

Living With Trees*

South Dublin County Council Tree Management Policy

2021 - 2026



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Peter Kavanagh | Mayor



Danny Mcloughlin | CEO

Foreword

Trees provide significant economic, social, environmental, ecological and aesthetic benefits in addition to enhancing biodiversity and mitigating Climate Change. They contribute to the character, appearance and wellbeing of the County. This Tree Management Policy, 'Living with Trees', represents our continued commitment to look after and enhance one of our most valuable natural resources. It represents our proactive approach to inspecting, planting, maintenance and management of the tree population, as well as an all-round improved service to our citizens and community. The 2021-2026 policy builds on the 5-year workplan of the previous policy, which achieved the surveying of 30,000 trees, the implementation of the cyclical management regime of street trees and the planting of 6,314 new trees.

The plan aims to continue to survey all street trees to produce an objective prioritised tree maintenance schedule and a proactive tree management programme.

We will expand the tree canopy in the County to combat Climate Change. Trees act as carbon sinks, storing carbon as they grow, reducing carbon dioxide (CO2) in the atmosphere and thereby reducing Climate Change impacts, which is central to our Climate Action Plan objectives.

A public awareness and education programme will be implemented, to provide information on the importance of the trees to our mental, physical and environmental state. Trees are living organisms and are

a unique part of the landscape biodiversity. Many trees are long-lived, offering enjoyment and a range of benefits to residents both now and in the future. They make a huge contribution to the urban landscape, enhancing the quality of life for people living, working and visiting the County.

Our vision is for our trees to thrive in a well-managed, safe, sustainable environment for the benefit of current and future generations. The development of this updated Tree Management Policy supports South Dublin County Council's mission:

To make our county a vibrant and inclusive place for the people who live, visit, work, and do business here, now and for the future.

Cuireann crainn leis an dúlra agus le saol an Chontae. Leagann an beartas seo - 'Ár Saol agus na Crainn' béim ar an tabhacht atá ag baint leis na crainn atá ag fás faoi láthair agus ar ár dtiomantas an ceannbhrat a mhéadú chun troid i gcoinne an athraithe aeráide.

Peter Kavanagh Mayor Danny Mcloughlin CEO



1 Introduction





Trees make a major contribution to the character, appearance and well-being of South Dublin County.

They provide significant economic, social, environmental, ecological and aesthetic benefits to our communities and to our urban and residential streets, parks and open spaces. They also enhance biodiversity and play a crucial role in mitigating climate change. The Council recognises trees as a living asset and will view all the trees within the County as that of an urban forest and part of its Green Infrastructure.

This approach has led to the development of the Living with Trees, Tree Management Policy. This document is aligned with other Council Policies to assist with achieving the Councils aims and objectives:



South Dublin County Councils Corporate Plan (2020 - 2024):

Objective 2: Improve the visual appearance of our County in the interest of economic and social development.

Objective 3: Support a Green infrastructure network across the county to provide a shared space for amenity, recreation, biodiversity protection, flood management and adaptation to climate change.

Increasing the tree canopy cover in the county through the continued tree planting and replacement programme.

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County Development Plan 2016 - 2022:

Green Infrastructure 2 Objective 9: To preserve, protect and augment trees, groups of trees, woodlands and hedgerows within the County. We will do this by increasing tree canopy coverage using locally native species and by incorporating them within design proposals and supporting their integration into the Green Infrastructure network.

Climate Change Action Plan 2019 - 2024:

The importance of Trees to our County can also be identified within this policy with multiple actions identified as contributing factors under the titles of 'Tree Management' and Conservation and Preservation' within the 'Nature Based Solutions' section.

(N12-N19 Tree Management, N20 Conservation and Preservation)

The Tree Management Policy provides a framework to inform and support decisions made by the Council on the management and development of a sustainable urban forest in the County. The Policy is a point of reference for the public, Councillors, Council staff and professionally interested people to enable informed discussion and to establish a clearer, consistent, and more structured approach to the issues affecting trees. This allows for a pro-active and systematic approach to tree management, resulting in a healthier tree population and a greener, more sustainable environment for residents and visitors to the County.



1.1 Urban forest

The urban forest comprises all the trees in the urban realm – in public and private spaces, along linear routes and waterways, and in amenity areas. It is part of green infrastructure and the wider urban ecosystem. The Council will use this concept to help in the expansion of the tree canopy in the County.

1.2 Why have a Tree Management Policy?

South Dublin County Council has responsibility for the management and maintenance for trees in public spaces – streets, parks and open spaces.

Whilst the County has an estimated population of c.60,000 street trees, an inventory of street trees has not previously been undertaken and information on the number, age and condition of trees is limited. It is also well recognised that parts of South Dublin County's administrative area, such as the long-established neighbourhoods of Rathfarnham, Terenure, Templeogue, Tallaght, Clondalkin, Palmerstown and Lucan, have ageing and mature tree populations where tree maintenance is required in order to sustain the health and throughbility of these trees into the future. The planting of new trees and replacement planting where trees have been removed has also been very limited in recent years and there is a need to plan for the renewal and continuity of our tree population.

The development of this Tree Management Policy continues to signal a commitment by South Dublin County Council to looking after one of our most valuable natural resources. It outlines how we manage trees with the development of a strategic, proactive, planned approach to inspection, planting, maintenance and management. It has enabled progress towards an improved service and a more effective and informed tree maintenance programme.

Our objectives are as follows:

- 1 To continue to implement a proactive tree management programme.
- 2 To expand the tree canopy in the County.
- 3 To implement a public awareness and education programme.



Why trees are important

Trees are living organisms and are a unique part of the landscape. Many trees are long-lived, offering enjoyment and a range of benefits to residents both now and in the future. Trees make a huge contribution to the urban landscape enhancing the quality of life for people living, working and visiting the County.

The aesthetic and environmental values as well as social and economic benefits that they provide can be categorised as follows:

- Environmental
- · Climate Change
- Economic
- · Health and Well Being





Why trees are important





- Air quality: trees absorb carbon dioxide and other gases from the air producing oxygen in the photosynthesis process. Each year a mature tree produces enough oxygen for 10 people. Trees also trap dust particles which improves air quality.
- Flooding: trees help mitigate the risk of flooding
 tree canopies intercept rainfall.
- Noise: trees can reduce noise by acting as a sound barrier, This is particularly important in absorbing traffic noise in built up areas.

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Climate change

- Carbon: trees are carbon sinks, they store carbon as they grow temporarily reducing carbon dioxide (CO2) in the atmosphere.
- Habitats:trees and their ecosystem provide valuable habitats for wildlife
- Habitat connectivity: trees provide green links between parks and open spaces allowing opportunities for wildlife to travel from place to place to access new habitats.







Social

- Sense of place: trees create a important landmarks and providing a unique sense of place and
- Nature: trees connect people
- Community links: trees are long lived and are a part of the social

Economic

- Property values: research has shown that the presence of trees can increase the value of residential and commercial properties by between 5 - 18%
- · Village and retail areas: the presence of trees in retail areas positively affects people's behaviour by attracting consumers to an area.
- Effects on heating / cooling buildings: trees provide shade, shelter in wind and a regulation of energy and heat costs.





Health and wellbeing

- Physical benefits: trees have a
- Mental benefits: research has shown that trees reduce stress and give a greater quality of life.
- Emotional wellbeing: trees with and aromas can stimulate positive



1.4 Impact of climate change and trees

Policy: The Council will protect and increase the county's overall canopy cover to mitigate the effects of climate change.

As climate change increasingly becomes a reality, planting and caring for trees in our towns and cities will become even more important. The effects of climate change are predicted to result in warmer, wetter winters with an increased risk of flooding and hotter, drier summers. This policy has previously highlighted the importance of trees in cooling the urban environment and the health, social and economic benefits that trees provide to the public space environment of South Dublin. Trees can also maintain and recycle vast amounts of water and, while flooding is not currently a major climate mitigation issue for South Dublin, the part that trees play in flood mitigation may become increasingly significant in the future.

While trees may play a part in mitigating climate change, they are also directly affected by it and unfortunately the effects of a changing climate will threaten the health and survival of trees. However, one of the greatest challenges facing the local and national tree population is the control and containment of new pests and diseases from outside Ireland. New pests and diseases are a threat to Ireland due to the increased international trade in plants, timber and general goods and the more favourable conditions for new pests and diseases associated with impacts of climate change. Recent examples include ash dieback and bacterial canker of horse chestnuts. The spread of new species-specific diseases to Ireland emphasises the importance

of species diversity. It is important to ensure the future continuity of tree cover across the county by, where practical, managing the age range of trees and by replanting with a more diverse range of species to mitigate the risks that monoculture and climate change present for tree management.

The 'Dublin Tree Canopy Study' undertaken by the School of Geography, University College Dublin and published in March 2017 provides an analysis of data from an aerial survey of the tree cover for the Greater Dublin Region within the lands managed by the four Dublin local authorities and the Office of Public Works. Canopy cover is simply a measure of the physical coverage of the combined tree canopy cover over the land. The survey data is analysed in terms of the environmental services (biodiversity, air quality, water management) provided by the tree cover across the county.

The report indicates that "A tree canopy cover of 15% would make Dublin comparable to other European cities. Currently cover across the county is 10% but there are large variations between local authorities."

Regarding the South Dublin Administrative Area the report finds "South Dublin County Council (SDCC) displays a strong urban/

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rural divide in terms of canopy cover. Rural areas contain approximately double the canopy cover per unit area compared to its urban areas, due in part to the presence of forested areas in the south Dublin Mountains and areas adjacent to the river Liffey. SDCC's urban areas are impoverished in terms of tree canopy, with approximately two thirds of urban SDCC having less than 10% canopy cover. Areas of particular need of tree planting are Adamstown, City West, Firhouse, Jobstown, Tallaght, Palmerstown, Perrystown and Walkinstown."

South Dublin County Council's Climate Change Action Plan, promotes the use of trees and vegetation as adaptive measures to manage air pollution, drainage and flood mitigation etc. Actions aim to develop, agree and embed principles of sustainable and best practice tree planting and management in South Dublin. The residents of South Dublin are also encouraged to support the Council's actions to increase tree canopy cover by planting trees in private gardens thus developing the urban forest.

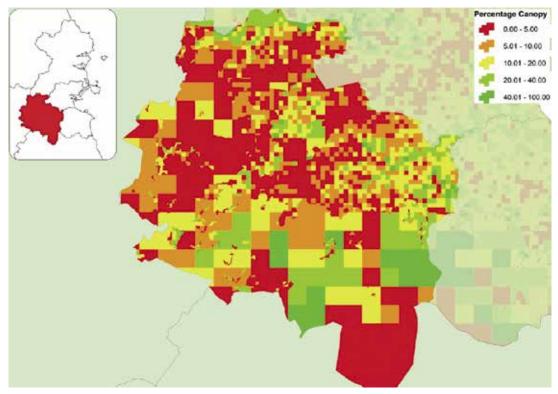


Figure 4 - Estimated tree canopy cover across SDCC, which is 42% urbanised. (Brennan, M., Mills, G, and Ningal, T. 2017: The Dublin Tree Canopy Study. University College Dublin).





1.5 Challenges of managing trees

While trees enhance the urban environment, urban growing conditions, in many cases, are less than ideal. Often, trees are forced to find and compete for good ground and healthy root development in footpaths and roadside margins containing utility networks or foundations for roads and footpaths. Meanwhile, the above ground growth has to contend with a variety of pollutants such as car fumes, salt and de-icing agents. Physical damage and disturbance to trees roots is a frequent consequence of road and footpath reconstruction or trenching works by utility companies. Vehicular damage, particularly by skips and high-sided vehicles, and vandalism can damage trees causing death or disfigurement resulting in a misshapen or weakened specimen. There is also an increasing trend by car users to park their vehicles on verges, causing rutting and soil compaction, resulting in significant damage to tree roots as well as leaving the verge in an unsightly and unsafe condition. Poor management of trees, incorrect pruning, and failure to remove tree stakes and tree ties can also negatively affect tree growth.

Despite all of this, trees can and do survive, albeit with a more limited life expectancy. However, these challenges demonstrate the need for a strategic approach to tree management, planting and maintenance.

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1.6 Vision

Our vision is for our trees to thrive in a well-managed, safe, sustainable environment for the benefit of current and future generations.

The development of the updated Tree Management Policy supports South Dublin County Council's mission:

To make our county a vibrant and inclusive place for the people who live, visit, work, and do business here, now and for the future.

1.7 Aims of the Tree Management Policy

The overall aims of the Tree Management Policy are to ensure the safety of Council trees, maintain and encourage biodiversity, maintain and improve landscape quality, and through these elements, improve the quality of life for residents and visitors to South Dublin now and in the future. We will achieve this by:

- ensuring that the Council has a clear programme of tree maintenance, management and planting;
- maintaining and improving the tree canopy cover for the future;
- appropriate siting and species selections for all new trees;
- promoting the importance of trees in shaping the distinctive local character and appearance of South Dublin's urban landscape;
 recognising the significant aesthetic, landmark, ecological, social and economic value that trees provide;
- effectively communicating, educating and engaging with the local community on trees and their importance;
- allocating sufficient resources to allow for best practice tree management
- · providing clarity over why decisions and actions are taken;
- balancing the risk and nuisance to persons and property against the other aims; and recognising the value of trees as a tangible asset.

1.8 Action plan

An action plan has been prepared to deliver the objectives and goals of this Management Plan between now and 2026. This will support and assist in measuring progress against the vision and aims of the Tree Management Policy. The plan identifies several key actions, responsibilities and timescales for delivery (Section 8.0).

1.9 Policy monitoring and review

This policy will be subject to annual monitoring to assess progress against the Action Plan and to pick up any emerging issues. A more thorough review of the policy will be undertaken every five years to adjust and incorporate any new changes in legislation, local policy, working practices or technical developments which may arise.

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2 Tree management

Policy: The Council will continue to survey all Council owned and managed trees, so that the collected information can be used to manage the tree resource in a planned and efficient way, which allows for the development and implementation of long term management plans, work schedules and the prioritisation of tree work.

2.1 Tree management system

The Council will use the computerised GIS based tree management system to enable the mobile mapping, surveying and management of all street trees within the county. An integrated street tree management system provides a comprehensive record of individual trees and enables the Council to trace the full history of any tree including inspections and tree works completed.

2.2 Tree survey

It is estimated that South Dublin County Council has responsibility for the management and maintenance of at least 60,000 street trees. To date we have recorded over 35,000 tree surveys. Information about trees is essential if our trees are to be managed effectively and to enable planned management. A programme of street tree surveying across the county will continue to record details of location, species, age, size, condition, maintenance history and management requirements of individual street trees. The Council's computerised tree management system allows for the recording of said data in an efficient and effective manner. This information is subsequently used to better manage its risks and to prioritise actions for our street tree population.







2.3 Tree maintenance service

The Council's tree maintenance service will aim to provide a professional and reliable service to the public, Council members and other Council services. The key roles of the Council's tree maintenance service are to:

- manage inspections and surveys of trees under Council ownership and management.
- develop and maintain the computerised tree management system.
- plan and monitor all planned and reactive tree works.
- compile and deliver a three-year programme of tree maintenance works.
- deal with public enquiries and complaints on tree related matters.
- provide professional advice to other Council services and Council members.
- communicate with community stakeholders.

2.4 Tree management programme

The pruning, removal and planting of street trees is addressed under the Council's three-year Tree Management Programme. This programme is presented to meetings of the Council's Area Committees. The development of the Programme has largely evolved in response to requests for tree maintenance works received from members of the public and public representatives and as a result of tree inspections.

Planned maintenance is the Council's preferred method to maintain trees in a safe and healthy condition. Since the introduction of the Tree Management Policy, the tree maintenance programme has focussed on tree pruning and removal works on entire roads or whole estates as opposed to acting on isolated requests for arboricultural works. The objective of this approach is to increase the efficiency and productivity of the tree maintenance crews and to advance a proactive programme of cyclical pruning that is targeted at priority locations where intervention is most needed.

2.5 cyclical programme of planned street tree maintenance

Policy: The Council will continue to conduct a cyclical programme of tree maintenance.

To ensure 'Best Value' service delivery, the Council will continue to work on a planned cyclical programme of tree maintenance -

pruning entire roads or whole estates. Having a planned approach also reduces the risk of tree failure and nuisance to residents, and will help to pre-empt complaints and meet the majority of customer requirements for tree works. This planned programme of tree maintenance will be made available to the public through the Council's Area Committees and the Council's website.

In addition to the rolling programme of planned works, some works will also arise from unplanned events such as severe weather conditions or insurance claims. Trees which threaten public safety and property will always be given the highest priority which may lead to plans for programmed works having to be delayed.

2.6 Reactive and emergency works

There will always be a need to carry out reactive works, although the quantity of this work should reduce over time as cyclical work is embedded. Reactive works are carried out to manage risks to the public. They include felling dead trees, removing hazardous branches, and clearing obstructions to sightlines and infrastructure. Reactive works are carried out in response to enquiries from other Council services, residents and Council members or where staff have identified them when travelling in the County.

The Council has an emergency plan for severe weather conditions and has tree maintenance crews on call 24 hours a day for any tree related emergencies.

2.7 Public awareness, education and engagement

Policy: The Council will engage with the general public, schools, resident groups and environmental non-governmental organisations to promote a better understanding of the management, care and value of trees and to increase public awareness of their importance in promoting well-being, environmental sustainability and improving quality of life.

Where practicable, the Council will promote awareness and appreciation of trees through encouraging and facilitating the involvement of local communities, schools and other stakeholders in tree planting, management and educational activities. This will include organising events for National Tree Week in March and Tree Day in October, particularly in association with schools and community groups throughout the county. Social Media campaigns will be undertaken to highlight the value of trees and increase public awareness.

2.8 Trees in parks and open spaces

There are 1,750 hectares of parkland and open spaces throughout the County which make an important contribution to people's overall quality of life. Trees are one of the major components that define the landscape and layout of parks and recreational open space and as such the Council recognises the importance of its parkland trees. They provide screening, shade and structure to make our parklands a more attractive environment to visit and in which to enjoy a broad range of recreational activities. These trees also offer a rich and unique wildlife habitat, particularly where they grow to form woodlands.





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The parks of South Dublin are well stocked with trees although in places age and species diversity are not optimal. In some parks, there are limited opportunities for planting new trees without encroaching on the recreational open space that, in itself, is important to the structure and use of the parks. Existing trees in parks and public open spaces are managed to reflect the circumstances of the site and their type, age and condition.

Ongoing maintenance includes removing dead wood, formative pruning of establishing trees, removing low branches from pathways and removing trees when they come to the end of their safe and useful life. Available resources will be used to plant new trees where a need has been identified.

Larger parks and open spaces offer the most scope and potential to plant a mixed range of diverse tree species, large individual trees and urban forests. Tree lined avenues are also a feature of many of our parks. Trees in parks generally have more room to grow compared to street trees and usually grow to their full height and spread. Trees in these areas can be planted with no restriction on size or habit and can include exotic trees which can be in keeping with existing character or history of a park or area. Noteworthy features may also be included in parks such as plantings to remember historical, public and social events. An example is the Famine Commemorative Arboretum in Corkagh Park established in 1995. The arboretum hosts 150 different species of trees native to the countries to which Irish people emigrated following the famine.

2.9 Tree sculpture

Tree Sculpture will be explored where appropriate, to allow trees to continue to make a contribution after they have reached the end of their useful life span and to provide an interesting feature in the landscape.



2.10 Trees and social heritage

Trees are amongst the most important and significant features in the urban and rural landscape. They are a part of our history and culture and have been worshipped, celebrated and revered in myth and folklore. Some trees are remarkable for their age, size, scientific, ecological or botanical interest or are valued for their intrinsic beauty while trees associated with historic events or landmark trees can be special to local interest and affection. There are a number of trees within the administrative area of South Dublin, on both public and private land, which have helped shape the County's cultural landscape and character.

South Dublin Libraries Local Studies Section refers to the wonderful heritage of ancient trees in South Dublin County preserved in literature and folklore and indeed some of these remarkable trees still survive and grow here. Trees associated with kingship, mythical trees, a hanging tree, saint's trees, and venerable old trees have all been recorded here:

https://localstudies.wordpress.com/2012/09/19/remarkable-trees-of-south-dublin-county/

One of the trees referred to in the folklore record is the Balgaddy Bush. It lay on the boundary between the parishes of Clondalkin and Lucan, at a crossroads, a location redolent of folklore.. The Balgaddy Bush or similar was replanted on the roundabout next to the area.

Trees are also recorded in our local place names -

- · Lucan (Irish: Leamhcán, meaning "place of elms")
- Terenure (Irish: Tír an Iúir, meaning "land of the yew tree")

2.11 Autumn leaf fall management

The Council's street cleaning contract includes leaf sweeping during the autumn period. Leaves are removed from public roads and footpaths throughout the County. This usually begins in September and extends to the end of January each year.

Residents are responsible for dealing with leaf-fall on their private property. Leaves from private gardens, drives or pathways should not be swept into the road but should be disposed of in a responsible manner. Options may include:

- home composting
- collection from your home through the brown bin
- taking them to the Civic amenity for recycling



3 Tree planting replacement planting



Policy: South Dublin County Council recognises the value of street trees in the urban environment and is committed to planting new trees to ensure that the visual amenity in South Dublin is assured for future generations. We will maintain a database of sites that have been identified as possibilities for new trees and implement an annual programme of tree planting in accordance with available resources.

3.1 Right tree, right place

Policy: The principle of planting the 'right tree in the right place' will apply for all new and replacement tree planting.

The careful selection of appropriate tree species and planting location is essential to minimise future nuisance issues and unnecessary maintenance costs. Potential sites for tree planting will be inspected to assess their suitability for new trees, considering factors such as services, sight lines, warning signs and traffic signals, space for future growth and so on. When positioning new street trees the Council will specifically aim to:

- avoid future obstruction of public lighting columns by ensuring that the fully mature new tree canopy will be ideally greater than five metres, but certainly no less than three metres from the lighting column.
- seek to ensure that future tree growth does not compromise a minimum footpath width of 1.2 metres.
- make adequate soil volume a priority to sustain tree health and longevity when selecting planting sites and preparing pits for tree planting.



3.2 Tree planting

Areas targeted for new tree planting are those where trees have been removed or where there is an identified need to increase the overall tree cover. Requests from Council members and residents for new trees on their road or in their area will be taken into consideration within the planting programme. Individual requests will be prioritised according to the number of trees already on the street, including those in front gardens and on adjacent land.

Residents and residential associations must first seek and obtain permission from the Council before engaging in projects to plant trees and shrubs within Council managed streets, roadside margins, or open space environments.

The Council's Tree Planting Programme will be implemented between November and March as this is accepted to be the most appropriate time of the year

for planting of bare-root and root-balled trees. Tree planting will be carried out by adequately trained or supervised staff followed by appropriate post-planting maintenance. Currently the Council plans its annual tree planting in accordance with available budget resources.

All tree planting works will be undertaken in accordance with the Council's Tree Planting Guidelines and with current British Standard Codes of Practice including British Standard 8545: 2014 Trees: from nursery to independence in the landscape – recommendations.

Most new trees planted will be of advanced nursery stock; that is trees with a stem circumference of between 12 - 16cm and a height of three - five metres. The planting of trees of this more robust tree size has been proven to be effective in reducing the risk of vandalism of newly planted trees.







3.3 Design of street tree planting schemes

Where there is a substantial requirement for new or replacement tree planting within a streetscape, our preferred approach is to prepare a tree-planting plan for the site reflecting its character, scale, use and local interests. The design of any new tree planting should ensure that it complements the local landscape character and enhances the immediate environment. Trees will be selected for their appropriateness of scale and proportion to their surroundings and the aesthetic contribution they make to that environment. Planting density and species selection should be guided by available space to ensure that each tree is compatible with its new site and has every opportunity to develop into a healthy mature specimen. Such schemes may be subject to community consultation before being adopted and implemented.

The Design Manual for Urban Roads and Streets (2013) outlines how street trees are an integral part of street design as they contribute to the sense of enclosure, act as a buffer to traffic noise / pollution and enhance the sense of place. A traffic calming effect can also be achieved, where trees are planted in continuous rows and their canopies overhang, at least in part, the vehicular carriageway. Street trees can also be used to enhance legibility by highlighting the importance of connecting routes and distinguishing one area from another through variations in size and species selection. (See Appendix four)

Species selection

The choice of tree species for street tree planting is dependent on suitability to the planting location and local landscape character. A greater variety of trees can be planted in parks and open spaces and species will be selected on suitability to setting, biodiversity value and visual appearance. The selection of street trees is guided by their mature size, water demand, crown shape and future management requirements. Species utilised in tree planting programmes will be those judged by the Council to be appropriate for the circumstances based on policy, arboriculture knowledge and experience. Appendix one contains a suggested list of tree species suitable for street tree, open space and garden planting. The list is not definitive and additional species will be considered where they have shown to be appropriate for the location.

Having too many of the same type of tree in the County is a concern because of the increased risk of a loss of one or more species of tree to disease or other environmental factors. We can enhance the resilience of our tree population by increasing the diversity and variety of new trees planted. However, where the same type of tree species creates an avenue or clearly defined group within part of a street, new and replacement trees will be of the same or closely matching species in the interest of visual continuity.

As well as increasing species diversity, the Council will also seek to plant large canopy trees, wherever possible, to achieve the maximum benefits that trees provide. Large-growing tree species confer much greater benefits to urban areas than small trees. Where space allows, preference will be given to planting as large a tree as is appropriate for the location.

The Council also encourages the planting of fruit trees in parks, community centres and schools.



3.5 Replacement tree planting

Policy: The Council aims to ensure, subject to available budget resources, that every tree felled should be replaced to ensure that over the years, the County retains its tree stock for future generations, although it is not always practical or prudent to replace a tree in the same location or with the same species that was previously planted.

If a site where a tree was removed is suitable to support a new tree, the site may be replanted with a suitable tree species. Because the stump is placed on a stump removal list and sufficient time needs to elapse to allow breakdown of residual underground root material, the process from removal to replanting may take up to three - five years. Replacement tree planting will only take place during the dormant season.

3.6 Use of tree guards

The Council does not install mesh tree guards around street trees or trees on public open spaces. It is our experience over the years that tree guards attract vandalism and become traps for unsightly accumulations of litter. They can also have the opposite effect to that which is intended in that the tree guard structure itself can provide leverage against which the trunks of young trees can be broken.

In order to minimise vandalism to newly planted and establishing trees, the Council's preferred approach is to plant trees of robust size stem girth, usually a minimum of 14 - 16cm and support the tree with a staking mechanism of about one metre above ground. It is our experience that the heavier stem girth combined with a low stake minimises the ability to cause damage to the tree.

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3.7 Post planting maintenance programme

Care and maintenance of young trees is vital. When trees are first planted, they are at their most vulnerable and are more likely to die within their first five years than at any other time in their life.

To aid establishment, all new planted trees will be watered during the first growing season. Residents are encouraged to help trees outside or near their property by watering them on dry and windy days (10 - 20 litres per week). Where present, this can be done through the plastic tubing protruding from the earth at the base of the tree, which is buried around its roots. Residents should conserve water and use a basin in the sink to collect water or collect rainwater in a water butt for watering trees.

Maintenance of the tree will also include loosening of tree ties and removal of stakes and ties when the tree has become established.

3.8 Sponsored memorial tree planting

The Council has a protocol to address occasional requests to accommodate sponsorship of trees as memorials or to commemorate major life events. Due to potential sensitivities surrounding memorial tree plantings, any development of a scheme for sponsored memorial tree planting in public spaces would have to carefully consider the selection of suitable sites where the risk of vandalism or damage to the tree would be minimal.

4 Tree maintenance

Policy: The Council will maintain trees on public spaces, streets, parks and open spaces adhering to relevant industry guidelines when carrying out arboricultural works to ensure all trees are in a safe condition and not causing actionable nuisance or forseen danger.



Street tree maintenance includes the inspection, pruning, removal and replacement of trees.

4.1 Quality of work

All tree works will be undertaken in accordance with British Standard BS 3998: 2010 Tree Work - Recommendations and current Health and Safety requirements. All staff undertaking tree works will be competent with appropriate training, experience and qualifications. Any tree surgery contractors engaged to work on Council owned trees will be competent and adequately qualified, trained, experienced and appropriately insured.

Any tree work carried out should be essential to the long term retention of the tree in its current position rather than simply for appeasement reasons. The Council will aim to maintain a natural silhouette to a tree unless it can be shown to be in the best interests of the long term health of the tree to do otherwise. The Council will not normally consent to pruning works that are greater than the standard set out by the Arboricultural Association or industry best practice, generally accepted to be crown reductions and thinnings of no greater than 30% by volume.

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4.2 Public information on tree works

The Council currently presents its Tree Maintenance Programme to Council members at the Council's Area Committee meetings. Information on the Council's planned programme of tree works is available on the Council's website www.sdcc.ie 'Trees' webpage. The Council will use its social media platform to provide information on tree work.

The planned removal of trees can be a particularly emotive and contentious issue. When a tree becomes a removal candidate, and the works are not emergency works, steps will be taken to provide public notice prior to any trees being removed. Trees that are removal candidates are identified by requests from residents or public representatives or through routine survey work. Public notification of any proposed tree removals will consist of a variety of methods that may include posting a list of trees on the Council's website, emailing known residents associations, notices being attached to trees, and / or letter drops to adjacent properties. Timescales for notice will vary according to the type of work, whether it is urgent and the local significance of the tree but wherever practical, the period of notice will be at least 10 working days before any scheduled tree removals. We will not usually give notice where works involve the felling of dead trees or those in imminent danger of failing.



4.3 Reasons for tree pruning and felling

Policy: The Council will wherever possible try to avoid removing a tree or undertaking unnecessary pruning works where there is no good arboriculture reason. It has a duty to manage the tree population for the benefit of the wider community and in accordance with good arboriculture practices.

The Council will undertake tree works to fulfil its legal obligations to ensure the safety of the public and properties.

Tree works will be undertaken:

- Where an inspection has identified visible decay, fungal brackets indicating possible root and trunk decay or any other defect that would lead to the tree failing.
- A tree is dead or visibly in decline.
- To abate an actionable nuisance, where branches are touching buildings, for example, physical contact with walls, windows and gutters.
- Where road signs, traffic signals, street lights, and sightlines for vehicles and pedestrians are obscured.
- Evidence has been provided that the tree is a contributing factor in causing structural damage that cannot be reasonably addressed by an alternative solution and proactive tree management has had no mitigating effect.

Tree removal or pruning will not be undertaken where:

- Trees are perceived to be too large.
- Satellite dish TV reception is interrupted.
- Sunlight may be blocked from reaching properties or gardens.
- · Views are obstructed.
- Seasonal or naturally occurring events happen, for example, falling leaves, fruit, seeds or berries, honeydew sap, bird droppings, pollen allergies.
- Insects or other non-hazardous wildlife are present.

4.3.1 Tree pruning

The type of pruning works undertaken depends on the tree's location and its species. Bad or unnecessary pruning can do more harm than good since each cut has the potential to change the growth of a tree, cause damage or allow the entry of wood decaying organisms, therefore no branch should be removed without a good reason. Older trees do not tolerate pruning as well as younger trees and substantial pruning can be very damaging. The effect of pruning also varies between species and some are not naturally tolerant of cutting. In general, minimal pruning works will be undertaken in order to sufficiently manage a tree. This may often only involve removing the lower branches to increase clearance for pedestrians and vehicle traffic and / or cutting back the branches from adjacent buildings.

4.3.2 Formative pruning

Young immature trees, particularly in an urban setting, can benefit from pruning in their formative years. This should be carried out in accordance with British Standard BS 3998: 2010 Tree Work – Recommendations as required throughout the early years of a tree's life in the landscape. It involves removing crossing branches and potentially weak forks to encourage a good natural shape, reduce health issues and reduce the need for major pruning when the tree is mature.

4.3.3 Topping of trees

Topping of trees (reduction in height) causes large wounds, exposing trees to decay pathogens and causing their longterm decline, as well as being unsightly and potentially unsafe. Topping is therefore only considered where trees have serious defects, that cannot be reasonably addressed otherwise, and their short-term retention is essential or highly desirable.

It is often the view of residents that removing the crown or 'topping' a tree or trees will improve light levels or views or improve reception to TVs, satellites and so on. Whereas this may be true in the short term, any pruning, but especially 'topping', will cause decline in some species or rapid growth in others. Regrowth resulting from 'topping' will often be denser than the original crown and be weakly attached to the branches it develops from. Wounds associated with topping are often large and are more likely to be colonised by wood decaying fungi. 'Topping' is not good practice and can lead to dangerous trees in the future. For these reasons the Council will not 'top' trees.



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4.3.4 Removal of trees

Trees are removed only when necessary as a last resort. The criteria for tree removal are:

- tree is dead, dying or is considered hazardous due to its poor structural or biological condition,. Hazardous conditions may exist above and / or below ground and may include significant root, trunk or crown decay, split trunks and crotches, and large dead limbs.
- The tree has declined beyond the point of recovery and is no longer meeting the functional or aesthetic requirements of a street tree. Typically, a tree with 30 percent or less of its foliage remaining would meet this criterion.
- Fatally diseased trees (for example, Ash dieback, Fireblight Disease) may be removed before they reach the primary threshold in order to prevent the spread of disease to healthy trees.
- To allow space for development of nearby trees that may be more desirable for retention
- To allow space for new planting
- To make way for any approved engineering or building works when unavoidable construction work will immediately compromise the stability or throughbility of the tree.
- Tree proven to be causing significant structural damage that cannot be reasonably addressed by an alternative solution and proactive tree management has had no mitigating effect.
- To abate actionable nuisance
- Where a tree is located in close proximity to a public lighting column and the long term throughbility of the tree if retained in its location would be compromised by a

4.4 Unauthorised pruning, removal or damage to council owned trees

Policy: The Council may seek to prosecute anyone found to be carrying out unauthorised work or causing damage to its trees without permission and where appropriate apply the maximum penalty.

The unauthorised removal of trees affects the amenity of an area and destroys the many positive benefits of trees in a locality.

All Council staff operate from vehicles displaying the Council's logo and tree contractors operating on behalf of the Council are required to erect signage which refers specifically to South Dublin County Council. If a person is observed pruning, removing or causing damage to a Council owned tree and it is suspected that the action is being carried out without the Council's consent, the matter must be reported by the observer to An Garda Siochána in the first instance and the Council notified. Unauthorised damage, pruning or removal of a Council owned / managed tree may be prosecuted by An Garda Siochána under the Criminal Damage Act 1991.

Unauthorised works or damage to Council-owned trees may result in a charge being levied. This charge will reflect the amount of damage sustained and where the life / safety of the trees is undermined, it will include the cost of total tree replacement and compensation for loss of tree value. These charges will be drawn up by professional parks staff and each case will be assessed on an individual basis using a recognised tree valuation system (for example, CAVAT or Helliwell)



4.5 Arrangement or payment for street tree maintenance by residents

Where tree work is not justifiable as the result of a request for service from a resident, some residents may seek to pay for the work themselves. This will often be in relation to minor seasonal nuisance issues. If the Council was to engage in 'pay for service' agreements, this would create an unfair two-tier system. This would fail to deliver an even-handed service for residents who are unable to pay for service. The Council will not enter into any arrangements where members of the public pay for or contribute towards the cost of tree maintenance works. We will also not allow tree surgeons engaged by members of the public, access to climb trees under our stewardship. Except in the case of overhanging branches any unauthorised works to Council owned trees carried out by any person would be treated as criminal damage.

4.6 Stump removal

When a tree is felled by the Council, it is not always possible to remove the stump immediately. Stump removal may be delayed at least six months after tree removal. Under these circumstances a short tree stump is left as a temporary measure. The stump is usually left at around one metre high so that does not constitute a trip hazard in the intervening period. Tree stump removal is normally undertaken during the winter months between November and February or may be done when there are a sufficient number for their removal to be economical.

4.7 Timber and green waste use policies

Policy: The Council will seek alternative uses for arisings from tree work to ensure as much as possible is reused or recycled.

A large quantity of wood and woodchip is produced each year from pruning and felling trees. Wherever possible, the wood debris from tree work is converted and recycled into woodchips for use as a mulch in planted areas or surfacing for woodland paths within the Council's parks and open spaces. Larger sections that cannot be processed by the woodchipper are recycled according to the condition and species of timber. Timber and green waste generated from tree works in woodlands is usually left in place to create wildlife habitats.



4.8 Nesting birds

Policy: The Council will carry out inspections of trees prior to tree works for bird nests during the nesting period of March 1 – August 31 and comply with the relevant legislation and seek expert advice from relevant organisations where necessary.

The Wildlife Act 1976 (as amended 2000) is the principle legislation protecting nesting birds in Ireland. The Act makes it an offence to kill, injure or take any wild bird and to take, damage or destroy any nest that is either in use or being built. Section 40 of the Act prohibits cutting of vegetation on uncultivated land between 1 March and 31 August. However, it is accepted in practice that street trees are cultivated and as such, this allows for tree maintenance works to be carried out during the closed period subject to compliance with best practice protocols in regard to pre-works assessment of trees for active nests or nesting birds. Where an active nest or nesting birds are observed, no tree works should be carried out.

The primary reason for a year round programme of street tree maintenance is to ensure public safety and minimise tree hazards. Phenological and biological research also indicates that a number of tree species including cherry and walnut are best pruned in mid-summer to avoid introduction of disease while maple and horse chestnut will bleed sap extensively if pruned during early season growth.

Appendix five outlines the Code of Practice for Pre Works inspection of trees for Nesting Birds The Council's tree maintenance crews or contractors engaged by the Council, will be required to thoroughly check trees for nesting birds during the nesting period (1 March - 31 August) and take appropriate measures to prevent disturbance prior to the commencement of routine works.



4.9 Pest and disease control

Policy: The Council will investigate signs of pests and diseases and where practicable, will respond in accordance with current best practice.

In the last few years, several new pests and diseases have emerged in Europe as significant risks to tree health and plant biosecurity. Due to Ireland's island status, there is a better chance of remaining free of many pests and diseases not currently found on the island. However, the growth of global trade in plants and the increasing movement between countries of plant material increases the risk of new pests and diseases entering Ireland. There is also a risk of exotic pests arriving in dunnage and timber packaging through our ports. The predicted changes in climate may increase the risk of these pests and diseases spreading. Small changes in temperature or weather patterns, due to climate change, can enable organisms to become established in areas where previously they would have struggled to survive.

4.10 lvy on trees

Policy: The Council will seek to retain an acceptable level of ivy on trees where the inspection for decay or defects is not compromised.

The Council acknowledges the considerable value of ivy (Hedera helix) as a habitat and food source for wildlife. Unless ivy has established on young or weak trees, where it may compete for water and nutrients and suppress healthy growth, it causes little harm. However, where ivy has taken hold on mature trees, especially those close to roads and public areas, judgements must be made on its retention based on the health of the tree and the possibility of cavities or defects being hidden from view as well as its increased vulnerability to wind damage. In these situations, removal of ivy may be deemed necessary for risk management purposes.



5 Prioritising tree work

It is recognised that residents' views on trees can vary greatly and a tree that is of great beauty and value to one person can be perceived as an unsightly nuisance to another. People rarely contact the Council when they are happy about local trees. Only when trees become an apparent problem are comments made, and therefore a distorted picture of peoples' perception of trees develops. It is important to seek alternatives to felling or severe pruning when conflicts arise, so that the trees can remain for the silent majority who value them.

The Council's role is to try to achieve a compromise, which is acceptable to the community at large but not necessarily to every individual within the community and to safeguard the tree population for the future, within available resources.

5.1 Response to enquiries

The Council's Customer Contact System is usually the first point of contact for enquiries and complaints from the public, including those relating to trees.

Any tree-related emergencies are referred for immediate action in accordance with the Council's emergency procedures. An emergency is defined as a tree that is in immediate danger of collapse or a tree that is causing an obstruction requiring urgent attention.

For non-emergency tree enquiries, customers will be informed of Council policy within 10 working days of receipt of an enquiry. If a site inspection is considered necessary, this will be listed and any required works will be scheduled.

5.2 Inspections

The Council is currently undertaking tree inspections of all trees in public ownership. Each inspection involves an assessment of the tree's health and condition, and identifies if any work is required.

The planned approach to tree management adopts a proactive management approach through regular cyclic inspections. The frequency of inspections will depend on available resources and the severity of identified issues for monitoring in our street tree population. Following inspection where it is identified that tree works are required, they are categorised and will be included for attention on the Council's Tree Maintenance Programme if required and be undertaken in accordance with a priority based system.

The results of tree inspections will be recorded on the electronic tree management system.



5.3 Tree risk management

A risk-based system of tree management based on a programme of regular inspection prioritised by potential hazard and its potential impact on known targets in the surrounding area will be developed.

Whether trees are managed for their amenity, social, heritage or environmental benefits, their management must however be balanced and proportionate to the actual risks from trees. It is both normal and natural for trees to lose branches or fall and the risk to human safety is very low. While no research has been carried out in Ireland with regard to the level of risk posed by falling trees, research by the UK Centre for Decision Analysis and Risk Management demonstrates about a one in 10 million chance of an individual being killed by a falling tree (or part of a tree) in any given year. However, the low level of risk may not be perceived in this way by the public, particularly following an incident and its coverage in the media.

The Council has both a moral and legal duty of care to ensure members of the public and staff are not put at risk because of any failure to take reasonable precautions to ensure their safety. All such processes balance the need for safety with the amenity and other benefits of trees on a risk assessment basis. Exposure to an element of risk is however accepted as an unavoidable consequence of all environments where trees are present.

The Council will develop a pro-active and systematic good practice approach to tree management and inspection with the aim of promoting good tree health, condition, diversity, public amenity and a balanced age profile. This approach will highlight necessary works at an early stage and enable hazards to be identified and made safe in a cost effective and efficient way.

All identified tree work will be prioritised and carried out according to identified hazard or risk. Work is in progress to survey and record Council owned / managed street trees.



5.4 Priority rating system for tree works

To enable efficient use of resources, tree works will be prioritised and programmed based on the Priority Category as shown below, and in each category a list of maintenance that would normally fall into that priority has been given as guidance. However until the tree has been inspected and the relevant information has been recorded its true priority cannot be established. It is strongly emphasised that these categories and figures are only guidelines which are applicable under normal circumstances only. The occurrence of emergencies, storms and other events beyond our control do occur and thus would have to take priority over programmed work. This would result in scheduled work being delayed.

The following categories will be used when prioritising tree works:

Tree maintenance priority

Priority 1: Emergency works	Type of maintenance
Response to trees that are perceived to pose imminent danger to people or property. Target completion - within 24 hours	 Making safe of storm damaged trees in adverse weather conditions Large limbs snapped and hung up over high vehicular and pedestrian flow



Works on trees that are not considered high risk but where remedial work is required. Target completion – action immediately or within three months Tree branches below 2.5 metre causing obstruction over high pedestrian flow footpaths Tree branches below 4.5 metre causing obstruction over high traffic flow roads Tree branches causing damage to property Trees with root plate movement

Improvement works that are considered desirable to enhance street scene or public space. Works to abate nuisance caused by Council trees Target completion – action within 12 months Type of maintenance Crown thinning of trees close to public lighting Crown lifting / removal of low branches over footpaths and roadways Pruning of trees near buildings to prevent damage from occurring Snapped limbs / branches on public open space with low pedestrian access Works which promote the effective establishment of newly planted trees

Priority 4: Low priority works	Type of maintenance
Target Completion – action when resources allow within 24 months plus	All other general tree maintenance work that is causing no risk of harm to persons or property.

Priority 5: No action / unnecessary works	Type of maintenance
	This category consists of trees that have been inspected and considered healthy and safe with no works required at this time of inspection regime



6 Felling and pruning policies ***

To ensure that requests for tree works are dealt with efficiently and consistently, South Dublin County Council's policy in relation to the more common types of request is outlined below.

6.1 Obstruction of street light

Policy: The Council will undertake work to a tree in Council ownership / management to ensure that trees do not unduly obstruct the streetlight.

Tree pruning will be undertaken where reasonably feasible to address obstruction of a streetlight. In circumstances where the long-term throughbility of the tree, if retained in its location, would be compromised by a requirement for ongoing maintenance in order to maintain the effectiveness of the adjoining streetlight, the tree may be removed. Alternative public lighting solutions should also be explored for areas of existing mature and established trees. Where a tree is removed from a roadside verge, due to proximity to a public lighting column, a replacement tree will not normally be planted back into the same verge. The Design Manual for Urban Roads and Streets (2013) recommends that new lights should be positioned away from trees.

















6.2 Obstruction of road traffic sight lines, traffic signals or street signs

Policy: The Council will undertake work to a tree in Council ownership/management to maintain clear sight lines, where reasonably feasible, at road junctions and access points and for traffic signals and street signs.

Where an ongoing pruning requirement arises as a result of sightlines, road signs or traffic signals being obscured by tree growth or regrowth, consideration will be given to the removal of trees to minimise ongoing repeat maintenance costs.



6.3 Obstruction of roads, cycleways and footpaths

Policy: The Council will undertake work to a tree in Council ownership / management where a tree is causing an obstruction to a public highway, public footpath or cycleway, public right of way, access to property or public open space, where reasonably feasible.

Tree pruning to achieve the following height clearance is considered appropriate where reasonably practical and where it can be achieved without harming tree health or form:

- Pedestrian areas: 2.5 metres
- Cycleways: 3 metres
- Distributor roads / streets: 4.5 metres

Any works necessary to prevent an obstruction in the width of a public footpath due to the presence of a Council owned tree will be considered on a case-by-case basis.

If a privately owned tree or other vegetation is causing an obstruction to a footpath or road, powers exist under Section 70 of the Roads Act 1993 which enable the Roads Authority to deal with the matter. The section allows for the serving of notice on the landowner setting out remedial works to be carried out. Failing action by the landowner, the Roads Authority can arrange to have the necessary works carried out and seek to recoup the cost of the works from the landowner concerned.

6.4 Trip hazard

Policy: The Council will undertake measures to make safe an unacceptable trip hazard on a public footpath or road caused by the growth of a Council owned / managed tree.

The roots of trees exploit the soil in various ways dependent on species, local conditions, and history of site disturbance. Pressure exerted by the radial growth of roots can deform the surfaces of footpaths, roads or other light structures, especially in the close confines of the urban setting. Damage occurs most commonly close to the tree and will diminish rapidly with distance. To constitute a trip hazard the deformation will be assessed by the Council. Where a hazard exists and is attributable to tree roots engineering options will be explored before root pruning or tree removal is undertaken.

It is often possible to repair paths to take account of adjacent trees and tree roots. Where roots protrude they can be root pruned, or the path can be re-laid around the tree with flexible material such as asphalt to provide a smooth surface or using reinforced concrete or other engineering solutions.

Where trees are considered to be causing damage to paths or footpaths, the Council will not normally consider tree removal except where there is a risk to public health which cannot otherwise be mitigated. Removal of the tree will usually be the last resort, accepting that in some circumstances where the tree is of low value or easily replaced, removal may be the most appropriate solution. The Council will seek to explore engineering options through internal consultation between the Public Realm and Roads Maintenance sections to reduce trip hazards before root pruning or tree removal. The Council will develop a protocol for resolving issues where tree roots are in conflict with public areas under hard surfacing.





6.5 Trees in conflict with the built environment

Policy: The Council will not normally consider removal of a tree where structural damage can be repaired or reasonably resolved by appropriate engineering solutions.

Trees in an urban environment will inevitably conflict with people and infrastructure which creates pressures for trees to be pruned or felled. The perceived threat of damage by tree roots is sometimes a worry people have about trees near to buildings or built structures. Much of this concern is unwarranted as most trees growing near buildings cause no damage. Tree roots are unlikely to directly penetrate sound footings. Lightly loaded structures, if they have inadequate foundations, may be affected by pressure exerted by tree roots or trunks but in such cases trees are not the primary cause of damage.

The Council recognises that trees under its ownership / management may be implicated in damage to nearby built structures but is also aware that trees are not always the causative agent and that nearby trees often get blamed for damage before a thorough investigation is carried out. Some other reasons

for structural failure are inadequate foundation design, general structural failure, poor quality construction, nearby excavations or major works to adjacent properties.

In circumstances where structural damage can be repaired or reasonably resolved by appropriate engineering solutions, the Council will not normally consider removal of a tree, except where the tree is considered to be of poor structural or physiological condition. Property owners will, at their own expense, be expected to provide evidence from an appropriately qualified professional that a particular tree is or has caused damage to their property and that all reasonable engineering alternatives have been explored before felling will be considered. Where evidence is provided which demonstrates a Council owned tree is the cause of damage, the Council will take appropriate action on a case by case basis.

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6.6 Trees and drains

Policy: The Council will not prune, fell or cut the roots of a Council owned /managed tree to prevent roots entering a drain that is already broken or damaged.

The Council will not normally take action in response to complaints that Council trees are damaging drains. Tree roots do not have the capacity to break into a sound drain but typically they will invade drains that are already broken or damaged. Trees themselves very rarely break or damage the drain in the first place. Tree roots found in a drain are usually symptomatic of an underlying problem requiring repair of the broken pipe. The Council's presumption is that the appropriate way to deal with tree root blockage of drains is to ensure that the drains are watertight. Any concerns about the condition of public drains should be reported to the water authority. Householders are usually responsible for the maintenance of the drains within their own property.

6.7 Trees, riverbanks and watercourses

The Council will develop a protocol for maintenance and management of trees along riverbanks and watercourses in consultation with relevant internal Council Departments and fisheries authorities.

6.8 Trees and utilities

Utility companies have certain legal rights to carry out works to public or privately owned trees to address health and safety problems and to maintain a clearance between trees and their apparatus. This may sometimes involve the loss of trees or removal of large parts of a tree leaving a misshapen and unbalanced crown and reducing the amenity value of the tree. Excavation works near to street trees brings considerable potential disturbance within the root zone of trees, often reducing their stability and long-term throughbility.

Where works to trees are necessary because of proximity or conflict, the Council will encourage utility operators to adopt the most appropriate long-term solution, giving consideration to tree health, local tree cover and visual amenity.

Utility companies must consult with the Public Realm section of South Dublin County Council in advance of any pruning, trenching or other works likely to affect Council owned trees, and will refer to the procedures and conditions of the Council's Roadmap system.

The Council will develop protocols for dealing with trees and utilities in consultation with the main utility providers and adhere to the recommendations of the current NJUG (UK National Joint Utilities Group) Guidelines for The Planning, Installation and Maintenance of Utility Apparatus in Proximity to Trees. See Appendix two.

It should also be noted that the Communications Regulations Act 2002 and the Electricity Regulation Act 1993 give authority to utility suppliers to prune trees.

6.9 Valuing trees and compensating for tree damage

Policy: The Council will use a standard Amenity Tree Valuation formula to value all Council street trees and use this information to assist in the management of the tree stock.

In recent years there has been increased interest in quantifying the benefits of trees and translating them into financial terms. Several recognised formulae such as the CAVAT (Capital Asset Value for Amenity Trees) and Helliwell systems have been developed to allow authorities to prepare a valuation of their tree stock which can then be used to justify managing the trees as if it were a financial asset of the community. An amenity tree valuation system takes into account: tree size, longevity and condition, site suitability and other attributes to give a monetary value used to help guide management decisions. This is a major step forward as traditionally, the management of trees and woodlands by local authorities has been seen solely as a cost, with no acknowledgement of the financial benefits that trees bring.

It is important to place a monetary value on South Dublin County Council's trees because of the contribution trees make to the economic, social and environmental landscape of the county. Assessing the value of each tree will enable a more effective and efficient level of understanding to be applied to a given tree or group of trees when deciding their future management or removal.

The Council will also use a standard amenity tree valuation system to provide the basis for calculating the replacement value of any trees that have been significantly damaged or removed. The Council will seek this level of compensation from organisations found to be responsible for such damage.





6.10 Street trees overhanging neighbouring properties / roots encroaching into gardens

Policy: The Council will not prune trees that overhang neighbouring properties unless the trees are dangerous or are causing actionable nuisance.

The Council has no legal obligation to prune overhanging trees unless they are causing direct damage to an adjacent property or are imminently dangerous. This reflects the Council's position as an owner of thousands of trees and the resources available. Given that many thousands of Council trees overhang boundaries, it is not an effective use of resources to prune every overhanging limb.

Tree roots in gardens are a natural occurrence and root presence is unlikely to be affected by tree pruning. However, situations where a tree is genuinely generating root encroachment to an exceptional, severe, and unreasonable degree are dealt with on a case-by-case basis.

Adjacent landowners are entitled to prune encroaching tree branches or roots back to the boundary of their property. Legally, they are required to retain the pruning's and offer them back to the Council, but the Council is not obliged to accept them.

6.11 Trees overhanging private property from neighbouring private property

If a tree is growing on privately owned land, then the maintenance rests entirely with the landowner.

Wherever possible however, we would advise that the best way to resolve problems with trees or hedges growing in adjacent properties, is for property owners to talk to their neighbours and to try to come to an amicable agreement.



6.12 Dangerous trees in private ownership

Owners of trees and woodlands have a statutory duty under the Occupiers Liability Act 1995 and the Roads Act 1993 to maintain their trees to ensure they are not dangerous or in a hazardous condition and that they do not pose a threat to the public.

Section 70 of the Roads Act 1993 obliges landowners and occupiers of land to take all reasonable care to ensure that the trees, hedges, and other vegetation growing on their land are not, or could not become, a danger to people using or working on a public road. Examples of hazards might include dead or dangerous trees, or trees and hedges overhanging roads, blocking footpaths, or obscuring road signs or sight lines such as the view of the road ahead.

Under this section, the Council can serve a written notice on a landowner or occupier requiring the carrying out of specified works within a period stated in the notice to ensure the safety of those using or working on a public road. An owner or occupier who fails to comply with a notice under this section will be guilty of an offence and the Council may take the action specified in the notice or such other action as it thinks fit, including prosecution. Where the Council considers that trees, shrubs, hedging, or other vegetation presents an immediate and serious hazard to persons using a public road, it may take immediate action to reduce or remove the hazard and seek the costs from landowners where the Council must carry out the work.

It should also be noted that the Communications Regulations Act 2002 and the Electricity Regulation Act 1993 give authority to utility suppliers to prune trees.

6.13 Trees touching or causing direct damage to property

Policy: If a tree in Council ownership/ managed by the Council is touching your property (dwelling house, garage etc) the Council will take action to remove the nuisance.

The Council will cut back trees to provide two metre clearance from properties where they touch windows, walls,

roofs, or gutters to avoid damage. In many cases the solution will be for the Council to prune the tree, but in some circumstances, it may be more appropriate to fell the tree. If pruning is appropriate, we will try to undertake works to stop the problem reoccurring within three years. A balance will be struck between the nuisance experienced by individuals and the benefits offered by the tree to the wider community.

6.14 Trees blocking natural light

Policy: The Council will not normally prune, top or fell a Council owned tree to improve natural light in a property. Each case will be evaluated on its own merits.

A common complaint about urban trees is that they block light from properties or shade gardens. However, often the removal of the tree will have little effect on the amount of sunlight reaching the house or garden where the house is north facing.

There is no right to light under the law and therefore the Council has no legal obligation to abate this perceived nuisance. However, situations where a tree is genuinely blocking daylight from habitable rooms to an exceptional, severe and unreasonable degree are dealt with on a case-by-case basis. A habitable room is defined as residential living rooms, bedrooms, and kitchens (if they include a dining space and are larger than 12.6 metres squared). Bathrooms, toilets, landings, and lobbies are excluded.

Each case will be evaluated having regard for balancing the severity of the nuisance to the individual with the benefits of the tree for the wider community. Pruning will normally only be carried out where the tree is a significant contributory factor and there is a reasonable chance that pruning will improve the situation. Any decision to undertake tree works would consider the health and significance of the tree, its contribution to wider public amenity, the orientation of the house, and whether the tree was already present when the occupier moved into the property. Shading of habitable rooms of property will be given more weight than the shading of the garden.



6.15 Obstruction of a view

Policy: We will not prune or fell a Council owned tree to improve the view from a private property.



South Dublin County Council | Tree Man

6.17 High hedges

There is currently no legislation in Ireland regulating the height of trees and hedges. In the UK the control of height of evergreen hedges comes under Part 8 of the Anti-Social Behaviour Act 2003. The Council does not get involved in issues regarding the height of hedges on private lands unless they are hazardous to public road users. Residents with issues in relation to trees and hedges on neighbouring properties are encouraged to try to resolve the issues between the two parties or seek independent legal advice. Involvement in resolving tree and hedge disputes between private landowners is not considered part of the remit of the Council.



6.18 Driveways and new entrances

Policy: The Council will not normally support either the removal of a tree or cutting of a tree's roots for the construction of vehicle crossovers and / or alterations to residential driveway access, unless the tree is of limited life expectancy or is small enough to be relocated elsewhere. Exceptional circumstances will be considered by the Council on a case-by-case basis.

Planning permission is required if a property owner wishes to widen an existing access or create a new access to the public road. The Council's Environment Department should be consulted if the grass verge or any roadside trees are affected to get advice on the acceptability of a specific proposal and other technical requirements before any planning application is made. A minimum clearance of three metres or 10 times the diameter of the tree trunk at its base (whichever is greater) must be provided between the trunk of any street tree and the edge of the crossover unless the Council determines otherwise. The Council's Roads Department should also be consulted if the roadside kerb is to be dished and a roadside concrete apron laid to provide vehicle access to car parking spaces in front of a house.

As part of the application assessment, the Council will apply a standard tree amenity valuation formula to fully determine the costs associated with the removal and or retention of specific trees associated with the development activity. If the condition of the street tree is declining and its life expectancy is short, tree removal may be considered to allow for the installation of a new driveway crossover. Removal and replacement of trees will be at the cost of the applicant and a new tree will be replanted as close as possible to the original tree.

6.19 Tree and solar panels

Policy: The Council will not prune or fell a Council owned/managed tree to facilitate installation or improve natural light to a solar panel.

Whilst the Council appreciates that there is a need to provide renewable energy resources, trees have an important role in maintaining and improving local amenity, in addition to contributing to local and national targets in tackling climate change. The presence of existing trees and how these trees will grow in the future must be fully appreciated when considering a suitable location for the placement of solar panels.

6.20 Trees affecting TVs and satellite reception

Policy: The Council will not prune or fell a Council owned/managed tree solely to improve TV and / or satellite reception, where the trees in question would not otherwise require works.

The Council acknowledges that television and satellite entertainment are important to residents. However, a balance must be found between these and the local environment. The Council will encourage residents to seek reasonable alternative solutions to improve television or satellite reception rather than requesting tree pruning or removal. When positioning a new satellite receiver, residents are recommended to carefully consider existing trees and their potential for growth to avoid problems in the future.

6.21 Trees affecting CCTV

Policy: The Council will not normally prune or fell a Council owned/managed tree to improve CCTV sightlines.

Exceptions may include Garda CCTV, trees adjacent to CCTV cameras that monitor ATMs or within the field of view being covered to ensure that public security is not compromised. The installation of new CCTV cameras must take into consideration existing trees to prevent requests for unnecessary pruning works or the removal of trees to improve desired sightlines.





6.22 Crime and anti-social behaviour

Policy: Where a Council owned tree is associated with criminal activity and/or anti-social behaviour, measures to reduce the problem will be considered on a site-by-site basis.

Where a tree is associated with criminal activity and / or anti-social behaviour, steps to reduce the problem will typically require the coordination of several agencies including the Gardaí. Pruning or felling a tree is not always the answer to the problem.

6.23 Leaf fall

The Council will not prune or fell a Council owned tree to remove or reduce leaf fall or remove fallen leaves from private property.

The loss of leaves from trees in the autumn is part of the natural cycle and cannot be avoided by pruning. The maintenance of gutters is the responsibility of the property / landowner and the Council is not obliged to remove leaves that may have fallen from Council owned trees. Where gutters are regularly blocked by fallen leaves, gutter guards may be fitted to provide a low maintenance solution. The Council organises a street cleaning service which will sweep leaves from most streets and residential roads during the autumn period. The composting of leaves is encouraged as a way of environmentally recycling this valuable resource.

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6.24 Sticky deposits from honeydew

Policy: The Council will not prune or fell a Council owned tree solely to remove or reduce honeydew or other sticky residue from trees.

Certain species of tree, for example lime and sycamore, are susceptible to aphids or other leaf-feeding insects. Honeydew is the sugary sap / sticky deposit which results from insects feeding and is subsequently colonised on surfaces by sooty mould fungi giving it a black appearance. Honeydew is a natural and seasonal problem and the severity varies from year to year depending on conditions. A balance between the inconvenience of honeydew deposits and the wider benefits of trees must be achieved and as such there is unlikely to be justification for the pruning or removal of trees due to honeydew deposits. Residents are advised to make their own arrangements to minimise the problem; regular car washing, covering the car or parking in an alternative location. Where honeydew affects cars, warm soapy water will easily remove the substance.

6.25 Bird droppings

Policy: The Council will not prune or fell a Council owned tree solely to remove or reduce bird droppings.

Bird droppings can be unpleasant and a nuisance, but the problem is not considered a sufficient reason to prune or remove a tree. Roosting birds are a natural occurrence as is their production of droppings. Generally, felling a tree will not allethroughte the problem as birds will relocate to another tree in the locality. Pruning or felling of trees will not be considered as a way of resolving such matters. Warm soapy water will usually be sufficient to remove the bird droppings. Nesting birds are protected under the Wildlife Acts 1976 and Habitats Regulations 1997 - 2005.





6.26 Fruit / berries / nuts / blossom

Policy: The Council will not fell or prune Council owned trees solely to allethroughte problems caused by natural and/or seasonal phenomena such as fruit / berries, nuts or blossom which are legally outside their control.

Problems caused by falling fruit, berries, nuts or blossom are natural and seasonal occurrences and not something the Irish legal system recognises as a 'legal nuisance'. Whilst we appreciate these problems, they are judged as a relatively minor inconvenience when considering the many benefits of having trees within an urban environment. Fruit trees such as apple, cherry and pear are welcomed in many locations for having the double benefit of spring blossom and autumn fruit. This makes fruit trees good for wildlife and a source of free food However, where fallen fruit is leading to a significant anti-social behaviour problem, the Council will consider measures to reduce the problem including whether a phased removal and replacement with alternative species is reasonable. If there is a hazard on the public footpath the Council's Public Realm section should be notified of the problem to arrange clearance.

6.27 Tree and poisonous berries

Policy: The Council has no general policy to remove trees bearing poisonous fruit/foliage (such as yew trees).

However, where it is claimed or known that young children, under supervision, are likely to be exposed to poisonous berries or foliage, such cases will be investigated, and appropriate action considered.

6.28 Wild animal / insect pest

Policy:The Council will not prune or fell a Council owned tree to remove or reduce incidence of perceived pests such as bees, wasps, or wild animals.

6.29 Pollen

Policy: The Council will not prune or fell a Council owned tree



6.30 Tree root pruning

Policy: The Council will carry out root pruning only when throughble alternatives to severing the roots cannot be found and where an obvious and positive outcome can be achieved without any long-term damage to the tree.

Tree roots keep a tree healthy and upright. Most roots are found in the top 600mm of soil and often grow out further than the tree's height. If roots are damaged the tree may become unstable or may suffer irreversible harm and eventually die.

Root pruning is generally discouraged as a method of allethroughting damage to adjoining property, such as infrastructure uplift or serviceline disturbance. This is because the long-term implications of sustained and heavy root pruning are unpredictable. The Council will perform root pruning on any tree wherever practicable before removal is considered. Approval of the Council is required before any tree root over 25mm in diameter is pruned.

Any construction, excavation or installation works being carried out in proximity to trees must be in accordance with British Standard (2012): Trees in relation to Design, Demolition and Construction - Recommendations and with the current NJUG (UK National Joint Utilities Group) Guidelines for the Planning, Installation and Maintenance of Utility Apparatus in Proximity to Trees.

6.31 Trees located along private boundaries within parks and open spaces

Policy: The Council will develop long term management plans for trees in parks and open spaces to enhance the quality of the environment, maintain a succession of throughble and healthy trees and minimise risk to people and structures.

In general, the Council will cut back trees located within adjacent parks and open space areas to provide three metres clearance from property boundaries. In some circumstances it may be more appropriate to fell trees.

6.32 Trees located within gardens of council-owned housing

Policy: Trees located within the residential gardens of Council-owned housing are to be maintained by tenants as part of their tenancy agreement, except in cases subject to the Housing Department's discretion.

7 Trees and development

Mature trees can be an asset to a new development. They give a place a sense of character, as well as providing a ready-made landscape. Retaining trees is always desirable, though many trees are lost each year in the course of development. Some are removed due to their condition or because they are directly in the way of development. However, many are lost due to unsuitable protection during the construction phase.

7.1 Trees on development Sites

Policy: The Council will use its powers to ensure that where it is conducive with the objectives of the County Development Plan, and other planning objectives, there is maximum retention of trees on new development sites.

The Council is committed to continuously improve the way that tree, biodiversity, and landscape issues are considered in relation to applications for new development. There is increasing pressure to both maximise available development opportunities and at the same time protect and enhance existing landscape and biodiversity features.

In the processing of planning applications, the Council will seek the retention of trees of high amenity / environmental value taking consideration of both their individual merit and their interaction as part of a group or broader landscape feature. Tree Surveys and Arboriculture Impact Assessments, along with Tree Protection Plans are required early in the planning application process for sites with existing trees so that the positioning and grouping of trees of value can be incorporated into the design of the site. This assists in the retention of as many trees as possible. Tree bonds are routinely applied to existing trees on development sites which merit

retention, to ensure their protection and retention. The Council has sequestered tree bonds, or parts thereof, from several sites where tree protection was inadequate and there was resulting damage to, or loss of trees, as a result.

The Council will consider the use of Tree Preservation Orders in accordance with Departmental Guidelines for trees of exceptional amenity, landscape, or heritage value.

On construction sites all work must be in accordance with British Standard 5837 (2012): Trees in Relation to Design, Demolition and Construction – Recommendations and with the Council's Guidelines for the Open Space Development and Taking in Charge.

The Council will promote the replacement of trees removed to facilitate approved planning and development of urban spaces, buildings, streets, roads, infrastructural projects, and private development sites.

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7.2 Development of the built environment (including residential extensions or annex developments) in close proximity to established trees

Policy: Where there are trees within a proposed planning application site or on land adjacent to it that could influence or be affected by proposed development, including street trees in the ownership or management of the Council, the planning application must include a detailed submission prepared by a suitably qualified Arboriculturist in accordance with British Standard 5837: 2012 'Trees in Relation to Design, Demolition and Construction – Recommendations'.

South Dublin County Council will consider the protection of existing trees when granting planning permission for minor and major developments and will seek to ensure the maximum retention, preservation and management of trees, groups of trees and hedges.

Where development is proposed it is essential that existing trees are considered from the very earliest stages of design and prior to an application for planning permission being submitted. Root systems, stems and canopies, with allowance for future movement and growth, need to be considered in all projects.

For all minor and major development applications where trees might be affected, the application must be accompanied by the information below prepared by a suitably qualified Arboriculturist (who through relevant education, training, and experience, has expertise in the field of trees in relation to construction)

in accordance with British Standard 5837: 2012 'Trees in Relation to Design, Demolition and Construction – Recommendations':

- Tree survey
- Arboricultural impact assessment
- Arboricultural method statement
- Tree retention / removal plan
- Tree protection plan

Details of retained trees and Root Protection Areas shown on the proposed layout to include those of trees located within the proposed planning application site or on land or a street or roadside adjacent to an application site that could influence or be affected by the proposed development.

As part of the application assessment, the Council will apply a standard Amenity Tree Valuation formula to fully determine



the costs associated with the removal, retention or replacement of specific trees associated with the development activity. If the condition of a tree is declining and its life expectancy is short, tree removal may be considered to allow for the new development. Removal and replacement of trees will be at the cost of the applicant and a new tree or trees will be replanted as close as possible to the original tree.

Any tree works that are required prior, during or post completion will be completed by a suitably qualified arborist. The cost of any tree works will be borne by the applicant. Any proposed works will be agreed with the Council's Public Realm Section prior to the commencement of development.

7.3 Tree planting on development sites

The Council will ensure that tree planting on development sites is adequate and appropriate by requesting that landscaping proposals and plans to include tree planting proposals are submitted as part of a planning application.

The design of roads and streets should be in accordance with Design Manual for Urban Roads and Streets. See Appendix four - The planting of trees should be considered as an integral part of street design.



7.4 Tree Preservation Orders (TPO)

Making a Tree Preservation Order (TPO) is the primary mechanism available to a planning authority to ensure that trees of significant value are preserved. Section 205 of the Planning and Development Act 2000 provides the legal framework and procedures for making a TPO.

A Tree Preservation Order (TPO) enables local authorities to preserve any single tree or group of trees and brings them under planning control. Tree preservation orders are only made if it appears that a tree or group of trees need to be protected in the interests of amenity or the environment.

The establishment of a TPO brings the designated tree / trees under planning control and restrictions do apply. The permission of the planning authority must be sought before any tree with a TPO is lopped, topped or felled. When the authority proposes an order, they have to publish a notice in one or more newspapers. Observations and submissions can be made to the planning authority within a period of not less than six weeks. Tree Preservation Orders are only made after careful consideration of all submissions and observations by the local authority.

The Council will carry out a review of its existing TPOs and will seek to identify important / special trees in the county and protect those worthy of Tree Preservation Orders.

There are currently four TPOs in place in south Dublin County as follows

Order	Location
Dublin County Council TPO 1973	St. Brigids (Now Newlands Garden Centre), New Road, Clondalkin, Dublin 22
Dublin County Council TPO 1987	Beaufort Downs, Rathfarnham, Dublin 14
Dublin County Council TPO 1990	Townslands of Quarryvale and Brooklawn, Palmerstown, Dublin 10
South Dublin County Council (Coolamber Site) TPO 2015	Newcastle Road, Lucan, Dublin



8 Living with Trees -**Action Plan** 2021 - 2026

Objectives

- To continue to implement a proactive tree management programme
- To expand the tree canopy in the County
- To implement a public awareness and education programme



Objective 1 - To continue to implement a proactive tree management programme

Ref	Action	Measurement	Who	When
1.1	Complete surveying all street trees in County	Number of trees surveyed	Public Realm	2024
1.2	Develop protocols with main utility providers on a regional basis for dealing with trees and utilities	Procedures and protocols agreed and with utility providers	Public Realm	2026
1.3	Develop a tree risk management system	System developed and in place	Public Realm	2024
1.4	Present annual review of Tree Management Policy Action Plan	Annual review completed	Public Realm	Annual
1.5	Review Tree Management Policy 2021 - 2026 and draft new Policy	Five year review completed	Public Realm	2026
1.6	Develop procedure for dealing with the unauthorised removal of Council owned trees for SPC	Procedure in place	Public Realm	2022
1.7	Prepare a plan for dealing with impact of Ash dieback	Ash replacement programme	Public Realm	2023
1.8	Examine tree data collection proposal for public	Countywide tree data	Public Realm	2023



Objective 2 - To expand the tree canopy in the County

Ref	Action	Measurement	Who	When
2.1	Develop an annual tree planting programme	Number of trees planted	Public Realm	Annual
2.2	Develop a hedgerow management plan	Hedgerow plan in place	Public Realm	2022
2.3	Develop woodlands in parks and open spaces	Increased tree canopy	Public Realm	Annual
2.4	Use the Council's planning powers to retain and protect trees on development sites and enforce as necessary	Annual review	Public Realm and Planning Department	Ongoing
2.5	Review existing Tree Preservation Orders	Annual review	Public Realm	Ongoing
2.6	Use the Helliwell system to value all Council Street trees	All trees have accurate value	Public Realm	2022
2.7	Agree procedures and protocols with partners to secure protection of Council-owned trees from avoidable damage	Procedures and protocols agreed with internal Council Departments and external agencies	Public Realm	2024
2.8	Develop a protocol for resolving issues regarding tree roots in conflict with the built environment	Procedures and protocols developed and in practice	Public Realm, Roads, Council's Insurers	2026
2.9	Develop urban and mini woodland programme	Woodland programme in place	Public Realm	2022

Objective 3 - Prepare and implement a public awareness and education tree programme

Ref	Action	Measurement	Who	When
3.1	Promote Tree week and Tree day	Number of Tree week and Tree Day activities organised each year	Public Realm	Ongoing
3.2	Prepare a social media tree information campaign	Number of posts	Public Realm	Ongoing
3.3	Prepare an information video on trees and their importance	Number of posts	Public Realm	2021
3.4	Complete an annual Carbon sequestration exercise for public trees in County	Carbon sequestration data	Public Realm	2022



9 Appendices

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Appendix one: Sample list of tree species suitable for street planting

The selection of street trees is guided by their mature size, water demand, crown shape, future management requirements and suitability to the location. The following is a guide to the type of species considered appropriate for street planting. It is not an exhaustive list, and other trees may be equally suitable.

Tree species suitable for street planting

Latin name	Common name
Acer Campestre 'Elsrijk'	Field Maple
Acer Campestre 'Streetwise'	Field Maple
Acer Platanoides 'Globosum'	Maple
Amelanchier Arborea 'Robin Hill'	Serviceberry
Betula Albosinensis 'Fascination'	Chinese Birch
Betula Pendula	Silver Birch
Betula Pubescens	Downy Birch
Betula Utilis 'Jacquemontii'	Himalayan Birch
Carpinus Betulus 'Frans Fontaine'	Hornbeam
Corylus Colurna	Turkish Hazel
Crataegus Laevigata 'Paul's Scarlet'	Hawthorn
Malus 'Royalty'	Crab Apple
Malus Trilobata	Crab Apple

Latin name	Common name
Malus Tschonoskii	Crab Apple
Prunus Cerasifera 'Nigra'	Black Cherry Plum
Prunus Padus 'Watereri'	Bird Cherry
Prunus Sargentii 'Rancho'	Sargent's Cherry
Prunus Subhirtella 'Autumnalis Rosea'	Autumn Flowering Cherry
Prunus 'Pandora'	Cherry
Pyrus Calleryana 'Chanticleer'	Ornamental Pear
Quercus Robur 'Fastigiata'	Fastigiate Oak
Sorbus Aria 'Lutescens'	Whitebeam
Sorbus Aria Majestica'	Whitebeam
Sorbus Intermedia 'Brouwers'	Swedish Whitebeam
Tilia Cordata 'Greenspire'	Small Leaved Lime

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Specimen trees suitable for open space planting

Latin name	Common name
Acer Pseudoplatanus 'Spaethii'	Maple
Aesculus Hippocastanum	Horse Chestnut
Alnus Cordata	Italian Alder
Betula Ermanii	Erman's Birch
Castanea Sativa	Spanish Chestnut
Cedrus Atlantica 'Glauca'	Blue Atlas Cedar
Cedrus Libani	Cedar Of Lebanon
Fagus Sylvatica	Beech
Fagus Sylvatica 'Atropurpurea'	Copper Beech
Juglans Regia	Walnut

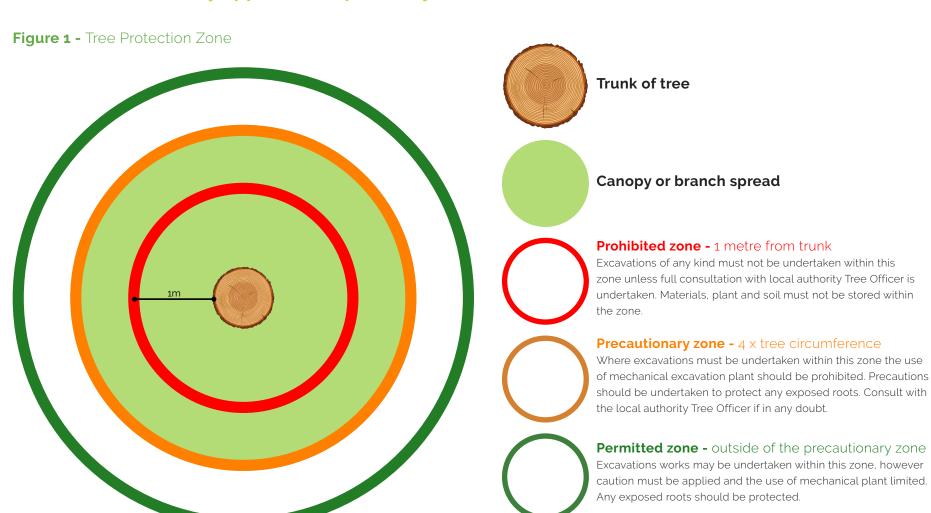
Latin name	Common name
Pinus Sylvestris	Scot's Pine
Platanus X Acerifolia	London Plane
Prunus 'Shirotae'	Mount Fuji Cherry
Prunus 'Yedoensis'	Yoshino Cherry
Pterocarya Fraxinifolia	Caucasian Wingnut
Quercus Ilex	Holm Oak
Quercus Robur	English Oak
Robinia Pseudoacacia	False Acacia
Tilia X Euchlora	Lime
Ulmus 'Lobel	Elm

Trees suitable for urban gardens

Latin name	Common name
Arbutus Unedo	Strawberry Tree
Acer Palmatum 'Atropurpureum'	Japanese Maple
Acer Davidii	Snake Bark Maple
Acer Griseum	Paperbark Maple
Amelanchier Lamarckii	Snowy Mespilus
Crataegus Orientalis	Eastern Thorn

Latin name	Common name		
Cercis Canadensis 'Forest Pansy'	Redbud		
Malus 'Golden Hornet'	Crab Apple		
Malus 'Royalty'	Crab Apple		
Prunus 'Amanogawa'	Cherry		
Sorbus Vilmorinii	Rowan		

Appendix two: National Joint Utilities Group (UK) Guidelines for the planning, installation and maintenance of utility apparatus in proximity to trees



Protecting roots - do's and don'ts

There are three designated zones around a tree each of which has its own criteria for working practices.

The prohibited zone

Don't excavate within this zone.

Don't use any form of mechanical plant within this zone

Don't store materials, plant or equipment within this zone.

Don't move plant or vehicles within this zone.

Don't lean materials against, or chain plant to, the trunk.

Do contact the local authority tree officer or owner of the tree if excavation within this zone is unavoidable.

Do protect any exposed roots uncovered within th-is zone with dry sacking.

Do backfill with a suitable inert granular and top soil material mix as soon as possible on completion of works.

Do notify the local authority tree officer or the tree's owner of any damage.



The precautionary zone

Don't excavate with machinery. Where excavation is unavoidable within this zone excavate only by hand or use trenchless techniques.

Don't cut roots over 25mm in diameter, unless advice has been sought from the local authority tree officer.

Don't repeatedly move / use heavy mechanical plant except on hard standing.

Don't store spoil or building material, including chemicals and fuels, within this zone. Do prune roots which have to be removed using a sharp tool (for example, secateurs or handsaw). Make a clean cut and leave as small a wound as possible.

Do backfill the trench with an inert granular material and top soil mix. Compact the backfill with care around the retained roots. On non-highway sites backfill only with excavated soil.

Do protect any exposed roots with dry sacking ensuring this is removed before backfilling.

Do notify the local authority tree officer or the tree's owner of any damage.

The permitted zone

Don't cut roots over 25mm in diameter, unless advice has been sought from the local authority tree officer.

Do use caution if it is absolutely necessary to operate mechanical plant within this zone. Do prune roots which have to be removed using a sharp tool (for example, secateurs or handsaw). Make a clean cut and leave as small a wound as possible.

Do protect any exposed roots with dry sacking ensuring this is removed before backfilling.

Do notify the local authority Tree Officer or the tree's owner of any damage.



Appendix three: Code of practice for pre works inspections of trees for nesting birds

The Wildlife Act 1976 (as amended 2000) is the principle legislation protecting nesting birds in Ireland. The Act makes it an offence to kill, injure or take any wild bird and to take, damage or destroy any nest that is either in use or being built. In general terms, bird nesting in Ireland can be expected to take place between 1 March and 31 August.

South Dublin County Council's tree maintenance crews and contractors operating on behalf of the Council are required to carry out pre works inspections of trees for wildlife and nesting birds in line with best practice recommendations. Table 1 provides a checklist for pre works inspections for nesting birds.

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During the bird nesting season, the following general procedures should be observed:

- Work within dense vegetation will be prohibited (unless directed by An Garda Síochána).
- Trees and shrubs being worked upon will be single individuals that can be observed in full.
- · Carry out the checklist "What to do before tree works" see Table 1.
- · Complete site inspection form see Table 2.
- If the selected tree / shrub is part of a group or immediately adjacent to tree / shrubs, these too should also be inspected for nests. For example felling one tree could expose a nest to a change in micro-climates or predators.
- If at any time, an active nest or a nest that is being built is observed, the tree / shrub must not be worked upon.
- If a nest is observed that it is quite clearly an old or abandoned nest (not maintained / falling apart or clearly not being used – time of year will be a consideration), the tree / shrub may be felled.
- In regard to larger mature trees it should be our aim to work on these trees out of the regular nesting season. However, if for health and safety reasons or perhaps responding to wind damage, work should continue with caution. The tree should be continually observed for nests and bird activities.
- Holes in the trunk / branches should be viewed with suspicion and all available measures (for example, binoculars, hoist) should

- be employed to investigate such features further. If a tree is found in a dangerous condition that contains a nest, where possible the work should continue without disturbance to the nest and within the shortest possible time. Where there is possibility the nest may be physically disturbed advice should be taken from The National Parks and Wildlife Services (NPWS).
- Fallen trees and trailing branches in water bodies present nesting opportunities for waterfowl such as Coots and Grebes. Water side trees and vegetation should not be generally worked upon during the nesting season. If there is a necessity to work upon such trees or vegetation (for example, health and safety issues) then first view the tree / branch / vegetation from as many aspects as possible to identify any nests, including under any waterside branching / vegetation.
- In case of shrubs particularly evergreen species such as Laurel (a favourite with blackbirds) as necessary separate the branches and look in the central areas of the shrub looking for nests.
- At times where formally grown shrubs or hedges are being clipped of current season's growth, an inspection that includes physically moving and separating and visually inspecting the areas to be cut should take place. Operations in such areas should only proceed with caution, with operators prepared to stop if they see anything that concerns them regarding bird movement or activity.

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Assessment for bird nesting activities

Checklist of what to do before tree work

Ac	tion	Tick when completed
1	Look at the tree from a distance, looking up and down the tree for indications of nesting.	
2	Slowly circle the tree, again inspecting for indications of nesting	
3	Move underneath the tree, again slowly circle looking for nests.	
4	Look on the ground for concentrations of white-coloured droppings, then check the vegetation above again.	
5	Holes in the trunk / branches should be viewed with suspicion and all available measures (for example, binoculars, hoist) should be employed to investigate such features further.	
6	As you walk through an area, look for birds flying out of vegetation close to you and intensely scolding you; they may have a nest nearby.	
7	Sit quietly and watch for birds that may be bringing nest material or food repeatedly to one place. Birds tend to place their nests just on the undersides of the tree canopy and where branches join together.	

Table 1. Pre Works Inspection Checklist for bird nesting activities

When an active nest is found - reschedule!

Assessment for bird nesting activities

Inspectors name:			Date:		Time:			
Location:								
Tree / shrub description:		Site description:						
Description of inspection technique:	Ground inspection:			Hoist inspection	n:			
Visual evidence of bird nesting activity:	Phyiscal observat Nest materials		Physical nests Droppings		Foodstuffs Cavities			
Final comments:								
Signed:								

Table 2. Site inspection form for documenting searches for bird nesting activity associated with tree and shrub work undertaken in the bird nesting season (March 1 – August 31)

Appendix four: Extract from Design Manual for Urban Roads and Streets

Street trees are an integral part of street design as they contribute to the sense of enclosure, act as a buffer to traffic noise / pollution and enhance place. A traffic calming effect can also be achieved, where trees are planted in continuous rows and their canopies overhang, at least in part, the vehicular carriageway. Street trees can also be used to enhance legibility by highlighting the importance of connecting routes and distinguishing one area from another through variations in size and species selection. The planting of trees should be considered an integral part of street design.

In general, the size of the species selected should be proportionate to the width of the street reserve.

- Larger species, with a canopy spread greater than 6m will be best suited to wider streets, such as Arterial and Link streets.
- Smaller species with a canopy spread of two six metres will be best suited to narrower streets such as Local streets.
- Designers may seek to vary this approach in keeping with the characteristics of a place.
- For example: Sparse planting may be more appropriate in a Centre, enhancing its urban qualities.
- Smaller species may be more appropriate where buildings are located in close proximity to the street edge carriageway (i.e. to take account of overshadowing and growth restrictions).
- Larger species may be desirable within suburbs, to enhance the greener character associated with these places.

To be effective, trees should be planted at intervals of 14 - 20 metres. This may be extended periodically to facilitate the installation of other street facilities, such as lighting. Designers should also consider the impact of root growth. Tree roots may need to be contained within individual tree pits, continuous soil planting strips or using other methods to restrict growth under pavements / toward services.

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Appendix five: Extract from Design Manual for Urban Roads and Streets

British Standard 3998:2010 Tree Work. Recommendations. London: BSI

British Standard 5837:2012 Trees in relation to Design, Demolition and Construction - Recommendations. London: BSI

British Standard 8545:2014 Trees: From nursery to independence in the landscape - Recommendations. London: BSI

London Tree Officers Association (2008). The Risk Limitation Strategy for Tree Root Claims. London: LTOA

McHugh, D and Gallagher, G (2004). Trees, Forests and the Law in Ireland. Dublin: COFORD

National Tree Safety Group (2011). Common Sense Risk Management of Trees. Guidelines on trees and public safety in the UK for owners, managers and advisers. Edinburgh: Forestry Commission.

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Trees and Design Action Group (2014). Trees in Hard Landscape - A Guide for Delivery. London: TDAG

Trees and Design Action Group (2012). Trees in the Townscape: A Guide for Decision Makers. London: TDAG

Tree Council of Ireland (2010). Amenity Trees and Woodlands, A Guide to their Management in Ireland. Dublin: Tree Council of Ireland



