain the good health of these trees.

Inspections of Street Trees is undertaken in response to resident report, however, in these instances not only the single tree is assessed but the totality of the street to address any pruning required in a resource efficient manner.

Trees in Parks are inspected as a part of the service level for Council's internal Parks and Gardens crews.

QMF-OS-030 – Inspection and Service Report – informs follow up tree maintenance work, as shown below:



Quality Management – Asset Management (Open Space)	
QMF-OS-030	Park/Sportsfield/Open Space Inspection and Service Report

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PARK/SPORTSFIELD/OPEN SPACE

DATE: _____ Roster _____ Workorder number _____ TIME: _____

SERVICE PROVIDER: _____

LOCATION: _____

SUBURB: _____

CROSS STREET: _____

TYPE: ☐ Park ☐ Sports field ☐ Open Space

WORK REQUIRED:

RUBBISH	GARDENS	TURF	SPORTSFIELD
☐ Dumped Rubbish	☐ Re-mulch	☐ Turf Damaged	☐ Turf Damaged
☐ Dumped Mulch	☐ Replant	☐ Large Holes	☐ Wet
☐ Asbestos	☐ Over Grown Footpaths	☐ Inspection Required	☐ Inspection Required

DAMAGE TO:

BUILT ASSETS		GRAFFITTI		TREES
☐ Buildings	☐ Signs	☐ Adjoining Fences		☐ Dead Tree
☐ Car Parks	☐Gates	☐ Buildings	☐ Toilets	☐ Pruning Required
☐ Fences	☐Locks	☐ Playground		☐Fallen Branches
☐ Lighting	☐Goal posts	☐ Park Furniture		☐Damage
☐ Park Furniture	☐ Footpaths	☐ Footpaths		☐ Inspection Required
☐ Playground		☐ Signs		

Name:
Notes:

ADDITIONAL COMMENTS: ☐PTO➔➔➔➔➔➔➔➔➔➔➔➔➔➔➔➔

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5.3 Asset Description

The following outlines the definitions used:

Bushland/Reserves are managed, protected and enhanced as part of Council's Legislated environmental responsibilities.

Dead Tree a tree that has not produced leaves for two successive years, exhibits permanent wilting or is shedding bark which is dried out and peeling off to the beginning of sapwood. May be retained for habitat..

Canopy that part of the tree above the main stem comprising primarily branches and foliage.

Significant Tree a tree which has been identified by Council displaying biological, cultural, heritage or intrinsic value significant to warrant its protection..

Tree (Native/Exotic and Indigenous) Native are trees with natural origins in a particular environment; indigenous are trees endemic to the local environment and exotic are introduced trees and may include native trees in some locations.

5.3.1 Life Cycle Issues

Some of the key life cycle issues that trees are:

- Weather events (drought/flood)
- Vandalism
- User misuse or abuse
- Age
- Poor planting/location
- Species

5.3.2 Asset Condition

Condition is measured using a 1-5 rating system as defined in the Table 5.3.2.1 below:

Level	Condition	Description	% Life Consumed
1	Excellent	No work required (normal maintenance)	0
2	Good	Only minor work required	25
3	Average	Some work required	50
4	Poor	Some renovation needed within 1 year	75

5	Very Poor	Urgent renovation/upgrading required	100

5.3.3 Asset Valuation

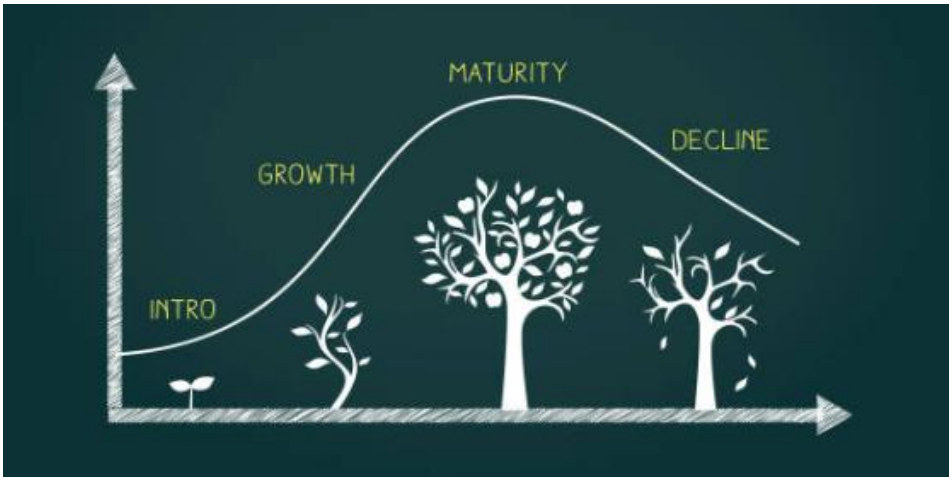
Trees are not currently a depreciable asset and have not to date been formally valued.

However, for the purpose of tree replacement and compensatory planting the following schedule of rates is applied:

Name	Policy Code	Fee (excl. GST)	GST	Fee (incl. GST)
Tree Management/Preservation [continued]				
Memorial Tree Planting (tube stock) – existing planting of garden bed	N	$56.36	$5.64	$62.00
Memorial Tree Planting (stand alone planting).	N	$122.73	$12.27	$135.00
Tree Work Permit (Pruning/Removal) – Inspection Fee	C	$75.00	$0.00	$75.00
Inspection of 1-2 trees				
Private Tree replacement	C	$62.00	$0.00	$62.00
Replacement contribution				
Street Tree replacement – Minimum Fee	N	$300.00	$0.00	$300.00
Based on street tree valuation minimum replacement fee				
Street Tree replacement – Medium	N	$568.00	$0.00	$568.00
Based on street tree valuation medium replacement fee				
Street Tree replacement – Large	N	$827.00	$0.00	$827.00
Based on street tree valuation medium – large tree replacement fee				
Street Tree replacement – significant	N	$2,478.00	$0.00	$2,478.00
Based on street tree valuation significant landscape element replacement fee				
Street Tree removal – Market Rate	I	Council removes tree at full cost recovery (DA triggered)		

5.3.4 Asset Useful Life

Trees as non-depreciable demonstrate a life cycle that in terms of cost is higher at establishment and reduces over time.



5.3.5 Maintenance Expenditure

The expenditure over the past three years is detailed in Table 5.3.5.1.

Table 5.3.5.1: Maintenance Expenditure

	2019/2020	2020/2021	2021/2022
Maintenance	$541,974	$664,262	$756,509

- Proactive work in this portfolio will require additional funds

5.3.6 Life Cycle Activities

5.3.6.1 Operations

Operational activities include watering and mulching of tree assets.

5.3.6.2 Maintenance

Maintenance activities for tree assists are predominantly pruning and dead wooding.

1. *Planned Maintenance (proactive)*
   Maintenance works planned to prevent asset failure and deterioration.
   This is limited by budget constraints..

2. *Unplanned Maintenance (reactive)*
   Maintenance works carried out in response to reported problems or defects.
   Typical unplanned maintenance activities include tree removal or branch removal.
   This work is prioritised on risk and includes pruning for road safety reasons (sight distance).

5.3.6.3 Maintenance Standards

Maintenance standards are a set of performance criteria to the agreed service standard and future maintenance needs of tree assets.

Industry standards are applied for the maintenance of trees as outlined in the Tree Work Instruction below:

TREE WORK INSTRUCTION

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Plants sometimes need a bit of a tidy up. Generally, the best time of the year to do this is when plants are dormant, which is in the cooler months of the year or after the plant has flowered.

TYPES OF PRUNING:

Cleaning out
The removal of any diseased, damaged or dead branches that could cause a problem.

Lifting
The removal of branches from the bottom of the crown of the crown of a tree to provide clearance for pedestrians, vehicles or improve lines of sight.

Crown thinning
The selective removal of branches to increase light penetration and air movement throughout the crown without any reduction of height.

CROWN REDUCTION: (only approved in special circumstances)

Thinning out
The reduction in height and spread while keeping the plants natural shape.

Lopping
The main branches are cut back to the stubs with little regard for its shape and future problems. This is not recommended as it can predispose trees to infectious diseases, insect attack and other problems which can result in decayed and partially hazardous trees with a reduced life span.

Fairfield City Council's Tree Work Permits are required to protect trees over a height of 4 metres or has a branch span of 3 metres or more from unnecessary removal or excessive and inappropriate pruning.

5.3.6.4 Maintenance Strategy

Maintenance strategies include:

Inspections (Annual High Risk Sites)

- Preventing premature deterioration or failure of assets
- Ensuring the tree assets are maintained to deliver the desired levels of service
- Identifying requirement for renewal/replanting programs

Maintenance works are prioritised based on the following factors:

- Risk management
- Statutory regulation
- Utilisation

Maintenance Specifications

- Maintenance work is carried out in accordance with Australian Service Standards and Specifications.

5.3.6.5 Maintenance Program

Both planned and unplanned maintenance is undertaken as a result of either proactive inspection by Council staff or after receiving a request from customer.

An Inspection Plan (Appendix A) is a part of this Asset Management Plan. The plan describes the timing of inspections.

5.3.6.6 Maintenance Service Provision

Current Service Provision

Fairfield City Council currently uses internal and external service providers for tree maintenance and replanting.

The specialist nature and equipment required for tree work informs the majority of work being outsourced by way of a major works Tender.

Internal work, minor tree work, effectively the under pruning of tree branches is undertaken by internal service providers. This work is limited by resources available and is an area requiring review so that Council can cost effectively undertake minor tree work in a timely manner.

The following provides a summary of current maintenance service provisions:

Operating Services

Services	Service Provider	Services Provided	Term
Major Tree Work	External Contractor	Full service – pruning, removal, stump grinding, wood chipping	Reactive
Minor Tree Work	Waste and Cleansing Branch	Minor under pruning, removal and chipping of small branches	Reactive
Tree Planting	Park and Gardens Branch	Replacement of Trees	Reactive
Water Services	External Contractor	Watering	Monthly

Maintenance Services

Services	Service Provider	Services Provided	Term
Tree Surrounds	Construction & Maintenance Division	Installation of Tree Guards/site protection	Reactive
Tree Pits	Construction & Maintenance Division	Maintenance and repairs	Annual

Contract Management

Service Level Agreements with Council's Trades/Parks and Works Branches will be reviewed annually to determine service and operational benefits.

External Contracts are reviewed in line the Tender agreements.

5.4 Renewal Plan

Renewal work is the replacement of an asset or a significant component to restore its original size and capacity. Typical tree renewal works includes:

- Tree replacement funded by compensatory payments for tree removal
- New Planting to enhance street scapes
- Tree Planting associated with other capital upgrades i.e. park improvement
- Private tree planting associated with Tree Work Permit specifications

5.4.1 Renewal Strategy

Renewal/replacement strategies are determined on the basis of:

- **Risk** – where the risk of failure and associated safety, financial and commercial impact justifies action;
- **End of Natural Life** – when the asset fails to meet the required level of service

Council's Renewal Works Program

Budget allocations for tree planting are considered as part of Council's Delivery Program and Operational Plans.

5.10 Asset Disposal

Fairfield City Council is required to comply with Environmental Legislation for the preservation of trees (EP&A Act 1979) and has in place a Local Environment Plan 2013 (LEP) to ensure the natural amenity of Fairfield City for community benefit.

Under these provisions a Tree Work Permit is required to be issued by Council for cutting down, topping, lopping or pruning a tree.

An exception is that approval is not required for the removal of undesirable trees and plants as set out in Council's Quality Management documentation and provided to the community for their reference:

6. FINANCIAL FORECAST

6.1 10 Year Financial Forecasts

Council currently funds tree work as part of general operations with the planting of trees as capital works budgets determined as part of beautification works.

As such capital works budgets are largely discretionary.

The below table provides an example of the expenditure categories and the actual expenditure relating to tree planting and maintenance for a single financial year (2021/22).

Table 6.1.1 – Actual Expenditure 2021/22

Expenditure Type	2011/2012
Operation/Maintenance	$756,509
Renewal	$100,000
New Works	$60,000

6.2 Funding Strategy

The focus of this Asset Management Plan is on identifying the optimum cost for each asset group necessary to produce the desired level of service. How the cash flow is to be funded is a matter for separate consideration as part of Council's funding policy review.

Current Funding sources available for these assets include:

Asset Type	Funding Source
Tree Assets	Rates Federal Government Funding State Government funding Private developer funded works

6.3 Confidence Levels

The confidence in the asset data used as a basis for the financial forecasts has been assessed using the following grading system:

Confidence ratings for public tree assets:

Asset Category	Confidence Rating							
	Qty	Cond	Age	Service Levels	Demand Forecasts	Lifecycle Mange	Financial Forecasts	Overall Rating
Public Trees	D	D	D	C	D	D	B	D

Confidence ratings and estimates of uncertainty values

Confidence Grade	Confidence Rating and Description
A	**Highly Reliable < 2% uncertainty** Data based on sound records, procedure, investigations and analysis which is properly documented and recognised as the best method of assessment
B	**Reliable 2-10% uncertainty** Data based on sound records, procedures, investigations, and analysis which is properly documented but has minor shortcomings for example the data is old, some documentation is missing and reliance is placed on unconfirmed reports or some extrapolation
C	**Reasonably Reliable 10–25 % uncertainty** Data based on sound records, procedures, investigations, and analysis which is properly documented but has minor shortcomings for example the data is old, some documentation is missing and reliance is placed on unconfirmed reports or significant extrapolation.
D	**Uncertain 25–50% uncertainty**

	Data based on uncertain records, procedures, investigations and analysis, which is incomplete or unsupported, or extrapolation from a limited sample for which grade A or B data is available.
E	**Very Uncertain > 50% uncertainty** Data based on unconfirmed verbal reports and/or cursory inspection and analysis

7. ASSET MANAGEMENT PRACTICES

Council utilises the following computer software as part of Council's Asset Management system to manage its Tree assets:

- Peoplesoft Financial Management System
- Conquest Asset Management System
- Mapinfo (GIS – Geographic Information System)

8. PLAN IMPROVEMENT AND MONITORING

8.1 Improvement Program

Council's Asset Management Strategy 2022/23 – 2031/32 identifies the improvement tasks as part of the following Priority Themes:

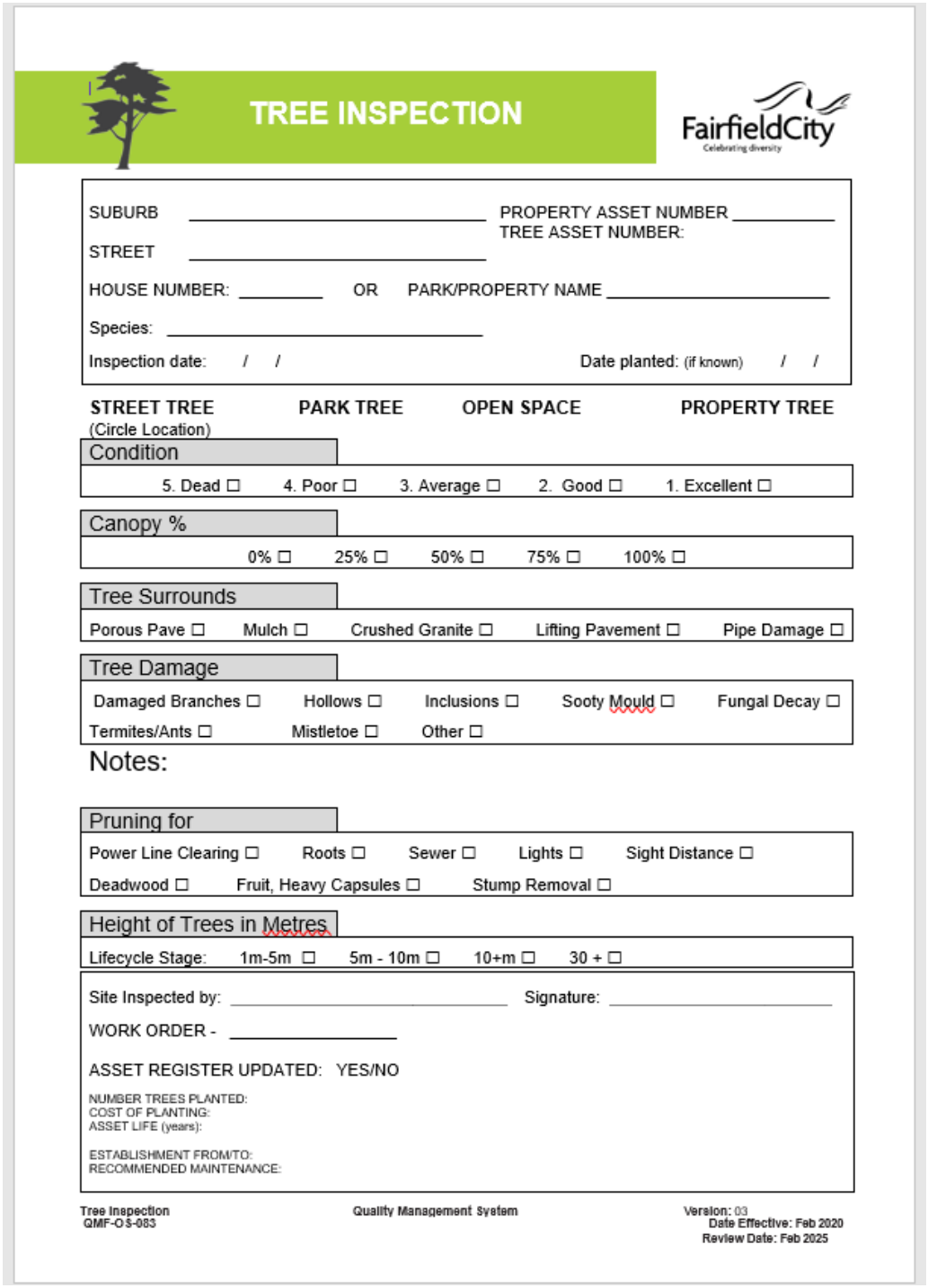
- Asset Capitalisation
- Asset Information Management
- Service Management
- Risk Management
- Innovation

9. APPENDICES

Appendix 1 Tree Asset Inspection

Asset Group	Inspection Type	Frequency	Responsibility
High Risk Trees	Risk Inspection	12 Months	Asset Management
	Condition Inspection	12 months	Asset Management
Parks Trees	Risk Inspection	Monthly	Operations
	Condition Inspection	12 months	Asset Management
Street Trees Town Centres	Risk Inspection	12 months	Asset Management
	Condition Inspection	12months	Asset Management
Street Trees Residential	Risk Inspection	1-3 years	Asset Management
	Condition Inspection	1-3 years	Asset Management
Private Trees	Risk Inspection	Upon application	Asset Management
	Condition Inspection	Upon application	Asset Management

Appendix 2 Individual Tree Inspection Checklist – QMF-OS-083



TREE INSPECTION

FairfieldCity
Celebrating diversity

SUBURB _____ PROPERTY ASSET NUMBER _____
TREE ASSET NUMBER:

STREET _____

HOUSE NUMBER: _____ OR PARK/PROPERTY NAME _____

Species: _____

Inspection date: / / Date planted: (if known) / /

STREET TREE **PARK TREE** **OPEN SPACE** **PROPERTY TREE**
(Circle Location)

Condition

5. Dead ☐ 4. Poor ☐ 3. Average ☐ 2. Good ☐ 1. Excellent ☐

Canopy %

0% ☐ 25% ☐ 50% ☐ 75% ☐ 100% ☐

Tree Surrounds

Porous Pave ☐ Mulch ☐ Crushed Granite ☐ Lifting Pavement ☐ Pipe Damage ☐

Tree Damage

Damaged Branches ☐ Hollows ☐ Inclusions ☐ Sooty Mould ☐ Fungal Decay ☐
Termites/Ants ☐ Mistletoe ☐ Other ☐

Notes:

Pruning for

Power Line Clearing ☐ Roots ☐ Sewer ☐ Lights ☐ Sight Distance ☐
Deadwood ☐ Fruit, Heavy Capsules ☐ Stump Removal ☐

Height of Trees in Metres

Lifecycle Stage: 1m-5m ☐ 5m - 10m ☐ 10+m ☐ 30 + ☐

Site Inspected by: _____ Signature: _____

WORK ORDER - _____

ASSET REGISTER UPDATED: YES/NO

NUMBER TREES PLANTED:
COST OF PLANTING:
ASSET LIFE (years):

ESTABLISHMENT FROM/TO:
RECOMMENDED MAINTENANCE:

Tree Inspection
QMF-OS-083

Quality Management System

Version: 03
Date Effective: Feb 2020
Review Date: Feb 2025

Appendix 3 Tree Inventory

Background

Fairfield City Council is implementing the Integrated Planning and Reporting Framework as required under the 2009 Local Government legislation to ensure appropriate management of community assets.

Levels of service are being defined and costs established for the service of tree maintenance. The purpose is to communicate to council for the setting and funding of agreed services.

This document seeks to define and quantify the service of tree maintenance for the allocation of resources.

- **Inclusions**

Major Town Centres

- Bonnyrigg
- Cabramatta
- Canley Heights
- Fairfield
- Fairfield Heights
- Smithfield
- Villawood

- **Exclusions from this agreement**
  - Parks and Open Spaces

- **Policy**

Fairfield City Council has adopted a Tree Management Policy “right tree-right place” that informs this management plan.

- **Procedures**

The following are general inclusions in these service levels:

Weekly Tree Work Report (WHS Risk Assessment)

- Fortnightly Tree Work Status Reports (includes age of job status and count of tree pruning and tree removal).
- All pruning and tree work to comply with Australian Standards for Pruning Amenity Trees AS4373 -2007
- All work to comply with Fairfield City Council WHS

- **Quality Management**
  - Document control: Asset Manager – Open Space
  - QM variations: Approved by Manager/City Assets

- ## Service Areas

MAJOR TOWN CENTRES AND RETAIL CENTRES

- Bonnyrigg
- Cabramatta
- Canley Heights
- Fairfield
- Fairfield Heights
- Smithfield
- Villawood

The Council will maintain Major Town centre trees.

- ## INVENTORY

APPENDIX A - TOWN CENTRES

CABRAMATTA

CANLEY HEIGHTS

FAIRFIELD

(STAGE 2)

FAIRFIELD HEIGHTS

SMITHFIELD

VILLAWOOD


RIVER
VILLAWOOD
RD
KAMIRA
KIRRANG
AVE
KOONOONA AVE
COURT
HOWATT
ST
WOODVILLE
HILWA
KOORINDA

APPENDIX B – NEIGHBOURHOOD TOWN CENTRES AND RETAIL CENTRES

- Bareena Street shops
- Bolivia Street shops
- Bossley Park shops
- Brenan Street shops
- Carramar shops
- Daniel Street shops
- Denison Street shops
- Dublin Street shops
- Elizabeth Drive shops
- Fairfield East shops
- Fairfield Street shops
- Fairfield West shops
- Friend Way shops
- Granville Street shops
- Hamilton Road shops
- Harden Street shops
- Hassall Street shops
- Horsley Park Village
- John Street shops
- Lord Street shops
- Loscoe Street shops
- Meadows Road shops
- North Villawood shops
- Orchardleigh Street shops
- Rawson Road shops
- Sackville Street shops
- St Johns Road shops
- Thorney Road shops
- Townview Road shops
- Wakeley shops
- Whitaker Street shops

Town Centres Tree Audit	Address	Suburb	Latitude	Longitude	Tree Existing	Work Id	Scoped Date	Tree Count	Species	Tree Health	Tree Height	Photo Link 1
Town Centres Tree Audit	41-43 Station Street	Fairfield	-33.867465	150.951007	Tree Existing	999601	9/11/2020	1	Lophostemon confertus	2	13.00	
Town Centres Tree Audit	39 Station Street	Fairfield	-33.867573	150.951202	Tree Existing	999602	9/11/2020	1	Corymbia citriodora	2	17.00	
Town Centres Tree Audit	39 Station Street	Fairfield	-33.867589	150.951254	Tree Existing	999604	9/11/2020	1	Eucalyptus camaldulensis	2	15.00	
Town Centres Tree Audit	39 Station Street	Fairfield	-33.86745	150.951317	Tree Existing	999605	9/11/2020	1	Eucalyptus camaldulensis	2	9.00	
Town Centres Tree Audit	29 Station Street	Fairfield	-33.867669	150.951402	Tree Existing	999607	9/11/2020	1	Lophostemon confertus	2	7.00	
Town Centres Tree Audit	25-27 Station Street	Fairfield	-33.867834	150.951703	Tree Existing	999608	9/11/2020	1	Callistemon viminalis	2	5.00	
Town Centres Tree Audit	25-27 Station Street	Fairfield	-33.867868	150.951769	Tree Existing	999613	9/11/2020	1	Eucalyptus sp.	2	15.00	
Town Centres Tree Audit	8-36 Station Street	Fairfield	-33.86775	150.951883	Tree Existing	999614	9/11/2020	1	Corymbia maculata	2	13.00	
Town Centres Tree Audit	8-36 Station Street	Fairfield	-33.86775	150.951907	Tree Existing	999615	9/11/2020	1	Lophostemon confertus	2	5.00	
Town Centres Tree Audit	8-36 Station Street	Fairfield	-33.867754	150.951916	Tree Existing	999616	9/11/2020	1	Callistemon viminalis	2	4.00	
Town Centres Tree Audit	8-36 Station Street	Fairfield	-33.867757	150.951927	Tree Existing	999617	9/11/2020	1	Callistemon viminalis	2	4.00	
Town Centres Tree Audit	23 Station Street	Fairfield	-33.86795	150.952112	Tree Existing	999618	9/11/2020	1	Melaleuca styphelioides	2	7.00	
Town Centres Tree Audit	23 Station Street	Fairfield	-33.86793	150.952121	Tree Existing	999619	9/11/2020	1	Lophostemon confertus	2	5.00	
Town Centres Tree Audit	19 Station Street	Fairfield	-33.867981	150.95225	Tree Existing	999620	9/11/2020	1	Lophostemon confertus	2	6.00	
Town Centres Tree Audit	23 Station Street	Fairfield	-33.868117	150.952225	Tree Existing	999624	9/11/2020	1	Lagerstroemia indica	2	4.00	
Town Centres Tree Audit	17 Station Street	Fairfield	-33.868133	150.952284	Tree Existing	999625	9/11/2020	1	Archontophoenix cunningham	2	5.00	
Town Centres Tree Audit	17 Station Street	Fairfield	-33.868153	150.952316	Tree Existing	999626	9/11/2020	1	Lagerstroemia indica	2	4.00	
Town Centres Tree Audit	17 Station Street	Fairfield	-33.868122	150.952365	Tree Existing	999627	9/11/2020	1	Lophostemon confertus	2	8.00	
Town Centres Tree Audit	17 Station Street	Fairfield	-33.868261	150.95256	Tree Existing	999628	9/11/2020	1	Archontophoenix cunningham	1 (Healthy)	6.00	
Town Centres Tree Audit	17 Station Street	Fairfield	-33.868261	150.95256	Tree Existing	999629	9/11/2020	1				
Town Centres Tree Audit	17 Station Street	Fairfield	-33.86827	150.952591	Tree Existing	999630	9/11/2020	1	Archontophoenix cunningham	1 (Healthy)	3.00	
Town Centres Tree Audit	17 Station Street	Fairfield	-33.868328	150.952647	Tree Existing	999631	9/11/2020	1	Archontophoenix cunningham	1 (Healthy)	3.00	
Town Centres Tree Audit	17 Station Street	Fairfield	-33.868335	150.952667	Tree Existing	999632	9/11/2020	1	Archontophoenix cunningham	1 (Healthy)	4.00	
Town Centres Tree Audit	11 Station Street	Fairfield	-33.868435	150.952836	Tree Existing	999633	9/11/2020	1	Archontophoenix cunningham	1 (Healthy)	0.00	
Town Centres Tree Audit	11 Station Street	Fairfield	-33.868451	150.952893	Tree Existing	999634	9/11/2020	1	Archontophoenix cunningham	1 (Healthy)	5.00	
Town Centres Tree Audit	11 Station Street	Fairfield	-33.868516	150.953041	Tree Existing	999635	9/11/2020	1	Archontophoenix cunningham	1 (Healthy)	5.00	
Town Centres Tree Audit	6 Station Street	Fairfield	-33.868657	150.953269	Tree Existing	999636	9/11/2020	1	Corymbia maculata	3	20.00	
Town Centres Tree Audit	6 Station Street	Fairfield	-33.868756	150.953413	Tree Existing	999637	9/11/2020	1	Lophostemon confertus	2	13.00	
Town Centres Tree Audit	1 Station Street	Fairfield	-33.869019	150.953572	Tree Existing	999638	9/11/2020	1	Betula sp.	4	8.00	
Town Centres Tree Audit	1 Station Street	Fairfield	-33.869019	150.953572	Tree Existing	999639	9/11/2020	1	Betula sp.	4	8.00	

*Excerpt Town Centre – Tree Inventory