CITY OF CAPE TOWN
URBAN FOREST POLICY

(POLICY NUMBER 63600)

APPROVED BY COUNCIL: 27 JULY 2023
(C18/07/23)

DEFINITIONS AND ABBREVIATIONS

For the purpose of this policy:

Term	Definition
Adaptation	In human systems, the process of adjustment to actual or expected climate and its effects, in order to moderate harm or exploit beneficial opportunities; in natural systems, it means the process of adjustment to actual climate and its effects; human intervention may facilitate adjustment to expected climate and its effects.
Aftercare	The tree maintenance regime, which is implemented once the tree has been planted, normally for a period of 3 years, or until the tree is well established.
Arboriculture	The planting, management and care of trees and shrubs, and the study thereof.
Arborist	A professional with experience and training who has the technical and theoretical knowledge to manage and care for trees and shrubs.
Biodiversity Network	The systematic, fine-scale conservation plan for the Cape Town municipal area developed to meet national biodiversity targets.
Biome	A large naturally occurring community of flora and fauna occupying a major habitat e.g. fynbos.
Blanking	The replacement planting of trees in gaps where trees have been lost or died. Infill planting has the same meaning.
Canopy	The upper layer or habitat zone formed by mature tree crowns. Also, the extent of the outer layer of leaves of an individual tree or group of trees.
Champion tree	Extraordinary single trees and groups of trees assigned "champion" status by the national Department of Forestry, Fisheries and the Environment (DFFE). Champion status is assigned according to trees' biological attributes, age or heritage significance and enjoy protected status under section 12 of the National Forests Act 84 of 1998.
City	The City of Cape Town, a municipality established by the City of Cape Town Establishment Notice Provincial Notice 479 of 2000 issued in terms of section 12 of the Municipal Structures Act, 1998, or any structure or employee of the City acting in terms of delegated authority.
city	The greater Cape metropolitan area in which the City of Cape Town municipality has jurisdiction.
Climate change	A change of climate which is attributed directly or indirectly to human activity that alters the composition of the global atmosphere and which is in addition to natural climate variability observed over comparable time periods.
Coppice	Shoots that grow from the base of a tree or from the roots; when it has been severely cut or pruned (to almost ground level). It is a survival mechanism.
Council	The Municipal Council of the City.
Critical root zone	The zone, in which the majority of a tree's roots are found located inside the "drip line" of the tree (under the outer edge of the tree canopy)
Cultural landscape	Landscapes that include both natural and man-made aspects and that have been affected, influenced, or shaped by human involvement. This is expressed in various ways, patterns and elements, the relationship between these, and the meaning they have for people.
Development	In relation to a place, means any process initiated by a person to change the use, physical nature or appearance of that place, and includes - the construction, erection, alteration, demolition or removal of a structure or building; a) a process to enhance rights (e.g. rezone, subdivide or consolidate land) b) changes to the existing or natural topography or slopes;

	c) the destruction or removal of indigenous or protected vegetation; or
	d) submission of a building plan.
Ecosystem	A dynamic complex of animal, plant and micro-organism communities and their non-living environment (physical environment) interacting as a functional unit.
Ecosystem services	The direct and indirect contributions of ecosystems to human well-being.
Endemic tree	A tree that is native to a certain region and is not found anywhere else. (Compare "indigenous tree".)
Environment	Means the surroundings within which humans exist and that are made up of: the land, water and atmosphere of the earth; a) micro-organisms, plant and animal life; b) any part or combination of a) and b) and the interrelationships among and between them; and c) the physical, chemical, aesthetic and cultural properties and conditions of the foregoing that influence human health and well-being.
Exotic tree	Trees introduced to South Africa from other countries.
Felling	Tree removal.
Fynbos	A distinctive type of vegetation found only on the southern tip of Africa. Dominant plant group includes the *proteas, ericas, restios* and geophytes.
Green space	Open spaces that are generally semi-natural or which have been planted with vegetation.
Green Infrastructure (GI)	Natural and semi-natural open spaces, natural ecological and 'engineered' ecological systems, with other environmental features, that – a) integrate with the built environment, to provide a wide range of ecological, community and infrastructure services; b) provides ecosystem services ; c) is a continuum from naturally functioning systems to low impact development approaches for management of urbanisation impacts; or d) ideally form an interconnected network within the urban environment.
Green Infrastructure Programme (GIP)	A City programme to protect and enhance Cape Town's existing natural environmental assets, as well as promote and create new green infrastructure assets.
GIP: Best Practice Guidelines: Toolkit on Trees	Best practice guidelines developed as part of the City of Cape Town's Green Infrastructure Programme are not intended to be prescriptive, but are instead meant to guide property owners, City officials, designers, developers, architects, planners and community members in managing and improving our green infrastructure collectively and sustainably to create safe, contextually-appropriate environments.
Heat island effect	Occurs when a city or built up area experiences much warmer temperatures than nearby rural or natural areas. The difference in temperature is to do with how the surfaces in each environment absorb and hold heat.
Indigenous tree	A tree originating or occurring naturally in a certain geographical area or country. (Compare "endemic tree".)
Invasive alien species	Species listed in the Alien and Invasive Species Regulations (as amended in 2020) published in terms of the National Environmental Management: Biodiversity Act 10 of 2004 as well as any invader plant and weed declared in terms of the Conservation of Agricultural Resources Act, 1993 (Act 43 of 1983).

Landscape plan	A plan (or set of plans) with supporting drawings (plans, sections and elevations) showing the design of the physical landscape of a site including natural features, built structures and infrastructure services.
Maintenance Standards	Minimum maintenance standards document, revised regularly by the Recreation and Parks Department, for all land managed by the Department.
Mature tree	Any tree whether located on public or private land, that has reached a desired size or age for its intended use, completed its natural development or growth and has a well-developed canopy.
Mitigation	In the context of climate change, a human intervention to reduce emissions or enhance the sinks of greenhouse gases.
Public Open Space and Public Space	a) a public road, parking area, square, park, recreation ground, sports ground, sanitary lane, open space, beach, shopping centre on municipal land, unused or vacant municipal land or cemetery which has – i) been provided, reserved or set apart for use by the public; or ii) been dedicated to the public.
Public road	Any road, street or thoroughfare or any other place (whether a thoroughfare or not) which is commonly used by the public or any section thereof or to which the public or any section thereof has a right of access, and includes— a) the verge of any such road, street or thoroughfare; b) any bridge, ferry or drift traversed by any such road, street or thoroughfare; and c) any other work or object forming part of, connected with, or belonging to such road, street or thoroughfare.
Protected area	A protected area as defined in the National Environmental Management: Protected Areas Act, 2003 (Act 57 of 2003).
Protected tree	A tree protected in terms of the National Forests Act, 1998 (Act 84 of 1998).
Pruning	The removal of tree parts to control or enhance their performance or function in the landscape, including crown lifting, reduction and cleaning.
Resilience	The capacity of individuals, communities, institutions, businesses and systems in a city to survive, adapt and thrive no matter what kind of chronic stresses and acute shocks they experience.
Riparian	Adjacent to, or within the floodplain, of a watercourse or wetland.
Road reserves	A designated area of land that contains or is able to contain a public street or public road, including the road and associated verge, which land may or may not be defined by cadastral boundaries.
Root ball	The main base mass of roots of a plant and the soil surrounding them.
Significant tree	A tree that is considered exceptional in terms of cultural, historical, scientific or aesthetic value.
Skilled tree worker	A person who, through training and experience, has sound tree knowledge, and is familiar with maintaining and removing trees, and the equipment used for such, and has demonstrated ability in the specialised techniques involved.
Specimen tree	A tree that is particularly beautiful, interesting or unusual and which is a focus of attention.
Topping	Also 'heading', 'tipping', 'hat-racking', 'rounding over', 'lopping or lobbing'. The indiscriminate cutting of tree branches on the main limb and all lateral branches to the same height.
Transplanting	The digging out of a tree in one location and replanting it in another.
Tree	A woody perennial plant with an elongated stem, or trunk, supporting branches and leaves in most species, also includes the critical root zone.
Tree health	All factors (biotic and abiotic) that affect the vigour and productivity of a tree.

Tree management	The protection and maintenance of the existing tree asset base in the city, as well as the planning, planting and maintenance of trees.
Tree Work Procedures	A document developed to ensure uniform standards for all aspects of tree management on City-owned land.
Urban forest	The sum of all trees growing within an urban area.
Way leave	An approved right of way given for working over or under another ground or property.

ABBREVIATIONS

Abbreviation	Term
CARA	Conservation of Agricultural Resources Act, 1998 (Act 43 of 1998)
CDS	City Development Strategy
CCT	City of Cape Town
CSI	Corporate Social Investment
CTSDF	Cape Town Spatial Development Framework
DALRRD	Department of Agriculture, Land Reform and Rural Development
DFFE	Department of Forestry, Fisheries and the Environment
DWS	Department of Water and Sanitation
ECD	Early Childhood Development
EGS	Economic Growth Strategy
HPOZ	Heritage Protection Overlay Zone
HWC	Heritage Western Cape
IDP	Integrated Development Plan
IRT	Integrated Rapid Transit
NEMBA	National Environmental Management Biodiversity Act, 2004 (Act 10 of 2004)
NEMPAA	National Environmental Management Protected Areas Act, 2003 (Act 57 of 2003)
NHRA	National Heritage Resources Act, 1999 (Act 25 of 1999)
NMT	Non-motorised Transport
POS	Public Open Space
PSHB	Polyphagous Shot Hole Borer
SAHRA	South African Heritage Resource Agency
SDS	Social Development Strategy

1. INTRODUCTION

The City of Cape Town recognises the important role of trees in the urban environment in terms of creating a sense of place and to enhance the social and public environment. Trees transform neighbourhoods into desirable areas to live, work, and play. They can be used to transform underutilised spaces in destination sites, change roadways into scenic routes, demarcate community gateways and become symbols as part of City landscapes. In the built environment, trees add beauty, form and structure to urban design as well as, screen undesirable sights, make buildings more 'human' in scale and serve to buffer noise, sun, and wind. In the absence of built structures, trees are tangible and aesthetic features in the historic and cultural landscape. Trees also support other life forms by providing food and habitat as well as providing other essential ecosystem services.

Trees are also important for climate change adaptation and mitigation by improving air quality; regulating microclimate; combatting the urban heat island effect; assisting with flood mitigation; contributing to carbon sequestration and optimising thermal comfort by shading and cooling, thereby decreasing urban energy consumption.

The City of Cape Town is situated in one of the most biodiverse regions in the world and has pledged to conserve its unique biodiversity. This Policy is therefore aligned with the existing Bioregional Plan (City Policy) and the Biodiversity Network.

This Urban Forest Policy outlines the City's positions, roles, responsibilities, and goals regarding the planting, management and maintenance of trees in the city. The scope of the policy has been expanded to provide guidance in relation to tree management to private landowners, as well as articulating their roles and responsibilities. Furthermore, it also provides decision-making criteria to ensure informed decision-making, transversally, by all City departments. It starts by outlining the current challenges to adequately managing and maintaining trees and then lays out the directives that indicate how the City will exercise and govern its various duties and responsibilities.

2. PROBLEM STATEMENT

2.1   The City of Cape Town's strategic frameworks and policies emphasise sustainable development, environmental protection and the creation of quality living and work environments. Trees play a critical role in achieving these objectives and therefore these valuable environmental assets need to be retained, provided and managed in a manner that will optimise the outcomes of key City strategies.

2.2   However, the retention, provision and management of trees within the urban environment is an on-going challenge because the protection and survival of trees is threatened by: -

    2.2.1   An increasing demand on land for development;

    2.2.2   A lack of awareness of the value of trees, particularly in the urban environment;

    2.2.3   Densification, particularly where multiple dwellings are permitted per erf, as well as subdivision of existing properties, which can sometimes put trees (often mature trees) at risk of removal;

    2.2.4   Competing societal needs and demands resulting in trees being considered a nuisance and messy, rather than a benefit in some instances;

    2.2.5   An increased occurrence of illegal harvesting of tree-related produce for cultural and medicinal need (e.g. bark stripping of certain species);

    2.2.6   Climate change, disrupting weather patterns, leading to unpredictable water availability affecting tree planting due to water restrictions during drought periods, as well as reduced tree survival due to water stress;

2.2.7 Increasing occurrence of pests and diseases that cause the loss of trees. Examples include Polyphagous Shot Hole Borer (PSHB) that attack a wide range of exotic and indigenous trees; various fungi, often targeting oak trees;

2.2.8 Unlawful land occupation;

2.2.9 Expansion of infrastructure; road widening and construction; and

2.2.10 Limited resources relating to tree maintenance.

2.3 Due to increasing urbanisation demands, tree management must be carefully applied to ensure acceptable tree survival rates, whilst reducing potential risks that trees can pose to people, property, infrastructure and the environment. These risks are enhanced by the poor selection of planting sites, tree placements, inappropriate choices of species or lack of tree pruning and maintenance.

2.4 Cape Town is one of many of cities across the world affected by water scarcity brought on by climate change and it is anticipated that drought periods will be more frequent, longer and more severe in future. Clearing of invasive alien trees to promote water security, biodiversity conservation and reduce wildfire risk is therefore endorsed. It is further accepted that the reliance on potable water to irrigate trees is not sustainable and alternative solutions must be sought, such as groundwater, rainwater, reclaimed effluent or other non-potable water, to ensure trees are watered and maintained to reach maturity. This is one of the key principles underpinning the formulation of this Urban Forest Policy.

2.5 The City of Cape Town's current Tree Management Policy, adopted by Council in 2015 lacked sufficient recognition of trees as a network, and their green infrastructure value, which compromises the holistic approach to tree management and the benefits derived from an abundance of trees forming an urban forest. Its application was also predominantly within the operational environment of the Recreation and Parks Department and not adopted as a City-wide approach to tree management within the Urban Environment. Over time the applicability and relevance of the existing policy has diminished as the strategic framework has been updated and it has become incumbent to undertake a revision of the existing policy. A need to develop an Urban Forest Policy that is responsive to the changing social, legislative and environmental context of the city and can be adopted across City, public and privately owned land is required.

3. DESIRED OUTCOMES

3.1 The objectives of this policy is the following.

    (a) Ensure the retention, enhancement and management of the city's urban forest;

    (b) Ensure that the city's trees contribute positively to the quality of the local environment;

    (c) Ensure that trees do not pose a risk to the health and safety of people, or of damage to property;

    (d) Ensure that trees are protected from unnecessary harm; and

    (e) Provide for a uniform approach to the management and care of tree assets.

This will be accomplished by providing or referring to standards, guidelines, and recommended practices that result in a safe, healthy urban forest that contributes to a quality environment and supports climate adaptation.

3.2 The outcome of the implementation of a uniform and transversal policy for the management of trees within the boundaries of the city will be clustered around the following four key components:

3.2.1   Promote sustainable new tree planting.

> **3.2.1.1**   Suitable species selection that prioritise the planting of indigenous and drought resistant non-invasive trees in Public Open Spaces, Road Reserves, Parks, Sport fields and within new developments.
>
> **3.2.1.2**   Selection of non-host Polyphagous Shot Hole Borer (PSHB) tree species.
>
> **3.2.1.3**   Integrated greening and tree planting programmes in new housing developments as well as other suitable areas, as identified through service level agreements between City departments for the planting of new trees.
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> **3.2.1.4**   Engagement with all stakeholders and role-players responsible for planting trees on City land to ensure alignment and integration of tree planting initiatives.
>
> **3.2.1.5**   Prioritise, where possible, irrigation with non-potable water, to establish and maintain trees.
>
> **3.2.1.6**   Focus on high profile locations such as major through routes, intersections, public transport interchanges, relevant areas identified for Green Infrastructure Network corridors and areas highlighted as being particularly vulnerable to urban heat stress.
>
> **3.2.1.7**   Plant fewer large trees rather than many small trees to reduce maintenance, depending on circumstances. In windy areas, however, sometimes better to plant smaller, bushier trees in groups or clusters.
>
> **3.2.1.8**   A diversity of species to withstand future pests, diseases and a range of future climate conditions.
>
> **3.2.1.9**   Focus on tree planting and green infrastructure development in areas with a low canopy cover.

3.2.2   Ensure the sustainable management of current trees.

> **3.2.2.1**   Establish guiding principles, standards, and practices for relevant City department staff, agencies, community partners and service providers.
>
> **3.2.2.2**   Regulate the protection, planting, pruning and removal of trees by ensuring an integrated City-wide approach based on sound arboriculture practices.
>
> **3.2.2.3**   Reduce risks related to ad hoc approaches to tree maintenance by various internal and external role-players.
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> **3.2.2.4**   Prevent tree loss due to insufficient watering programmes and tree damage caused by construction activities, improper pruning practices, and tree diseases and pests.
>
> **3.2.2.5**   Implement integrated management frameworks and service level agreements between City departments in order to prevent unnecessary damage to trees during construction or maintenance works or related activities or in granting of additional rights through land use decisions.
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> **3.2.2.6**   Manage trees at urban/natural interface that may exacerbate fire risk.
>
> **3.2.2.7**   Undertake research on international examples of best management practices.

3.2.3 Reinforce the importance and value of trees (ecological, social, economic, health).

3.2.3.1 Improve understanding and awareness of the importance of trees and the tree lifecycle within a given habitat or environment, including their contribution to climate change adaptation and mitigation, building resilience and contributing to a more liveable city.

3.2.3.2 Develop partnerships with public and private sector entities and other interested and affected parties to promote tree planting and management on both public and private land where appropriate. Emphasise the importance of trees within the urban context, and promote the protection of cultural landscapes, qualifying individual trees, tree lanes and tree avenues of heritage significance and trees in general.

3.2.3.3 Highlight the traffic calming effect of trees, as well as the benefits of roadside tree planting on the health and well-being of communities, such as stress relief and shelter from the elements when commuting. Pollution assimilation, the amenity value and recreational benefits of such trees, also needs to be emphasised.

3.2.4 Encourage adequate tree management on private land.

3.2.4.1 Facilitate and encourage the planting and maintenance of trees by residents and other stakeholders wherever and whenever possible.

3.2.4.2 Provide clear guidelines for development and construction near trees e.g. trenching, building, hard surfacing, raising or lowering ground levels, excavation or compaction etc. in order to protect the trees.

3.2.4.3 Encourage protection of existing trees, especially mature and significant trees.

3.2.4.4 Allow qualifying indigent[1] occupants to request assistance to trim, and/or remove trees on their property, from the City's Recreation and Parks Department, where trees pose a risk of damage or injury on private property.

4. IDP AND STRATEGIC PRIORITY ALIGNMENT

4.1 Reviewing the Tree Management Policy is necessary to incorporate the strategic vision for the City of Cape Town as outlined in the Five-Year Integrated Development Plan 2022 - 2027 (IDP). The alignment to IDP objectives and priorities are listed below:

(a) OBJ 9: Healthy and sustainable environment.
(b) OBJ 10: Clean and healthy waterways and beaches.
(c) OBJ 14: A resilient city.

4.2 The diverse value of trees makes it a contributor to various priorities and foundations of the IDP but in particular to:

4.2.1 **Economic Growth Priority** – Economic Growth is the principle priority to achieve the IDP's vision to achieve a City of Hope. The Urban Forest Policy links specifically to the

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[1] As prescribed by the Credit Control and Debt Collection Policy.

Targeted Urban Development Programme that outlines both precinct management and development approaches. Trees and landscaping adds to a sense of place and becomes an integral part of creating healthy public spaces that aids attracting locals and visitors.

4.2.2 **Basic Services Priority** – Under the *Water Resilience programme's Catchment Management Project,* the City prioritises the removal of alien vegetation around targeted catchments to limit the loss of river flow and in turn increase yields in our dams.

4.2.3 **Safety Priority** – As part of the *Holistic Crime Prevention Programme* and the *Safer Community Facilities Initiative,* the City works with communities to create high quality and well-maintained parks. This initiative includes planting trees and other plants in a manner that ensures "line of sight"/passive surveillance opportunities for communities.

4.2.4 **Public Space, Environment and Amenities Priority** – The Urban Forest Policy directly reflects and implements this priority as it deals with trees in public spaces as well as how they contribute to, and shape these spaces and the environment. The *Environmental and Biodiversity Management Programme* commits the City to protect, restore and manage its natural areas to ensure their long-term sustainability. Under the *Environmental and Biodiversity Management Initiative* management of alien invasive species are emphasised again as well as generally protecting natural assets. The *Green Infrastructure Initiative* expresses how we can utilise Green Infrastructure that can be cost-effective, enhance quality of life, and improve resilience to climate change.

Trees provide important ecosystem services such as flood attenuation, water purification and infiltration, and coastal zone protection. The *Quality Community Facilities Programme's Recreation* and *Parks Development and Activation Initiative* aims to create well-maintained, safe and well used parks and open spaces that encourages healthy and active lifestyles. Finally the *Partnerships for Quality Public Spaces Programme* outlines how the City collaborates with partners and communities to maintain parks and public spaces that includes tree planting and maintenance.

4.2.5 **Transport Priority** – The *Road Safety and Maintenance Programme* includes a *Road Safety Initiative* that aims to improve road safety for all users. Trees can become hazards if not well maintained. On the other hand, trees can become part of the landscape design of streets and pathways "communicating slower speeds" and creating barriers to primarily motorised transport making streets safer for vulnerable road users such as pedestrians.

4.2.6 **A Resilient City Foundation** – Under this foundation, trees play a major role in climate change responses both from a mitigation (absorbing Carbon Dioxide) as well as adaptation point of view (root structures that protect against flash flooding). The Urban Forest Policy also directly implements the *Integrated Urban Health Programme* in that it improves and supports a healthy environment. It is crucial that the Policy also addresses the disparities that exists in environments where some communities might lack access to clean and green environments, which negatively affects their overall health and wellbeing.

5. POLICY PARAMETERS

5.1   The focus of this policy is the protection and management of trees that grow within the city. This includes City-owned land, City-owned land that is leased to individuals, groups or organisations, state-owned and private land, but excludes endemic trees inside proclaimed protected areas. This review (the Urban Forest Policy) aims to develop a transversal policy that applies to the management of trees growing in the city, but will not apply to naturally occurring trees growing inside protected areas.

5.2   Goals of this policy are to grow the urban forest through new planting, to protect the urban forest from threats and loss by preserving the city's existing trees, to manage and maintain the urban forest to ensure sustainability, to engage with stakeholders and implement awareness campaigns and to monitor and valuate trees.

5.3   This policy will take into account the management requirement related to the full life-cycle of a tree, the conditions for tree removals, trees growing within the urban environment and the appropriateness of the selection of species, planting locations and local contexts.

5.4   This policy deals with trees, forest and arboriculture elements, but it does not deal with other horticultural elements such as shrubs, groundcovers and other flowering plants.

6. TRANSVERSAL IMPLICATIONS

6.1   Due to the large number of trees on City land, the total management responsibility cannot practically reside with one City department. The Recreation and Parks Department will play an advisory and consultative role to other departments with regards to the management of trees, although it remains the responsibility of each department to ensure that they carefully consider the Toolkit on Trees: Best Practice Guidelines developed as part of the City of Cape Town's Green Infrastructure Programme.

6.2   Where departments need assistance with management of trees on their properties, service level agreements will be concluded to ensure well-defined roles and responsibilities.

6.3   The following internal directorates and departments are affected by the policy:

   6.3.1   **Electricity Generation and Distribution** - Maintenance of trees under or adjacent to electrical cables or streetlights.

   6.3.2   **Urban Mobility** – Recreation and Parks will maintain trees in road reserves and a service level agreement is required to manage and maintain trees when infrastructure implementation and maintenance is required.

   6.3.3   **Water and Sanitation** - Management of trees in rivers and other storm water infrastructure. Regulation of the use of water for the management and maintenance of trees.

   6.3.4   **Environmental Management** - Planting and maintenance of trees in nature reserves, according to such reserve's management plan, and other nature conservation areas in areas zoned for high intensity use, such as picnic sites and multipurpose centre precincts. Input into landscape plans for protection and conservation of trees with

heritage, cultural and environmental value, including significant or mature trees. Decide on trees that may be affected by proposed development in HPOZ's. Input into the management and control of alien and invasive trees on City land as required by the National Environmental Management: Biodiversity Act, 2004 (Act 10 of 2004) (NEMBA). Promoting the importance of trees as green infrastructure assets and for climate change adaptation.

6.3.5 **Human Settlements** – Opportunity to plant and maintain trees and create landscapes in human settlements, inclusive of road reserves.

6.4 The following departments play an important role in the enhancement and management of the City's urban forest:

6.4.1 **Metropolitan Police Services** – Enforcement of City by-laws and other legislation.

6.4.2 **Law Enforcement** – Enforcement of City by-laws and other legislation.

6.4.3 **Solid Waste Management** – To protect the environment by providing reasonable measures for reducing, re-using, recycling and recovering of waste as per the National Environment Management Waste Act, 2008 (Act 59 of 2008).

6.4.4 **Urban Planning and Design** – Ensuring that trees are properly considered during the urban planning and design process, including the retention, planting and maintenance of trees.

6.4.5 **Resilience** – In terms of a comprehensive city-wide heat plan, make recommendations on green infrastructure and tree coverage to mitigate and adapt to increased temperatures, high heat days and heat waves.

6.4.6 **Development Management** – Can assist with ensuring proper management and protection of trees within developments, especially protected, significant or mature trees, including to retain the integrity of tree avenues, during the evaluation of site development plans, landscape plans and the imposition of conditions of the plan approval process.

6.4.7 **Property Management** – Planting and maintenance of trees on land purchased by the City for municipal purposes and residents who need to lease or buy City-owned buildings and land.

6.5 To ensure retention of existing trees, all departments are to consider trees and undertake to prevent and mitigate loss. In instances where prevention and mitigation is not possible, the department should seek alternative ways to compensate for loss or damage.

7. EXTERNAL STAKEHOLDERS

7.1 There are many external stakeholders and role-players, most of who are interested in the provision, availability and benefits of trees and not necessarily in the management and maintenance thereof. The following lists some of the stakeholders and role-players that the City may engage with regarding tree management:

(a)   National and Provincial Government;
(b)   General public;

(c)   Developers and private companies;
(d)   Environmental groups and tree protection activists;
(e)   NGOs and community organisations;
(f)   Heritage societies or conservation bodies;
(g)   Schools and other education institutions;
(h)   Nursery traders;
(i)   Landscaping industry;
(j)   Residents associations;
(k)   Homeowners associations;
(l)   Academic institutions;
(m)   Professional bodies;
(n)   Friends groups; and
(o)   Beekeepers.

8. LEGISLATIVE AND POLICY FRAMEWORKS

The following legislation and policies apply and guide this Urban Forests Policy:

8.1   Legislation

(a)   Constitution of the Republic of South Africa, 1996.
(b)   By-law relating to Streets, Public Places and the Prevention of Noise Nuisances, 2007.
(c)   Conservation of Agricultural Resources Act, 1983 (Act 43 of 1983).
(d)   Local Government: Municipal Finance Management, 2003 (Act 56 of 2003).
(e)   Municipal Planning By-law, 2015.
(f)   National Building Regulations and Building Standards Act, 1977 (Act 103 of 1977).
(g)   National Environmental Management Act, 1998 (Act 107 of 1998).
(h)   National Environmental Management: Biodiversity Act, 2004 (Act 10 of 2004).
(i)   National Forests Act, 1988 (Act 84 of 1998).
(j)   National Heritage Resources Act, 1999(Act 25 of 1999).
(k)   Nature Reserves By-law, 2020.
(l)   Public Parks By-law, 2010.
(m)   Spatial Planning and Land Use Management Act, 2013 (Act 16 of 2013).
(n)   Water Act, 1998 (Act 36 of 1998).
(o)   Water By-law, 2010.
(p)   Water Services Act, 1997 (Act 108 of 1997).
(q)   Western Cape Land Use Planning Act, 2014 (Act 3 of 2014).

8.2   Policy Frameworks and Guidelines

(a)   Climate Change Strategy, 2021.
(b)   Climate Change Action Plan, 2021.
(c)   Cultural Heritage Strategy, 2005.
(d)   Design and Management Guidelines for a Safer City (Best practice guidelines for the creation of sustainable, safe and lively neighbourhoods in Cape Town), undated.
(e)   Environmental Strategy for the City of Cape Town, 2017.
(f)   Green Infrastructure Programme: Best Practice Guidelines: Toolkit on Trees, 2020.
(g)   Landscape Plans (booklet 8), Development Management Information Guideline Series, 2018.
(h)   Polyphagous Shot-Hole Borer Protocol, version 1: 28 May 2019.

(i)   Safe Use of Greywater, undated.

(j)   Management of Urban Stormwater Impacts Policy, 2009.

(k)   Tree Works Procedure, 2015.

(l)   Water Strategy, 2020.

(m)   Resilience Strategy, 2019.

(n)   Floodplain and River Corridor Management Policy, 2009.

(o)   Urban Design Policy, 2013.

(p)   Parks Development Policy, 2015.

(q)   Cape Town Bioregional Plan, 2015.

9. THE VALUE AND BENEFITS OF TREES

9.1   Trees are an essential part of our natural landscape and form part of Cape Town's cultural and aesthetic backdrop. Trees have a large part to play in making Cape Town a resilient city that can adapt to climate change. Whether trees are indigenous or exotic, collectively, they form part of our urban forest, and offer valuable social, ecological and economic benefits.

9.2   Trees offer a number of environmental, social and economic benefits. The most notable under these sections are:

Table 1: Value of Trees

Environmental	Social	Economic
Provide shade and cool the city Through the process of transpiration and the provision of shade, trees help reduce day and night time temperatures, especially during summer when temperatures are high.	**Improving community cohesion.** Green open space with trees defining space, providing shade, and creating a sense of place, provides for events, festivals and celebrations throughout the city. These can bring diverse groups of people together within a public realm that is available for everyone to enjoy.	**Reducing energy costs.** Restoring natural systems is often more cost-effective than technological substitutes or building new infrastructure. Major economic benefits come through shading buildings in summer, reducing the need for air conditioning, in turn cutting energy costs. Increasing tree cover, or strategically planting about three shade trees per building lot, saves thermal energy costs.
Reduce stormwater flows and nutrient loads. Tree canopies intercept and mitigate the impact of heavy rainfalls. Healthy tree roots help absorb the nitrogen, phosphorus and heavy metal content in stormwater.	**Reducing heat related illnesses.** The shade provided by trees on hot summer days helps to reduce localised temperatures by up to five degrees Celsius.	**Decreasing health costs.** Research suggests that a healthy green city helps alleviate the burden on national health systems.
Reduce air pollution, airborne particulates and greenhouse gas emissions. Vegetation ameliorates air pollution and reduces greenhouse gases. Through the process of photosynthesis trees remove carbon dioxide, nitrous oxides, sulphur dioxide, carbon	**Improving mental wellbeing.** Access to, and views of, green spaces and trees have positive effects on people's wellbeing. Many studies have explored relationships between greenery in the landscape and levels of depression and wellbeing.	**Marketing the city green spaces play a role in defining the culture and image of a city.** A better image makes a city more competitive, thus expanding its political and economic influence. Tourism is of increasing importance to many cities, and green space can help to promote

Environmental	Social	Economic
monoxide and ozone from the atmosphere.		tourism, as main attractions or more commonly as attractive 'settings' for various types of events and activities that boost the local economy. Presence of trees increase property value.

10. POLICY DIRECTIVES

The following are the key elements of this policy and must be considered as a single Tree Management System, namely:

10.1   Grow the urban forest through new planting to maximize benefits of trees and urban greening.

The City aims to maximise sustainable planting of trees, within transformed and modified urban areas, in order to increase percentage canopy cover and address disparity between leafy areas vs non-leafy areas.

The City's Tree canopy cover was determined to be at six percent in 2020 (for the entire City footprint area). This was calculated utilising infrared imagery and advanced computer software. Knowing the baseline canopy coverage, will assist in working on a future canopy cover goal. It can also assist to know if the urban forest cover is decreasing due to disease, pests, fire and tree senescence. A follow up assessment will assist the City to track canopy change and adapt urban forest management priorities and plans.

It must be kept in mind that the city is situated in the Fynbos biome. This vegetation type is not naturally rich in trees; in fact it is dominated by low and medium shrubs and geophytes, with trees confined to protected ravines, mountainsides and valleys (normally closer to mountain ranges). New tree planting by the City will therefore focus on planting suitable species in Public Open Spaces, Road Reserves, Parks, Sport fields and new developments**.**

10.1.1   New tree planting

The City shall plan for the planting of new trees and encourage the planting of new trees by private landowners.

10.1.1.1   When choosing tree species, consideration should be given to the following:

(a) available planting space and the size of the mature tree;
(b) the planting distance between trees to be based on species selected, services encountered, taking all local factors and context into consideration;
(c) diversification of species planted to increase biodiversity value that will serve as an effective buffer against the impacts of climate change, droughts, pests and other shocks;
(d) planting of appropriate local indigenous, water-wise or resilient tree species dependant on local conditions such as wind tolerance, sun and water table, as well as cultural landscapes; and

(e) planting of new trees need not exclude the use of appropriate exotic species provided that they are non-invasive and are suited to local conditions.

(f) Consider fruit or flowering trees that would not create nuisances (such as attract pests and diseases, increase risk of slipping on fruit on footways). Nut trees might be more suitable.

10.1.1.2   The Recreation and Parks Department as the City's custodian of the Urban Forest Policy, will promote the planting of appropriate new trees by any other department and residents of Cape Town.

10.1.1.3   Areas prioritised for planting by the City, will be based on urban planning proposals, new areas for human settlement, road upgrade projects, existing residential and business areas where the tree canopy is very limited or non-existent, programmes to reduce the urban heat-island effect, green infrastructure network corridors and climate change adaptation imperatives.

10.1.1.4   New tree planting can also take place when developers, residents or other parties request to plant trees on City land. These requests will be processed via the Recreation and Parks Department using Tree Planting Request forms or way-leaves for the planting of new trees.

10.1.1.5   Tree planting is generally undertaken during the rainy season from May to August of each year. Planting during warmer summer months is not encouraged, unless a sustainable water source is available.

10.1.1.6   On City land, trees shall not be planted under the following circumstances (see detail in Tree Work Procedures):

(a) where space is insufficient to provide for tree planting;
(b) where sustainable water sources are not available;
(c) where it may negatively affect municipal infrastructure, interfere with any underground or overhead services and where maintenance of underground infrastructure could compromise trees;
(d) close to a driveway or road intersection where it is likely to impair sightlines of motorists, cyclists or pedestrians;
(e) where it may obstruct sightlines to traffic signs, signals or direction signs;
(f) where pedestrian paths may be obstructed in such a way to cause people to walk in the street, or which makes passage by wheelchairs or pushcarts difficult;
(g) where it will impact negatively on Biodiversity Network sites; and
(h) where it may cause fire risk.

10.1.1.7   Existing streetlights and lighting shall be taken into consideration when planting is undertaken.

10.1.1.8   Private planting is not permitted on City-owned or leased land without prior consultation with the Director: Recreation and Parks or his/her delegated authority.

10.1.2 Replacement (or blanking) planting

Blanking is the filling in or replacement of trees where previous trees have died. This typically takes place in rows, avenues and groups of tree.

10.1.2.1   Where trees have died or are damaged due to drought, vandalism, lightning or the impact of human activity the individual tree may be removed and replaced with an appropriate tree, to ensure that the continuity of the planned tree planting programme remains in place.

10.1.2.2   Replacement planting can also take place where existing streetscapes or avenues of trees are ageing and new trees are inter-planted to ensure that as a tree comes to the end of its natural lifecycle the aesthetic view of the streetscape or avenue is not negatively impacted.

10.1.2.3   Existing trees identified to be unsuitable may, after being authorised by the Director: Recreation and Parks or his/her delegated authority, be removed and replanted with a suitable species. Removal of trees will only be authorised, after all reasonable measures, have been considered.

10.1.2.4   Replacement planting will take place when problematic trees have to be removed due to the damage caused to public and/or private property, in line with the policy.

10.1.2.5   Replacement planting can also be a requirement where trees are lost due to construction works on private land. If replacement trees cannot be planted elsewhere on the private land where construction works occur, consideration is to be given for the Construction Company or landowner to plant trees on City land.

10.1.3 Applications made by public for tree planting

10.1.3.1   Applications by the public for individual tree planting on sidewalks must be in writing and addressed to the local relevant Area Head: Horticultural. Residents may indicate their preference for tree species to be planted but local circumstances will determine the final choice.

10.1.3.2   In the event of the applicant not being able to read or write, provision must be made for such applications to be presented verbally at the local or district office or depot.

10.1.3.3   Residents requesting individual tree planting must undertake to water the tree for a specified period until it becomes established, and the use of non-potable water is encouraged.

10.1.3.4   Unless verbal applications are presented at the local or district office or depot, then signed applications will be a requirement. Such applications to be made on a prescribed form from individual property owners to ensure adequate aftercare of trees. The prescribed form must include instructions about aftercare and a maintenance agreement. The contents of this form must be communicated verbally in the event of the applicant not being able to read.

10.1.3.5 The property owner must be informed that such trees, once planted on municipal land, becomes the property of the City.

10.1.3.6 In the event of trees being planted on public land without authority, the Recreation and Parks Department will only have the tree removed if absolutely required and if, in its opinion, the tree will cause danger to persons or property in the future and all reasonable measures have been taken to avoid unmanageable risk, or violates the conditions mentioned under the chapter "Manage and maintain the urban forest to ensure sustainability".

10.1.3.7 Trees that are planted on City land that cause damage to private property must be reported to the Recreation and Parks Department. Any claims that may arise should be lodged with the City Insurance Section for investigation.

10.1.4 Watering

10.1.4.1 Trees should preferably be planted in the higher rainfall months of the year (May to August). Due to the hot, windy and dry summer season in the city, irrigation is crucial for successful tree establishment. To ensure establishment of trees, a watering programme is needed for at least 3 years after planting. Effective watering methods may include the use of groundwater, rainwater, reclaimed effluent or other non-potable water. Refer to the Tree Work Procedures and the GIP: Best Practice Guidelines: Toolkit on Trees.

10.1.5 Trees donated by the City

10.1.5.1 Trees may be donated to institutions and community facilities such as schools and community greening projects where trees are required as part of a project, according to the City's policy regarding donations and in accordance with the Local Government: Municipal Finance Management Act, 2003 (Act 56 of 2003).

10.1.5.2 Trees may be donated as part of a City initiative, project or campaign such as Arbor Month. For donations to be considered maintenance agreements, need to be in place.

10.1.5.3 On pavements not wide enough to accommodate trees (less than 1.2 meters wide); or where the pavement is not suitable for planting due to impenetrable surface, traffic sightlines or municipal services, a tree / trees may be donated to the adjacent private property at the discretion of the Director: Recreation and Parks or his/her delegated authority.

10.1.6 Memorialisation and commemorative tree planting

10.1.6.1 The Recreation and Parks Department has developed a standard operating procedure (SOP) for memorialisation and commemorative tree planting in line with the City of Cape Town's Memorialisation Policy.

10.1.6.2 A prescribed application form for memorial tree planting in a cemetery or park is available from the local Recreation and Parks Office or online.

10.2   Preserve the city's existing trees

Trees enhance the natural and built environment and the cultural landscape. Planting trees in streetscapes and other hard surfaced urban areas can assist in climate change adaptation. Therefore, trees, except invasive alien species, must be protected and maintained to increase their vigour and lifespan.

It is important to recognise trees for their special contribution to the city's landscape and in preserving this asset, strive towards net zero canopy cover loss. Owners of land, with trees on, especially protected, significant or mature trees, are encouraged to carefully consider the GIP: Best Practice Guidelines: Toolkit on Trees. The guidelines provide a better understanding of the important role played by trees, and offers reasonable and practical guidelines to ensure the longevity of the urban tree population and good tree health. Promoting the benefits of preserving, maintaining and planting trees by providing standards, guidelines and recommended practices ensures an urban forest that contributes to the quality of life for all.

10.2.1   The special categories of trees are listed below:

10.2.1.1   Champion trees

These are trees of exceptional importance that deserve national protection because of their remarkable size, age, aesthetic, cultural, historic or tourism value. In line with the DFFE Champion Trees Project, the Recreation and Parks Department will establish and maintain a database of Champion Trees within the City of Cape Town municipal boundaries.

(a)   Any person or organisation can nominate trees for Champion status and submit the said nomination to the DFFE for consideration. Nominated trees may be indigenous or exotic. Selected trees that comply with the national criteria will be gazetted as Champion Trees and will then have to be managed and maintained as such.

(b)   Champion trees have special protected status in terms of the National Forests Act of 1998. No such trees may be cut, disturbed or damaged without a license. Licences for the removal or pruning of champion trees are only obtainable from the DFFE and not from the City.

(c)   Additional protective measures may be necessary for some trees, such as the erection of fencing enclosures.

10.2.1.2   Significant Trees

The City identified the need to elevate the status of certain individual or groups of trees, occurring on City land, that have significant qualities in order to ensure a higher level of maintenance and protection. This will allow for trees nominated for Champion tree status to still receive an additional layer of protection, by the City, if Champion status is not given at a national level. Trees nominated as Significant trees, need not also be nominated for Champion tree status.

The criteria used to identify Significant trees are:-
(a)   outstanding aesthetic quality;
(b)   exceptional height;
(c)   stem circumference or canopy spread;

(d)   commemoration or association with particular historical or cultural events;

(e)   association with a well-known public figure or ethnic group;

(f)   tree/s of great age;

(g)   outstanding example of a specific species, rare or unusual species; or

(h)   likely to be a remnant or regrowth of a historical avenue.

Nominations for Significant trees status will be invited by the Recreation and Parks Department and considered on an annual basis. A register of Significant trees will be kept and revised annually.

Significant trees will deserve special attention in terms of management and protection. Significant and mature trees should be protected as per the GIP: Best Practice Guidelines: Toolkit on Trees. Removal of Significant trees may only be authorised by the City Arborist, and when no other management options are feasible.

10.2.1.3   Protected Trees

In terms of the National Forests Act (Act 84 of 1998) forest trees or protected tree species may not be cut, disturbed, damaged, destroyed and their products may not be possessed, collected, removed, transported, exported, donated, purchased or sold, except under license granted by the DFFE.

The criteria used to select tree species for inclusion in the protected tree list are:

(a)   Red List Status (rare or threatened species);

(b)   Keystone Species Value (whether species play a dominant role in an ecosystem's functioning);

(c)   Sustainability of Use (whether a species is threatened by heavy use of its products such as timber, bark etc.);

(d)   Cultural or Spiritual Importance (outstanding landscape value or spiritual meaning attached to certain tree species); or

(e)   Legislation (whether a species is already adequately protected by other legislation).

Protected species commonly occurring in the city:

- *Podocarpus elongatus* (Breede River Yellowwood)
- *Podocarpus henkelii* (Henkel's Yellowwood)
- *Afrocarpus falcatus* (Outeniqua Yellowwood)
- *Podocarpus latifolius* (Real Yellowwood)
- *Sideroxylon inerme subsp. inerme* (White Milkwood)
- *Leucadendron argenteum* (Silvertree)
- *Ocotea bullata* (Stinkwood)

10.2.1.4   Trees in Heritage Protection Overlay Zone and Heritage areas

In terms of the City's Municipal Planning By-law (2015), no-one may destroy or remove a tree(s), hedge or plantings in a heritage protection overlay zoning (HPOZ), which includes the Bakoven, Clifton and Glen

Beach Bungalow Area. Unless exempted, special consent from the responsible authority will be required (refer to the City of Cape Town Environmental and Heritage Management Branch).

Any heritage place that has been designated a heritage area in accordance with the National Heritage Resources Act, is deemed to have heritage protection overlay zoning and is subject to the provisions of this overlay zone.

10.2.1.5   Trees impacted on by Development

Trees may also be protected through title deeds, planning approval conditions or town planning schemes. The City's requirements for building plan submission, in terms of section A6(g)(ii) of the National Building Regulations and Buildings Standards Act, require that trees on City land that could be affected by proposed vehicular access routes be shown. The applicant would also have to show if any protected trees or City trees on the property and the neighbouring property, whose root zone extends onto such property, would be affected by development proposals. An omission of relevant information in this regard could constitute fraud/misrepresentation on the part of the applicant, as it could cause the City to approve a plan that does not comply with all other legislation.

10.2.2   Impact streetscapes and tree avenues

Recreation and Parks Department will continue to strive for the development and protection of special streetscapes and tree avenues, which have historic significance, positive visual impact and economic benefits such as promote tourism, amenity value and recreational benefits.

Existing tree avenues are to be categorised and management plans developed. Replacement planting and blanking to be done proactively to maintain the impact of the streetscape or avenue.

10.2.3   Threats to, damage and loss of trees

It is prohibited to mark, paint or attach any advertisements to a tree in a public park or public road. In addition, no one may break or damage a tree.

Where trees occur on Public Open Space, developers and utility companies/contractors are required to obtain permission from the Recreation and Parks Department prior to commencing construction work, in order to prevent unnecessary damage to trees. Consideration should be given to the GIP: Best Practice Guidelines: Toolkit on Trees prior to commencing construction work.

This includes, amongst other measures:

(a)   ensuring protective hoarding (fencing) for trees to be retained,
(b)   to ensure trees are watered before construction begins and after completion,
(c)   preventing root exposure to sun and air,
(d)   not storing heavy equipment under trees and placing unnecessary stress on tree roots,
(e)   not rinsing harmful chemicals near tree roots and not trenching near roots.

10.3 **Manage and maintain the urban forest to ensure sustainability**

In order to ensure that trees remain a part of the City's asset base and continue to provide social, economic and environmental benefits, efficient tree management and maintenance is critical. As buildings, public spaces and other assets and infrastructure require maintenance, so does the urban forest.

The driving principles of urban forest management and maintenance are sustainability and preservations. Through these practices, the City aims to achieve zero net loss of tree canopy cover, and with planting ensure substantial increase in the urban forest cover.

These outcomes will be undertaken according to accepted best practice in urban forest management and maintenance. This includes skill and competency development of staff and service providers.

10.3.1 Tree management

The premise that underpins the management of trees in the city is that all trees are valuable and therefore any request or decisions for removal of trees needs to be carefully considered on a case-by-case basis by the Recreation and Parks Department. Trees will only be removed if absolutely necessary or unavoidable.

Pruning of trees follows the same premise as mentioned above. The following factors are taken into account before pruning takes place:

(a) safety (public, staff, contractors and property);
(b) legal factors- upon written request for the removal of any offending branches or roots encroaching upon the complainant's property;
(c) South Africa Road Safety Manual guidelines; and
(d) generally, trees are only to be pruned for sound arboricultural reasons.

Key aspects of tree management and maintenance, including pruning and removal, are discussed below.

10.3.1.1 **Tree Removal on a Public Open Space or road reserves will only be considered by the City if;** -

(a) it presents an unmanageable threat to human life or property;
(b) if the tree has died; or
(c) when expansion of road and underground engineering services is required.

10.3.1.2 **Pruning or removal on City land may be considered by the City where:**

(a) trees cause damage to structures;
(b) trees and roots cause damage to underground or aboveground engineering services and prohibits the operations of municipal services;
(c) trees obstruct pedestrian or vehicular movement or impedes traffic sight lines;
(d) trees obstruct solar powered electricity and solar water heating devices;
(e) trees are known to cause long term repetitive problems for various reasons: such as aggressive roots, producing any product that my

lead to irritations and allergies, based on specialist medical opinion; and

(f)   trees affecting security: such as sightlines of security cameras, wireless signals; electrical fences, razor wire.

10.3.1.3   Pruning or removal of trees on private property or state-owned land undertaken by the City where:

(a)   these trees interfere with overhead or underground services is not the responsibility of the Recreation and Parks Department except for trees causing unmanageable risk to people, property or infrastructure. In these cases the Recreation and Parks Department will give guidance where required;

(b)   such trees are on private land and the occupants are qualifying[2] indigent occupants, the City will cover costs of such pruning or removal; and

(c)   a private landowner (that is not a qualifying indigent occupant) refuses to prune or remove a tree that is causing unmanageable risk to people, property or City infrastructure as instructed by the City, the City may choose to undertake such pruning and removal itself, and recover the costs from the landowner.

10.3.1.4   The City may refuse an application by residents to prune or remove trees where the following reasons are cited:

(a)   interference with radio, TV and internet reception;
(b)   shedding of leaves, fruits, seeds or any other plant material;
(c)   allergic reactions without specialist medical opinion;
(d)   causing excessive shade;
(e)   obstruction including pedestrian movement, an exception would be if pruning is required to improve visibility of traffic sightlines;
(f)   obscuring private advertising boards and signs;
(g)   causing a nuisance in respect of swimming pools;
(h)   hampering the growth of other plants; or
(i)   attracting insects, birds or bats and other creatures because of its flowers and/or fruit.

10.3.1.5   The pruning technique described as "topping, lopping or lobbing" shall only be applied in the following circumstances and on approval by the Director: Recreation and Parks or his/her delegated authority:

(a)   where other conventional pruning techniques do not adequately correct the problem situation;
(b)   above very busy roads and transport corridors;
(c)   where previously topped and new coppice growth is dangerous; and
(d)   any other circumstances considered necessary by the Director Recreation and Parks in consultation with the City Arborist.

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[2] Only those owners/occupants that are registered as indigent as prescribed by the Credit Control and Debt Collection Policy.

10.3.1.6   The City may undertake planned tree removals:

(a)   for purposes of legislative compliance where trees are classified as Alien and Invasive Species in terms of NEMBA (Act 10 of 2004) as published and updated in the Alien and Invasive Species List;

(b)   for purposes of public safety where trees causing a traffic, electrical, fire or health hazard as per specialist departments recommendation;

(c)   where trees interfere with essential services where no other suitable alternatives can be found;

(d)   where trees planted by residents interfere with City services, provided that where the trees are situated on private property the affected parties shall be notified in writing prior to removal;

(e)   when road widening projects have no alternative routes or options available;

(f)   in the interest of the environment where trees are diseased beyond 50% and unlikely to recover after remedial arboricultural work; and

(g)   where trees planted by residents on City land are considered as being unsuitable for the area.

Where trees need to be removed for reasons mentioned above, suitable replacements shall be considered by the Recreation and Parks Department where applicable.

10.3.2 Process for Removal of Trees on Public Open Space and Road Reserves

Trees form part of the green infrastructure asset base of the city and removal should only be considered if the tree poses an unmanageable risk. All efforts should be made to retain the trees.

10.3.2.1   Stump removal

(a)   It is the responsibility of the relevant City landowner department to remove a tree stump where the tree stump causes a safety hazard to the public or an obstruction.

(b)   The stump must be disposed of at a licenced City disposal site. The Recreation and Parks Department may facilitate the removals of such tree hazards on behalf of other City departments if requested to do so.

10.3.2.2   Vehicle access

(a)   Trees on City land, will be considered for removal on request of adjacent property owners for vehicle access, subject to pre-approval by the Recreation and Parks Department before building plans are submitted.

(b)   Approval shall not be granted if removal of the tree is not absolutely necessary, for example, if pruning is more appropriate, or if the removal will be a significant loss given the tree's maturity or contribution to local context. The cost of removal will be the applicant's responsibility.

10.3.2.3 Trees of heritage value

The Recreation and Parks Department will consult the Environment and Heritage Management branch prior to the removal of trees that form part of:

(a) an avenue;

(b) an area of heritage or cultural value, specifically zoned or protected for heritage or cultural value (such as the HPOZs);

(c) an area where many mature trees are located that add to the heritage or cultural context of the location.

10.3.2.4 Dealing with Disputes

(a) The decision to remove a tree lies with the Director: Recreation and Parks or his/her delegated authority. Prior permission should be given in writing (refer to Annexure H of the Tree Work Procedures) before ANY tree may be removed.

(b) In cases where a resident or applicant is dissatisfied with a decision regarding a tree; the dispute may be elevated to the City Arborist.

(c) Should the dispute not be resolved it will be referred to the City Ombudsman for final decision.

10.3.3 Process of Emergency Removal of Trees

10.3.3.1

In the event of fallen trees, on City land, posing a threat or endangering persons or property, such tree/s may be removed, by the Recreation and Parks Department.

10.3.3.2

In an emergency where a tree (or part of a tree) on private property has fallen or is imminent to fall or cause damage, the Recreation and Parks Department, with authorisation from the Director: Recreation and Parks or his/her delegated authority, may remove the tree (or part) in order to ensure the safety of persons and property.

10.3.3.3

This action may be taken in conjunction with the City of Cape Town's Disaster Risk Management Section in the Emergency Services Department.

10.3.3.4

Where other Service Departments need to remove trees (guideline: taller than 4 meters) to prevent damage, or repair damage, the Director: Recreation and Parks or his/her delegated authority, must be consulted. After hours: through the City's Call Centre, the Recreation & Parks duty officer needs to be consulted and his/her permission obtained.

10.3.3.5

Qualifying owners/occupants registered as indigent as prescribed by the Credit Control and Debt Collection Policy can apply to the Recreation and Parks Department to trim, cut down and remove trees that pose a risk of damages or injury on private property, at the cost of the Department. Qualifying owners/occupants must, in writing, indemnify the City against any damages prior to commencement of work and resulting from work being carried out.

10.3.3.6

Emergency work on private land will be limited to "making safe" the immediate unsafe situation.

10.3.3.7 Final cutting, tidying up and removal of debris will be the responsibility of the landowner. The City will not be responsible for any damages / losses caused during the operation.

10.3.4 Tree maintenance

10.3.4.1 Maintenance Standards

(a) Trees on POS that the Recreation and Parks Department manages, are maintained according to the Departmental Minimum Maintenance Standards that is revised regularly.

(b) Focus is on the first three years of the tree's life cycle, to ensure the successful establishment and survival of the newly planted trees.

(c) The Tree Work Procedures document provides for uniform standards for all aspects of tree management only on City-owned land.

(d) The Toolkit on Trees: Best Practice Guidelines, developed as part of the City of Cape Town's Green Infrastructure Programme provides good tree maintenance guidelines for property owners, City officials, councillors, designers, developers and community members in managing and improving our green infrastructure collectively and sustainably to create safe, contextually appropriate environments.

10.3.4.2 Control of Pests and Diseases

A number of pests and diseases affects Cape Town trees. Pests and diseases need to be treated in an effective, but safe, environmentally friendly and cost effective manner. Where applicable, other City departments, external stakeholders, academic institutions, and government departments may be involved.

It is recommended that trees be kept in healthy and vigorous condition as this increases resistance to pests.

Table 2: Pests and Diseases

Pest name	Target species	Action taken
Fungal diseases	Oak species, plane trees	Full canopy cover spray is possible but seldom applied due to environmental impact and cost.
Insects: Aphids (and related sooty mildew) is a particular nuisance during late months of summer and autumn.	Wide range of shrubs and trees. Common on elms and some oaks.	Systemic insecticide is recommended.

Pest name	Target species	Action taken
PSHB: Polyphagous shot hole borer is an invasive beetle (*Euwallacea fornicatus*). They spread the *Fusarium euwallacea* fungus from one tree to the next, which is grown in the tunnels to serve as food source for larvae and adult beetles. This fungus disrupts the flow of water and nutrients in the tree, causing branch dieback and, ultimately, tree death.	PSHB attacks a wide range of species in two categories: Reproductive hosts (both the beetle and the fungus establish and the beetle successfully breeds) and Non-reproductive hosts (hosts are attacked by the beetle and the fungus establishes, but the beetle does not successfully breed. The fungus may or may not cause disease, but is unlikely to kill the tree).	Infested tree/s will be assessed to determine infestation levels and severely infested tree/s are to be cut down, chipped and incinerated or solarised. There is currently no registered treatment for control of the pest. Planting of trees that are known to be non-host species of PSHB is promoted (detail in Tree Work Procedures).

10.3.4.3   Ownership of trees

(a)   All trees growing on City owned land are considered City property.

(b)   In cases where the tree is shared, ownership is determined by considering the position of the base of the tree at ground level where anything greater than 50% determines ownership.

(c)   Where a private owner refuses to remedy tree related problems, the City may carry out work to safeguard City infrastructure at the cost of the owner, unless he/she is registered as indigent as prescribed by the Credit Control and Debt Collection Policy.

(d)   Should the owner fail to execute this work, the City may trim any branches overhanging a road or footway for safety or other reasons. Tree roots may also be trimmed for safety or other reasons.

(e)   Similarly, any private resident may trim any part of a City owned tree overhanging his/her boundary line (cadastral boundary). This includes the root structure of a tree. It is advisable to consult with the Recreation and Parks Area Head: Horticulture. In the case of Special trees then the Recreation and Parks Department must be consulted. Refer to Categories of Special trees.

10.4   Stakeholder engagements and awareness campaigns

Urban Forestry is as much about the citizens of the city as it is about the trees in the city. Through an effective public awareness and education campaign the value placed on trees and the urban forest, as an integral part of the city's sustainable infrastructure, will be increased.

10.4.1 Awareness and promotion

The City may:

10.4.1.1   Develop an education and awareness programme to create greater awareness about the environmental, social, economic and heritage importance of trees as green infrastructure within the urban context. Such an education and awareness programme will also highlight the role the urban forest plays in climate change adaptation and the recreational

and resilience benefits and amenity value of trees. This programme will be funded and implemented by the Recreation and Parks Department together with other relevant departments, in accordance with the City's priorities.

10.4.1.2 Enter into City-to-City or other multi-stakeholder partnerships in relation to trees and particularly their green infrastructure, climate change, recreational and resilience benefits as well as amenity values.

10.4.1.3 Create experiential opportunities by engaging with groups to establish partnerships to transfer special skills and knowledge. Encourage participation in the planting, establishment and maintenance of trees through Community Gardens, Friends Groups, etc.

10.4.1.4 Campaign for private landowners and owners of state land to participate in tree planting, tree maintenance and protection of existing trees to reduce the heat-island effect within identified high-risk areas. Participate in national and international awareness campaigns relating to trees such as Arbor Month and Arbor City Awards.

10.4.1.5 Increase knowledge and engagement among residents, community groups, private sector, and public agencies.

10.5 Tree monitoring and valuation

In order for the City to understand the economic, heritage, environmental and social value of its tree asset base, existing trees need to be inventorised or mapped and a valuation method established.

A tree inventory (or tree census) is an important instrument in managing the urban forest.

There are several possible indicators that may indicate progress with the status of the urban forest:

(a) Increased canopy cover: An increase of canopy cover, where appropriate, will be a positive indicator.
(b) Increased number of trees: The current approximate number of trees should be known.
(c) Increased tree planting and survival numbers.
(d) Public opinion / surveys: Public satisfaction.
(e) Cooler City: Average temperature trends may be measured. Trees may play a role reducing local temperatures.
(f) Attractive City: Citizen and tourist surveys.
(g) Reduced tree related incidents and claims. Claim related data is available from the City's insurance department. This may be analysed to determine trends. A drop in tree related claims might be an indicator of improved tree management and maintenance.

10.5.1 Tree valuation

(a) This is to determine the monetary value of a tree. This valuation can be utilised to establish the overall tree asset value of the urban forest, as well as to establish values in the event of cost recoveries where trees have been illegally removed or in instances of malicious damage.

(b)   It is recommended that the Helliwell Method be used.   Helliwell is an easy to use British method that gives immediate outcome.

(c)   As an alternative: the full replacement cost of the tree may be used, which includes full cost of tree as supplied, delivered, planted and maintained until established.

10.5.2   Record keeping

Operational records must be kept by the Recreation and Parks Department in order to:

(a)   Report to Management.
(b)   Encourage good arboriculture practices e.g. regular watering, pruning, staking, feeding and use of pesticides.
(c)   Be able to deal with enquiries from the public in an efficient and professional manner.
(d)   Provide support for litigation where required.

The following minimum records should be kept by the Recreation and Parks Department:

(a)   Tree planting statistics
(b)   Tree Work Register or SAP records containing similar information
(c)   Tree Inspection Register
(d)   High Risk Tree register

11.   POLICY REVIEW

11.1   The monitoring and evaluation of the policy objectives will be captured within the Service Delivery Business Implementation Plan of the Recreation and Parks Department.

11.2   The Policy will be reviewed on a 5-year cycle, or if there are legislative changes requiring a review of the Policy.