APPENDIX 1

Southwark Tree Management Policy

Contents

Executive Summary

Trees have long been valued for their beauty, marking the seasons and providing habitat for wildlife. The environmental benefits of urban trees within ecosystem services including reducing pollution, cooling air, providing shade and protection from ultraviolet light, intercepting and absorbing rainfall and storing carbon are also now increasingly well understood. Trees are less often considered as an integral and historic component of the urban landscape and its architecture, where they contribute to local character and can define a sense of place, frame views and vistas and strengthen our heritage and culture. The sum of all these benefits is often defined as the amenity value of trees.

At a time where recent pace of change and development within Southwark has been having an increasing impact on the borough's built environment it is ever more important that the benefits that trees provide across the borough are protected and enhanced.

The document first identifies the benefits of the treescape across Environmental, Biodiversity, Health and wellbeing, Heritage value and future urban landscapes and Socio-economic themes. This leads to the exploration of Southwark's treescape with further detail provided in Appendix 1.

Policy context is set out across European, National, Regional and Local framework levels before Southwark's 17 Tree Policies are set out. These have been themed in the following groupings; Tree maintenance, removal and planting, Managing Tree Risk, Trees and built environment, Planning and development and Biodiversity in an easy to use format for quick reference.

Further technical information is set out in appendices which cover Tree Risk Management Strategy, Southwark's Treescape, Policy framework, Tree Risk Management Strategy, Tree planting, Managing trees and subsidence, Biosecurity and the new Southwark Nature Activity Plan (SNAP).

One of the objectives of the Policy is to ensure that anyone can use this document to understand how the council manages its tree stock and to provide relevant policies setting out why certain works are, or are not, carried out on trees.

In order to benefit all who live and work in Southwark this Policy will contribute to the combined efforts of all stakeholders to assist in the security, preservation and enhancement of the council's treescape and green spaces in to the future.

1 Introduction

1.1 Purpose of the policy document

- To promote awareness of the value of trees in our environment.
- To interpret the policy framework on trees at European, National, Regional levels.
- To set out our policies to enable us to protect and enhance Southwark's treescape.

1.2 Vision and objectives

Southwark's Vision is:

The Council recognises the positive impact that urban trees have on the environment and the lives of people in Southwark and aims to protect its current trees and woodlands. The Council

aims to maintain a healthy, protected and sustainably managed treescape that contributes significantly to the health safety and well being of Southwark residents.

In order to realise this Vision the following Strategic Objectives (SO) have been adopted:

1. To manage the existing tree stock in accordance with good arboricultural and silvicultural practice.

2. To maintain a general presumption against the removal of trees, allowing felling only in accordance with good arboricultural and silvicultural practice, and to ensure that adequate and appropriate replacement planting takes place where planting is desirable, aesthetically necessary and sustainable. Natural regeneration will also be allowed if the site circumstances are appropriate.

3. To recognise the relationship between trees and the built environment and their role in helping to combat air pollution and climate change. Also, promoting the 'Right tree, right place' philosophy for new and replacement planting.

4. To continue to ensure protection of trees and woodlands subject to Tree Preservation Orders, in Conservation Areas and Sites of Importance for Nature Conservation, with trees to be retained on development sites and to require high standards of replacement tree planting. Southwark will also initiate prosecution where unauthorised tree work has taken place, or to take enforcement action where breach of planning permission has occurred where it is expedient to do so.

5. To promote the value of trees to residents, businesses and developers through good management and education, and explore ways for greater involvement, consultation and protection of trees and woodlands.

1.3 Benefits of the urban treescape

Environmental

Trees benefit our environment in the following ways:

Improving air quality

Trees are effective agents in enhancing air quality by producing oxygen (via the process of photosynthesis), and also through the capture of urban pollutants e.g. sulphur dioxide, nitrogen oxides, ozone, particulate matter, carbon monoxide and lead and heavy metals[1]. Some air pollutants such as dust ash, pollen and smoke are absorbed by leaves and bark or are temporarily intercepted from the air and washed in to the ground or collected by drainage systems.

Urban Cooling

As summer temperatures increase through climate change the importance of trees and other vegetation in reducing the 'heat island effect' through shading and evapotranspiration during the day and cooling the built environment at night time has become ever more apparent[2]. In the winter trees lower wind speeds reducing heat loss from buildings.

Climate change mitigation

[1] Donovan, G. H. & Butry, D. T. The value of shade: Estimating the effect of urban trees on summertime electricity use. Energy Build. 41, 662–668 (2009).

[2] ROSENZWEIG, C., SOLECKI, W. D., PARSHALL, L., LYNN, B., COX, J., GOLDBERG, R., HODGES, S., GAFFIN, S., SLOSBERG, R. B., SAVIO, P., DUNSTAN, F. AND WATSON, M. (2009). MITIGATING NEW YORK CITY'S HEAT ISLAND Integrating Stakeholder Perspectives and Scientific Evaluation. Bulletin of the American Meteorological Society
90(9), 1297-1312.

Trees play a crucial role in mitigating climate change[3]. Over a year a mature tree can remove approximately 22kg of carbon dioxide from the atmosphere whilst soil around a tree can provide durable carbon stores[4].

Reducing noise and calming traffic
Trees can help reduce noise pollution through the absorption of sound waves muting noises from building facades and canyonised street configurations.

The presence of roadside trees significantly increases driver perception of spatial edge. The evidence that the presence of trees by the roadside has a positive impact on driver behaviour is apparently sufficiently compelling that, at the operational level, the Department for Transport has reported a number of schemes aimed at using tree planting to reduce speeds and hence accidents[5],[6].

Sustainable Urban Drainage and Bioremediation
Trees play a vital role in reducing the runoff associated with flash flooding by slowing down the rate of flow through interception and also through the active process of evapotranspiration. Some tree species also help to ameliorate soil and water conditions through bioremediation by absorbing, processing or neutralising a wide range of pollutants[7].

Biodiversity

Urban trees and woodlands are intrinsic to biodiversity through their contribution to creating green corridors, enhancing the ecological permeability of the built environment. Trees provide habitat and a food source for a diverse variety of flora and fauna species both in densely built up areas as well as urban woodlands. Some trees are more important than others for providing habitat, food and shelter to other wildlife dependent on their age, location and circumstances. For example a single mature oak tree can support up to 500 different species of flora and fauna[8].

Woodlands in the borough provide some of the most important habitats in Southwark and the ancient woodland components of these assets are irreplaceable and subject to stronger protection[9].

Health and wellbeing

Urban trees can help build stronger community cohesion and enhance how safe and healthy people feel. Most people prefer to live and work amongst greenery recognising the importance of the value their treescape and greenspaces in otherwise built-up densely populated areas. Within greenspaces trees provide inviting areas for exercise[10] providing shade, reducing the risk of skin cancer and heat related health problems. A rich and diverse treescape has also been shown to help reduce stress and contribute to other health benefits[11] and reduce the recovery times of patients in hospital[12].

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[3] Nowak, D. J. Atmospheric carbon reduction by urban trees. Journal of Environmental Management 37, 207–217 (1993).
[4] Nowak, D. J. & Crane, D. E. Carbon storage and sequestration by urban trees in the USA. Environ. Pollut. 116, 381–389 (2002).
[5] CLARK, J. AND MATHENY, N. (2009). The Benefits of Trees. Arborist News 18(3), 12-18.
[6] Rosenblatt, J., Kweon BS. and Maghelal, P. (2008) The street tree effect and driver safety. ITE Journal on the Web, 69-73.
[7] French, C. J., Dickinson, N. M. & Putwain, P. D. Woody biomass phytoremediation of contaminated brownfield land. Environ. Pollut. 141, 387–395 (2006).

[8] Miles, A. Silva: The Tree in Britain p64 (1999)
[9] National Planning Policy Framework (paras 170, 175).
[10] LEE, C. AND MOUDON, A. V. (2008). Neighbourhood design and physical activity. Building Research & Information 36(5), 395-411.
[11] LOVASI, G. S., QUINN, J. W., NECKERMAN, K. M., PERZANOWSKI, M. S. AND RUNDLE, A. (2008). Children living in areas with more street trees have lower prevalence of asthma. Journal of Epidemiology and Community Health 62(7), 647-649.
[12] VELARDE, M. D., FRY, G. AND TVEIT, M. (2007). Health effects of viewing landscapes - Landscape types in environmental psychology. Urban Forestry & Urban Greening 6(4), 199-212.

Heritage value and future urban landscapes

Trees have always featured prominently in history, art and literature holding an important place in our collective imagination as key features in the landscape contributing to local identity and heritage. The preservation of landmark trees help mark time in an increasingly developing urban environment helping to create links between generations; by contrast planting new trees provides a great opportunity to look to the future. Whilst trees can provide enhancement and help emphasise or soften existing architectural features, new developments provide exciting opportunities to create new and differing localities and atmospheres through consideration of landscape perception principles[13].

Southwark specific examples of places of heritage value can found with the Oak of Honor at One Tree Hill, Honor Oak, once part of the historic Great North Wood, the old boundary oaks along Wood Vale, and the tree associated tree associated road names in parts of the borough e.g. Wicker's Oak, Giles Coppice, Wood Vale, Linden Grove and Willowbrook Road.

Socio-economic

As the awareness of the benefits trees increases social demand for trees has never been greater. Trees help to create welcoming areas within our town centres, encouraging people to visit and stay for prolonged periods, using shops and restaurants, whilst workers who have views of trees feel happier, aiding increased performance[14]. Trees also help to provide a sense of place and community, and provide an educational resource through community orchards and the Forest Schools programme.

Trees stimulate the local economy. The presence of well-cared for trees encourages shoppers to spend more time at a business district, and they will travel a greater distance to visit that center, research has shown. Further, shopping areas with trees are more likely to be ranked as being more comfortable and having better upkeep, friendlier staff, and higher quality products.

2 Southwark's Treescape

2.1 There are approximately 120,000 trees in Southwark excluding areas designated as woodland[15].

2.2 Southwark Council is responsible for the direct management, maintenance and care of over half (80,000) of the borough's tree population as follows:

Housing Estates 17,000
Parks & Open Spaces 44,000
Highways 16,000
Schools 3,000

2.3 In terms of geographical distribution, the northern part of Southwark is densely urbanised with less open space and fewer trees, however the many parks in these parts of the borough make a significant contribution to existing canopy cover levels. In this area, the trees for which Southwark Council is responsible are concentrated along roadsides and on housing estates. The southern part of Southwark is more

[13] Kuo, F. E., Bacaicoa, M. & Sullivan, W. C. Transforming inner-city landscapes: Trees, sense of safety, and preference. Environ. Behav. 30, 28–59 (1998).
[14] Kaplan, S., Kaplan, R. & Wendt, J. Rated preference and complexity for natural and urban visual material. Perception and Psychophysics 12, 354–356 (1972).

[15] A woodland is a diverse ecosystem that is structurally dominated by trees, but also includes the ecological interplay of flora, fungi and fauna, many of which are specifically associated with woodlands.Southwark has 74 hectares of designated woodland including Dulwich Upper Wood,
Sydenham Hill Woods, Russia Dock Woodland, One Tree Hill and parts of Peckham Rye, Nunhead Cemetery and Camberwell Cemetery.

suburban and includes large open spaces, large private gardens and significant ancient woodland.

2.4 The most important woodland in Southwark in terms of size and age are the adjoining Dulwich & Sydenham Hill Woods (Dulwich Wood being owned by the Dulwich Estate) The much smaller Dulwich Upper Wood also makes a significant ecological contribution to the area. These were all once part of the Great North Wood, a vast area of worked coppices and wooded commons that once stretched from Deptford to Selhurst.

2.5 Trees not managed by Southwark include those managed by Transport for London, trees located within residential gardens and those on other private land.

2.6 There are over 400 species of tree found in Southwark, full details including tree distribution and canopy cover figures are shown in Appendix 1.

3 Policy

Policy framework

3.1 This policy document has been prepared in response to National, Regional and Local policy frameworks that necessitate the creation of borough-wide tree strategies and accentuate the importance of protecting, maintaining and enhancing trees and woodlands.

3.2 Regionally, the Mayor of London committed to making more than half of London green by 2050 in the 2018 London Environment Strategy (LES). This includes ensuring that there is not an overall loss of green cover through new development proposals, and increasing tree cover by 10% from current levels by 2050. An action of the LES is the emerging London Urban Forest Plan being co-ordinated by the London Forest Partnership (chaired by the Forestry Commission and Greater London Authority). This will effectively supersede the London Tree & Woodland Framework.

3.3 National government has recognised the vital role of trees in its 25 Year Environment Plan, where it recognises the importance of boosting the resilience of trees and creating new green spaces. In the strategy, the government committed to planting 1m urban trees and 11m additional trees across the country, and to the appointment of a national Tree Champion, who would help to drive a step change in tree planting

3.4 In 2012 The European Commission adopted an ambitious new strategy to halt the loss of biodiversity and ecosystem services in the EU by 2020. There are six main targets, and 20 actions to help Europe reach its goal. Some of the key measures include;

- Full implementation of EU nature legislation to protect biodiversity
- Better protection for ecosystems, and more use of green infrastructure
- More sustainable agriculture and forestry

3.5 Tree policies

Southwark's has adopted the following tree policies implemented in order to deliver its strategic aims and objectives.

The policies have been set out in the following sections:
Tree maintenance, removal and planting; Managing Tree Risk; Trees and built environment; Planning and development; Tree Management; Trees in Private Ownership; and Biodiversity.

(Please click on a single policy for quick reference – active table mechanism)

Tree maintenance, removal and planting

1. Tree pruning

Southwark will prune trees for the following reasons only: where there is a risk to public safety; to abate an actionable nuisance; to mitigate the risk of building subsidence; routine maintenance; and for accordance with good arboricultural practice.

Where possible, trees subject to pruning will retain their natural form. Where work is essential, this will be limited to the removal of dead wood, lifting of the crown and sympathetic crown reduction to ensure the tree retains its natural branch structure.

The Council has a proactive programme of inspections from which necessary remedial works are generated and carried out, supported by a 24 hour emergency service. In addition, requests are periodically made by residents for tree pruning which are managed by the Tree Section via the Customer Service Centre (CSC). In all of the above criteria the Council applies strict criteria for when pruning is deemed necessary.

To ensure an impartial and judicious service is provided to all of its residents the Southwark will only prune trees for the following reasons:

- For the purposes of public safety: to ensure statutory clearance over the highway, footway, cycle lanes and public rights of way.

- To abate an actionable nuisance: where trees come in to conflict with buildings and light structures.

- To mitigate the risk of building subsidence: where risk trees have been identified on shrinkable clay soil and been included in the Borough's Insurance Mitigation Pruning Programme.

To ensure the optimum functionality of street lighting and CCTV cameras (in accordance with pruning standards).

- Where remedial works are advantageous to the tree or tree stock and are in accordance with good arboricultural practice.

To ensure clarity and manage customer expectations Southwark will highlight some of the reasons frequently used to justify pruning that are considered beyond its responsibility.

The Council periodically receives requests from residents to prune trees. With the aim of ensuring an impartial, reasonable and transparent service is provided to all of Southwark's residents, the Council will not prune trees in request to allay or resolve the following issues:

- Branches overhanging properties: residents have the right to exorcise their right under Common Law to prune back branches to their property boundary; all arisings must be disposed of at their own effort or expense; pruning must only be carried out following discussion with a Council arboriculturist and completed to the standard set out in BS3998:2010 Tree Work Recommendations.

- Where a tree is thought be overly large.

- Interference with satellite, TV or other media reception: there is no legal right to television reception and the Council (or any tree owner) has no legal obligation to remove or prune trees to improve reception; 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.

- Branches and/or limbs in physical contact with telephone wires: telephone wires are plastic coated and faults on the line are very rarely caused by contact with branches; residents will be encouraged to contact their service provider to address any faults or interference experienced with their telephone phone line.

- Excessive leaf fall: this is a seasonal problem generally localised to a short period of the year. Residents are expected to clear any undesirable leaf litter falling on their properties themselves or at their expense; leaf litter on publically owned footways and highways will be addressed by the Borough's Street Cleansing contractors.

- Fruit fall: this is a seasonal problem generally localised to a short period of the year. Residents are expected to clear any undesirable fruit falling on their properties themselves or at their expense; fallen fruit on publically owned footways and highways will be addressed by the Borough's Street Cleansing contractors as notified.

- Problems associated with pollen.

- Excreta caused by insects or birds: honeydew (aphid excreta) and bird droppings are not recognised in law as a 'legal nuisance'; hazards on the footway can be addressed by contacting Street Cleansing to notify them of the problem; measures to address the problems associated with honeydew can be made by residents by regular car washing, covering or parking in an alternative location.

- Obstruction of view: there are no rights associated with maintaining trees in accordance with maintaining views in British law

- Lack of light: there is no 'Right to light' (or shade) in British law.

2. Tree Removal

Trees will only be removed where there is a risk to public safety or damage to property or with the aim of good arboricultural practice.

Publically owned trees are a valuable resource in the context of the Southwark's tree stock. Therefore the determination will be to resist the removal of trees wherever possible. Southwark will not normally fell a healthy tree; however there are some circumstances where it is deemed necessary to remove trees:

- to address professional public safety concerns;
- to mitigate building subsidence;
- to abate an actionable nuisance;
- to reduce the risk of the spread of pests and disease;
- where the highway and/or footway condition determine retention unsustainable;
- where an approved planning application or essential development works requires tree removal
- in accordance with good arboricultural practice.

These decisions are carefully considered by Southwark's Arboricultural Officers following consultation with local residents and other stakeholders wherever possible.

It is important that the public, elected Members, stakeholders and colleagues are provided sufficient notice of the intention to remove trees. Email notification must be sent at least 15 days in advance of the commencement of works. This will be followed up by the attachment of a Felling Notice to individual trees with a 15 day notice period.

Any objections or queries associated with the removal of trees should be answered prior to the commencement of the operation. However it should be understood that in some circumstances trees must be removed at short notice in accordance with their condition and associated public safety concerns. In such cases retrospective communications will be sent to Ward Members and stakeholders.

The tree pit will be made safe with a temporary backfill material and capped with a bituminous surface until the next planting season, or the Highway Maintenance Team will be contacted and asked to undertake a permanent reinstatement of the highway.

3. Tree planting

Replacement tree planting

Where trees have been felled the Council will commit to providing a replacement tree as close to the location of the felled tree as practicable during the next planting season. A sign will be placed in the original location of the felled tree detailing that the tree will be replaced in the same location or a nearby location.

The Council will seek to plant at least one tree for every tree it removes.

Following proactive or reactive inspections it is sometimes necessary to remove trees. In such circumstances the Council will ensure a replacement tree is planted if the location is continued to be deemed viable in accordance with good arboricultural practice.

When the decision to remove a tree is made, a request on the Southwark's asset management data base will be made for a replacement tree of suitable species for the

location. Subject to resources, the replacement tree will be planted within the following two planting seasons.

New tree planting

The Council will undertake an ambitious program of new tree planting and projects to support increasing biodiversity in order to address the Council's Climate Change Emergency status. Informed by ecosystems services analysis and working with local stakeholder groups Southwark will undertake tree planting in streets, housing estates, parks, school grounds, and woodlands in order to increase canopy cover for the borough in line with national, regional and London targets.

In addition the Council will encourage initiatives in support of additional planting e.g. woodland and orchard creation, from internal and external sources of funding on all of its sites as appropriate and will implement programmes of planting aimed at increasing Southwark's publically owned tree stock.

The Council will provide advice and information to schemes or groups seeking to increase tree cover within the borough whether on public or privately owned sites.

The Council will continue to manage the Adopt a Tree and Memorial Trees initiatives funded by individuals and groups.

In support of the Councils replacement tree scheme (The Adopt a Tree scheme and Memorial Tree initiative will continue to be managed by Southwark on a cost neutral basis, delivering value for money to local residents seeking additional tree planting.

The Council will continue to ensure that appropriate regard is given to the relationship between species selection and location (Right Tree, Right Place).

Wherever possible a wide range of species will be utilised in order to build in future resilience to against species specific tree related pests and diseases.

The objective of all tree planting programmes is to ensure future tree planting in the borough is appropriate, sustainable, considered and permits the long term survival of those trees planted so that they fulfil their growth potential and make the maximum contribution possible without causing many of the problems traditionally associated with planting trees in urban areas.

4. Programme of tree maintenance

The Council will continue to issue a proactive programme of tree maintenance linked to the tree inspection programme (ad hoc works will be issued appropriate to risk alongside the programme).

Following inspection as set out in Policy 5 the Council will order all necessary remedial works for pruning and felling in accordance with good arboricultural practice (Policies 1 and 2).

All works issued to service providers are expected to be completed within the timescales set out in the contract. Failure to meet designated timescales for works completion will be subject to the rectification and default procedures as per contract specification.

Managing Tree Risk

5. Tree Risk Management Strategy

The Tree Risk Management Strategy makes clear all legal responsibilities, assesses how Southwark operates to mitigate the risk which trees present, and sets out detailed associated

procedures and methodologies (see Appendix 2 – Southwark Council Tree Risk Management Strategy).

6. Emergency call out service

The Council will continue to provide a 24 hour call out service in order to respond to emergency situations on Borough managed land and highways.

The Council has a duty under The Highways Act 1980 to ensure that all of the roads within the Borough are free from hazards at all times. In order fulfil this duty the Council will continue to ensure a 24 hour emergency call out service is maintained to clear fallen trees from the highway and public land. It is expected that all call outs are responded to within 1hour.

In the prospect of an extreme weather event the Council will ensure that adequate resources are targeted to processing multiple emergencies and managing post storm clear up operations (see Tree Risk Management Strategy Appendix 1: Policy Framework).

7. Dangerous trees on privately owned land

The Council may serve notice on the owner of a private tree if it is considered to present an unreasonable risk to the public. If remedial work is not satisfactorily undertaken, the Council can undertake the necessary work to mitigate the risk and recover the costs from the tree owner.

Occasionally there may be reasons why owners do not make dangerous trees safe, e.g. owners may not be traceable, or refuse, or are unable to pay. As a last resort, the local authority has powers under the Local Government (Miscellaneous Provisions) Act 1976 section 23 & 24 Dangerous Trees and the Highways Act 1980 section 154, to take the minimum action necessary to remove immediate danger on private land. However, these powers are discretionary; the authority will only guarantee action if a tree in private ownership is likely to impact on the highway or Council owned land or property. All other scenarios will be assessed on a case by case basis (see LBS Tree Risk Management Strategy (appendix 2) appendix 4, LBS Procedure for tree risk mitigation on privately owned trees under the Local Government (Miscellaneous Provisions) Act 1976) and Highways Act 1980.

When works have been carried out, the Council can recoup the costs of the works plus an administration fee. If the owner is untraceable or un-contactable a land charge will be entered against the property for future payment.

Trees and the built environment

8. Excavations and utilities

When undertaking excavation works near to street trees all Council operatives and private contractors will be required to adhere to the guidelines as set out in the revised National Joint Utility Guidelines: Guidelines for the Planning, Installation and Maintenance of Utility Apparatus in Proximity to Trees (NJUG 4, 2007, unless otherwise formally agreed with the Tree Section.

It is recognised that on-going maintenance of the highway, service routes and street furniture is essential to ensuring that the Borough's transport and infrastructure network continues to operate effectively. This brings considerable potential disturbance to the Borough's trees as work often requires excavation and construction within the root zone of trees. Therefore it is essential that when undertaking excavation works near to street trees all Council operatives and private contractors will be required to adhere to the guidelines as set out in the revised National Joint Utility Guidelines.

9. Managing trees and subsidence

Southwark will continue to manage its tree stock to minimise the risk of tree-related subsidence, whilst maintaining a healthy and sustainable tree stock. Location and species for new tree planting will be selected to minimise the risk of future tree-related subsidence. Southwark will seek to continue to retain trees on shrinkable clay subsoil, where sustainable, in order to maintain the value of the amenity. The Council will continue to manage a robust programme of pruning in order to mitigate subsidence damage to buildings: regrowth on all risk trees will be removed on a 2 yearly cycle in order to manage water demand.

Southwark will manage and process claims in accordance with the principles of the LTOA's (London Tree Officers Association) Risk Limitation Strategy and the Joint Mitigation Protocol (of which it is a signatory) by managing its tree stock with the aim of reducing the potential for building damage whilst maintaining a healthy and sustainable tree stock:

- Local authorities instigate a regime of cyclical pruning of Council tree stock in areas predisposed to building movement where this is appropriate.
- Local authorities provide dedicated resources for dealing with subsidence generated claims directed at Council owned trees.
- Local authorities instigate a regime of selective removal and replacement of street tree stock in areas predisposed to building movement where this is appropriate.
- Local authorities provide dedicated resources for dealing with subsidence generated Conservation Area notifications and Tree Preservation Order applications.
- Local authorities review all existing unsettled claims providing dedicated resources to challenge those unwarranted claims based on poorly investigated and inaccurate evidence or where in the case of preserved trees the Town & Country Planning (Trees) Regulations 1999 can provide relief from the claim.

Planning and development

10. Tree protection

The Council will seek to ensure, through the use of current Tree Protection Order (TPO) and Conservation Area (CA) legislation, that trees of particular amenity value are protected. A TPO can include individual trees, those in groups or as entire woodlands.

In accordance with the Town and Country Planning legislation the council will seek to protect and preserve trees of high amenity value through the careful consideration of TPO and Conservation area applications.

Legal protection through TPO's and CA's is generally afforded to trees in private ownership. Trees in the ownership of Southwark, including those on leased sites, are subject to the protection of the Council.

Tree Preservation Orders:
Anyone wishing to remove or undertake pruning works under a TPO is required by law to make a formal application to the borough using application form (downloaded online or requested from the Planning Department). Care should be taken in completing the form as applications that are incomplete or lacking sufficient information to determine the proposal will not be registered. Once the application has been registered it will be assessed and a decision notice will be issued within 8 weeks, detailing the outcome of the process.

Tree owners carrying out permitted development to their property adjacent to protected trees may also require permission before starting work, if the development is likely to lead to the severing of roots or branches to facilitate the build.

Conservation Areas:

Any person wishing to remove or undertake works to a tree within a Conservation Area is required to give 6 weeks notification to the Council using an application form (this can be downloaded online or requested from the Planning Department). The Council will register, assess and respond to all notifications with 6 weeks.
The Council will respond in one of three ways;

- Allow the proposed works
- Negotiate and agree alternative works
- Serve a TPO to prevent the proposed works

Anyone not receiving a response within the six week period is advised to contact the Planning Department to ensure they operate within the law.

The Council will carry out a survey of its TPOs and review and update them accordingly and will maintain an electronic record of the details; many of the borough's TPO records are old and in need of updating. Some of the trees protected by TPO have died, whilst other trees have grown and are now in need of protection. The orders are largely recorded in paper files and there is a desire to update this to an electronic system which can be accessed by the public on-line.

Amongst non-statutory sites subject to protection are Sites of Importance for Nature Conservation (SINCs) or statutory Local Nature Reserves (LNRs), most of which in Southwark support woodland or individual and clusters of trees. These are important features for which the SINC/LNR is designated and managed.

11. Trees and development

Planning applications for new development will require compliance with development management policy which seeks to retain existing trees within a development site and promote the planting of new trees to benefit wildlife and biodiversity, enhance landscape, public amenity and health.

To ensure that due consideration and protection is given to trees worthy of retention, the Council will require all development applications that affect trees, to provide the following information (to the standard detailed in BS 5837:2012 "Trees in relation to design, demolition and construction):

Pre-application stage;

- Tree survey
- Tree retention/removal plan
- Consideration for protected wildlife species

Planning Application stage;

- Tree survey
- Arboricultural impact assessment
- Tree retention/removal plan, detailing retained trees and their Root Protection Areas (RPAs)
- Any proposed level changes
- Hard and soft landscape design plans (replacement tree planting)

Reserved matters/planning conditions;

- Arboricultural method statement
- Details of all special engineering within RPAs
- Details of utility apparatus and installation
- Schedule of works to retained trees
- Arboricultural site monitoring schedule*
- Post construction remedial works

*The Council, aside from making its own spot checks on development sites, will impose planning conditions to ensure that all proposed tree protection measures are carried out and maintained throughout each stage of the development as recommended in BS5837: "Trees in relation to design, demolition and construction".

In accordance with policy 7.21 of the London Plan in respect to trees and woodlands, the Council agrees that "any loss as a result of development should be replaced following the principle of 'right place, right tree'. Wherever appropriate the planting of additional trees should be included in new developments, particularly large-canopied species" (GLA Jul 2011, p.235). To encourage replacement or new planting on development sites the Council will apply these principles:

- All development sites must look to incorporate tree planting as part of the planning application.
- Where trees have been removed to facilitate the development, suitable levels of replanting will be required.
- Where the provision of tree planting on a development site conflicts with other trees.
- Council policies or where suitable levels of replacement tree planting cannot be found on site, the Council will seek funding for alternative tree planting in the locality.

Where the Council build new homes it is a requirement to replace any tree it removes in conjunction with the development.

12. Unauthorised works prosecution

The Council will prosecute anyone found to be damaging or pruning its trees (including damage to roots through excavation, compaction or modification of ground surface (i.e. paving) without permission or disposing of tree waste illegally, and where appropriate apply the maximum penalty.

The Council will use the Capital Asset Valuation of Amenity Trees (CAVAT) system to value its trees and use this information to assist in the management of its tree stock. Any private individual or external organisation that undertakes actions to damage or remove Council owned or protected tree(s) will be pursued for compensation for the full amenity value of the tree as calculated by CAVAT.

Biodiversity

13. Encouraging biodiversity in Southwark

The Council will seek to maintain a diverse range of species and age structure and will promote planting of native species, of local provenance where possible, in particular where appropriate to the park, character and the relevant park management plan. Management plans will be created by the borough ecologist, third sector partners and other stakeholder groups in order to achieve the conservation objectives of a particular site. All management plans should reference and adhere to the objectives of the Southwark Nature Action Plan (SNAP), formerly the Southwark Biodiversity Action Plan (BAP), e.g. the importance of woodlands (as a Priority Habitat) and of woodland/dead wood habitats for a range of priority species.

In order to maximise biodiversity the Council understands the importance of encouraging a varied age structure in its tree stock. This can be achieved through planting, thinning, coppicing, glade and ride creation retaining over-mature and veteran trees and selecting specimens for succession. Wherever possible natural regeneration will be allowed as a management approach in woodlands. Where planting is undertaken native trees of local provenance will be used to maximise biodiversity benefits.

Over-mature trees and those with dead wood and cavities provide valuable wildlife habitats particularly for bats, birds and invertebrates. The borough's woodlands are also particularly important, containing a substantial number of veteran trees which support a large number of insects, many of which are rare. It is important that veteran and ancient trees are retained with pathways and

Dead trees (turned into monoliths where necessary), fallen dead wood, and timber from felled trees should also be retained and where possible and remaining in situ.

14. Pests and diseases

The Council will ensure adequate resources are available to control and contain the outbreak of known new pests and diseases, and continue to ensure proportionate resources are dedicated to the control of existing pests and diseases.

Over the last few decades the UK has experienced increasing threats to plant biosecurity as increased global trade acts as a pathway for the arrival of new organisms, with impacts potentially exacerbated by climate change and new pathways of introduction into the EU. This has been highlighted by the increasing number of plant disease and pathogen outbreaks, most notably in relation to trees.

The Council will prioritise adequate resources in a timely fashion to deal with such threats, especially when these are related to the health of the tree stock and may also present serious public health issues. Southwark will continue liaise closely with the Forestry Commission and London Tree Officers Association (LTOA) on issues of biosecurity.

15. Woodland management

The Council will develop Woodland Management Plans, where required, for each of its woodlands and will encourage the development of Woodland Management Plans for privately owned woodlands and those owned by other public bodies.

Management plans will be created in by Southwark officers and third sector partners e.g. London Wildlife Trust (LWT) and The Conservation Volunteers (TCV) where appropriate, and with the participation of relevant stakeholder groups.

16. Veteran and ancient trees

The Council will promote a programme of recording and protecting veteran and ancient trees in the Borough and instigating a programme of management and succession planting in line with the government guidance (Ancient woodland, ancient trees and veteran trees: protecting them from development).

Many of the Council's veteran and ancient trees are already recorded and protected by a Tree Preservation Order, however Southwark acknowledges that the specific management practices required for this highly valuable resource are best undertaken under singular focused initiative. Therefore the Council will launch a programme of recording, mapping and the production of management plans for all of Southwark's veteran and ancient trees, whether on public or private land using data from the Ancient Tree Inventory and Greenspace information for Greater London (GiGL- London's Environmental Records Centre).

The resources available for this will be limited, however it is expected that a significant level of volunteer engagement will be sought in order achieve its aims.

17. Supporting partnerships

Southwark will continue to provide arboricultural support and advice to partnership groups throughout the Borough.

Partnership Groups make a highly valued contribution to Southwark's environment. The Council will continue to support our third sector partners, Friends of Parks and other stakeholder groups in providing support and arboricultural advice.

Trees have become increasingly important as a learning resource for children. This is reflected in the growing numbers of schools that have signed up to the Forest Schools programme. Southwark will provide arboricultural advice for schools hoping to utilise their outdoor space as a learning resource.

4 Review

This policy document is intended to be reviewed and updated annually following formal adoption.

Policy Number	Version	Author	Doc No.	PDF No.	Date Published	Review Due	Review Team
	1	JF				December 2020	
	2					December 2021	

Appendix 1

Southwark's Treescape

Tree species composition and distribution

Southwark Council is responsible for the management and maintenance of approximately 80,000 trees and over 70 hectares of woodland.

Species
The diversity of tree species in Southwark is staggering with over four hundred different species and cultivars recorded across the borough (see table 5).

The most commonly encountered genus across Southwark councils' urban forest is Acer with Cladrastis being the least commonly planted genus within the borough.

The top ten most commonly found council owned tree genus within Southwark are listed in the table below.

Tree Genera	Number Of Trees
Acer	8118
Populus	1504
Betula	2548
Sorbus	1719
Quercus	2305
Platanus	6072
Prunus	6366
Tilia	4335
Fraxinus	4180
Crataegus	1774

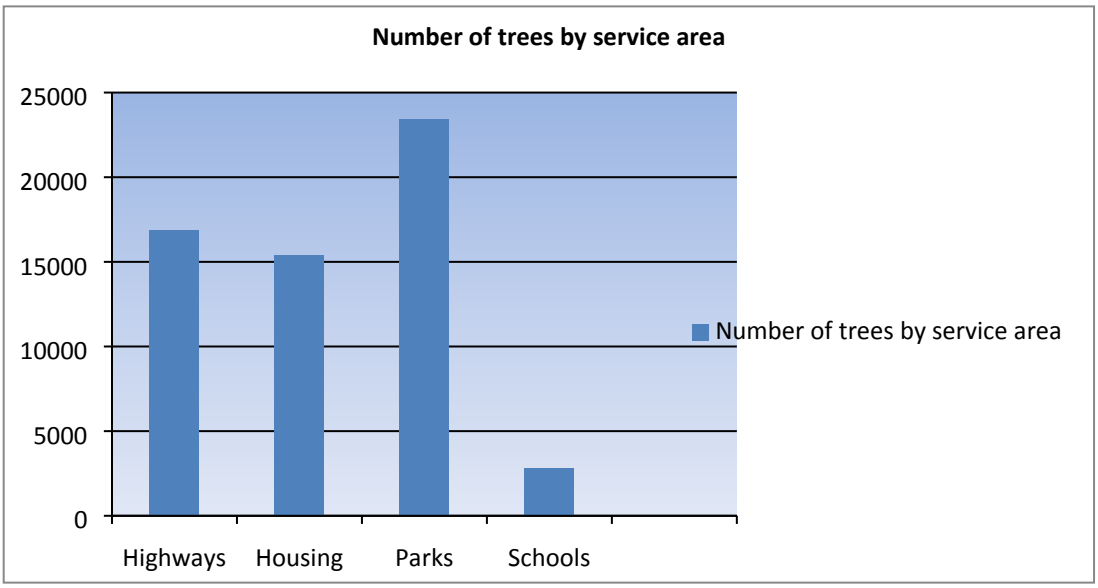
Table 1 – Top 10 most commonly found tree species in Southwark.

Composition
Southwark Councils tree section manages trees across four separate service areas; these consist of Highways, Parks, Housing and Schools.
The number of trees across the four service areas is presented in the graph and table below.

Site type	Number of trees by service area

Highways	16837
Housing	15363
Parks	23435
Schools	2786

Table 2 – Number of trees by service area.



Graph 1 – Number of trees by service area

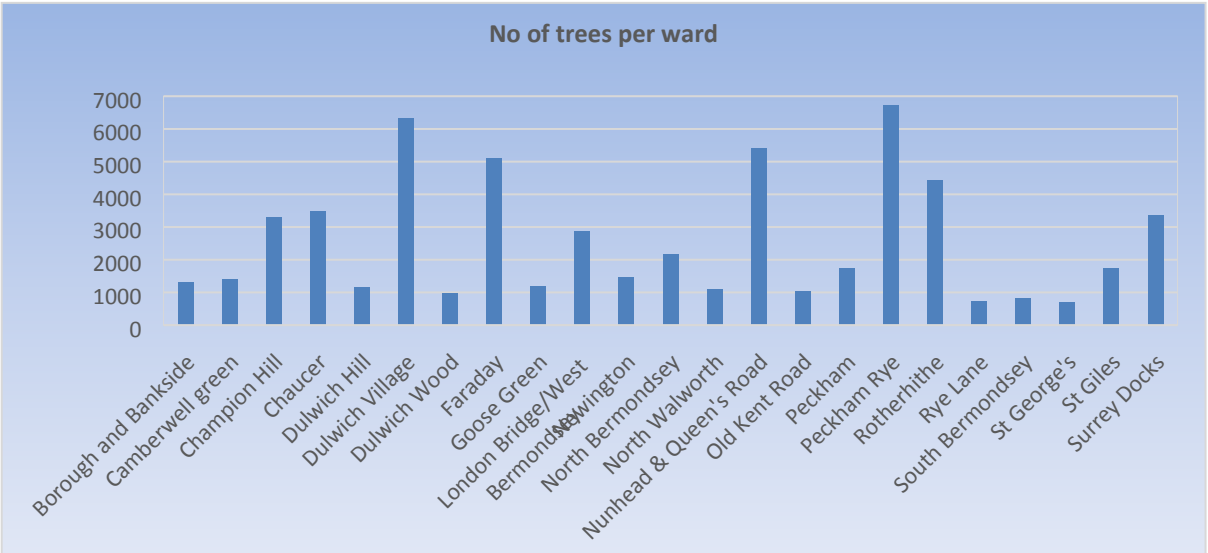
This data has been analysed further and separated into the information presented below to show the tree populations across each ward within Southwark.

The wards that have the largest tree populations are representative of the land use types in those areas, with large parks and woodlands being a dominant feature in that of Nunhead and Queens Road, Peckham Rye and Dulwich Hill with sites such as Nunhead Cemetery and Peckham Rye Park contributing significantly to these numbers.

Ward	No of trees per ward
St George's	703
Rye Lane	715
South Bermondsey	814
Dulwich Wood	971
Old Kent Road	1044
North Walworth	1084
Dulwich Hill	1163
Goose Green	1175
Borough and Bankside	1322
Camberwell green	1391
Newington	1468
Peckham	1740
St Giles	1747
North Bermondsey	2163
London Bridge/West	2857

Bermondsey	
Champion Hill	3295
Surrey Docks	3353
Chaucer	3472
Rotherhithe	4419
Faraday	5093
Nunhead & Queen's Road	5398
Dulwich Village	6318
Peckham Rye	6716

Table 3 – Number of trees per ward

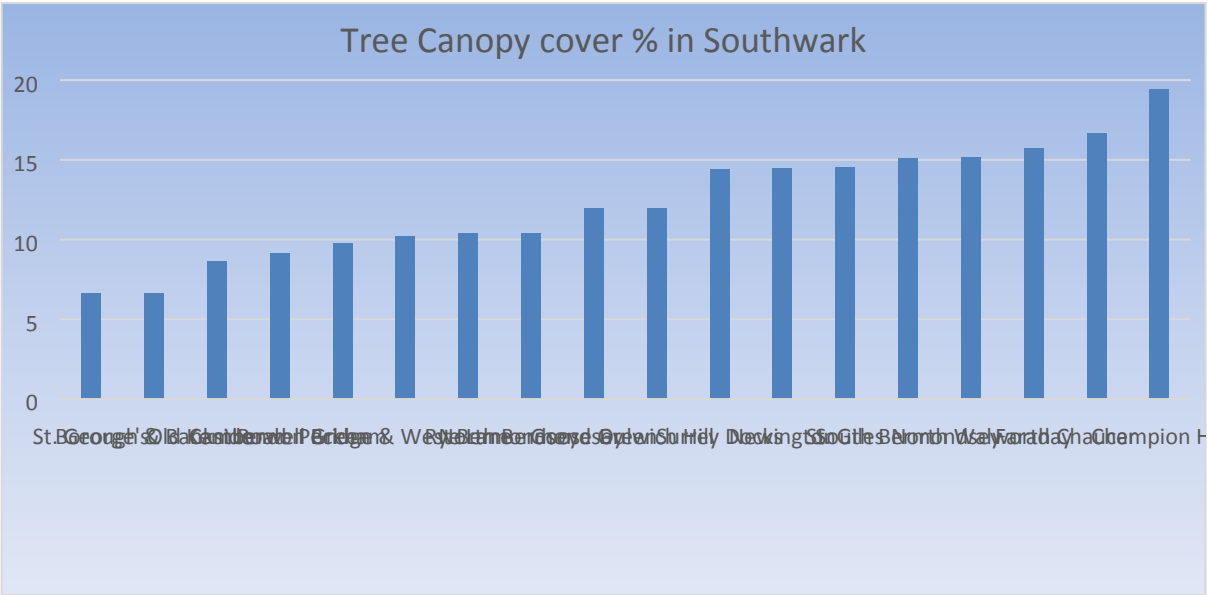


Graph 2 – Number of trees per ward

Canopy cover

An exercise undertaken by Curio Canopy and the Greater London Authority in 2016 to assess tree canopy cover within Greater London identified the following wards within Southwark with less than 20% tree canopy cover.

Since the exercise was undertaken the ward boundaries within Southwark have changed, however the canopy cover percentages across the borough have not significantly changed and the data can still be considered reliable. Serious consideration and prioritisation should therefore be given to increasing canopy cover within those wards.



Graph 3 – Tree canopy cover percentage by ward (Curio et al,2016)

Ward	Tree Canopy cover % in Southwark
Borough & Bankside	6.65
St. George's	6.65
Old Kent Road	8.63
Camberwell Green	9.16
Peckham	9.74
London Bridge & West Bermondsey	10.21
Rye Lane	10.36
North Bermondsey	10.39
Dulwich Hill	11.97
Goose Green	11.97
Surrey Docks	14.42
Newington	14.48
St. Giles	14.5
South Bermondsey	15.09
North Walworth	15.14
Faraday	15.69
Chaucer	16.66
Champion Hill	19.39

Table 4 – Tree canopy cover % in Southwark (Curio et al 2016)

Tree genus and species
Abies alba
Abies cephalonica
Abies grandis
Abies lasiocarpa
Abies nordmanniana
Acacia dealbata
Acacia pravissima
Acer campestre
Acer campestre 'Elsrijk'
Acer capillipes
Acer cappadocicum
Acer davidii
Acer ginnala
Acer griseum
Acer japonicum
Acer monspessulanum
Acer negundo
Acer palmatum
Acer platanoides
Acer pseudoplatanus
Acer rubrum
Acer saccharinum
Acer saccharum
Aesculus flava
Aesculus hippocastanum
Aesculus indica
Aesculus pavia
Aesculus X carnea
Ailanthus altissima
Albizia julibrissin
Alnus cordata
Alnus glutinosa
Alnus incana
Alnus rubra
Alnus viridis
Amelanchier Arborea Robin Hill
Amelanchier canadensis
Amelanchier laevis
Amelanchier lamarckii
Araucaria araucana
Arbutus unedo
Azara microphylla
Betula albosinensis -

Betula ermanii
Betula jacquemontii
Betula lenta
Betula nigra
Betula papyrifera
Betula pendula
Betula pubescens
Buxus sempervirens
Callistemon laevis
Carpinus betulus
Carya alba
Carya cordiformis
Castanea sativa
Catalpa bignonioides
Catalpa bignonioides Aurea
Catalpa speciosa
Ceanothus species
Cedrus atlantica
Cedrus atlantica 'Glauca'
Cedrus deodara
Cedrus libani
Celtis australis
Celtis occidentalis
Cercidiphyllum japonicum
Cercis canadensis
Cercis siliquastrum
Chamaecyparis lawsoniana
Chamaecyparis nootkatensis
Chamaecyparis obtusa
Chamaecyparis spp
Cladastris lutea
Clerodendron trichotomum
Cordyline australis
Cornus controversa
Cornus kousa
Cornus mas
Cornus sanguinea
Corylus avellana
Corylus colurna
Cotoneaster frigidus
Cotoneaster salicifolius
Crataegus 'Pauls Scarlet'
Crataegus crus-galli
Crataegus laevigata

Crataegus monogyna
Crataegus oxycantha
Crataegus X grignonensis
Crataegus X lavallei
Crataegus X prunifolia
Cupressus glabra
Cupressus lusitanica
Cupressus macrocarpa
Cydonia oblonga
Davidia involucrata
Eriobotrya japonica
Eucalyptus debeuzevillei
Eucalyptus gunnii
Eucalyptus niphophila
Euodia hupehensis
Fagus sylvatica
Ficus carica
Fraxinus americana
Fraxinus angustifolia 'pendula
Fraxinus excelsior
Fraxinus ornus
Fraxinus oxycarpa 'Raywood'
Fraxinus Pennsylvanica
Ginkgo biloba
Gleditsia triacanthos
Hamamelis spp
Hippophae rhamnoides
Ilex aquifolium
Jubaea chilensis
Juglans nigra
Juglans regia
Juniperus communis
Juniperus spp
Koelreuteria paniculata
Laburnocytisus adamii
Laburnum anagyroides
Laburnum X watereri 'Vossii'
Lagerstroemia indica Rosea
Larix decidua
Laurus nobilis
Ligustrum chinensis
Ligustrum japonicum
Ligustrum lucidum
Ligustrum ovalifolium

Ligustrum vulgare
Liquidambar styraciflua
Liriodendron tulipifera
Luma apiculata
Magnolia Galaxy
Magnolia Grandiflora
Magnolia kobus
Magnolia x loebneri 'Merrill'
Magnolia x soulangiana
Malus 'Golden hornet'
Malus 'John Downie'
Malus 'Profusion'
Malus baccata (Fastigiate Sibe
Malus domestica
Malus Evereste
Malus floribunda
Malus hupehensis
Malus Prunifolia 'Pendula'
Malus Rudolph
Malus sylvestris
Malus transitoria
Malus Tschonoskii
Malus X purpurea
Mespilus germanica
Metasequoia glyptostroboides
Michelia doltsopa
Morus alba
Morus nigra
Nothofagus antarctica
Olea europaea
Ostrya carpinifolia-
Parrotia persica
Paulownia tomentosa
Photinia fraserii
Picea abies
Picea orientalis
Picea pungens 'Glauca'
Picea pungens Hoopseii
Picea sitchensis
Pinus mugo
Pinus nigra
Pinus Nigra var. Maritima
Pinus pinaster
Pinus pinea

Pinus radiata
Pinus strobus
Pinus sylvestris
Pinus wallichiana
Pinus X holfordiana
Platanus orientalis
Platanus X hispanica
Populus alba
Populus balsamifera
Populus candicans 'Aurora'
Populus nigra
Populus nigra 'Italica'
Populus regenerata
Populus serotina
Populus tremula
Prunus 'Accolade'
Prunus 'Amanogawa'
Prunus 'Ichiyo'
Prunus 'Pandora'
Prunus 'Pink Perfection'
Prunus 'Pink Shell'
Prunus 'Sunset boulevard' (Che
Prunus 'Tai Haku'
Prunus 'Umineko'
Prunus avium
Prunus avium 'Plena'
Prunus avium Fastigiata
Prunus cerasifera
Prunus cerasifera 'Nigra'
Prunus cerasifera 'Pissardii'
Prunus domestica
Prunus domestica insititia
Prunus dulcis
Prunus incisa
Prunus kanzan
Prunus laur. magnolifolia
Prunus laurocerasus
Prunus laurocerasus 'Otto luyk
Prunus lusitanica
Prunus maackii
Prunus maackii 'Ambar Queen'
Prunus padus
Prunus padus 'Albertii'
Prunus padus 'Watereri'

Prunus sargentii
Prunus sargentii 'Rancho'
Prunus serotina
Prunus serrula
Prunus Serrula Tibetica
Prunus Serrulata
Prunus serrulata 'Autumn Glory
Prunus serrulata 'Kiku-Shidare
Prunus serrulata 'Schmitii
Prunus serrulata 'Sunset Boule
Prunus spinosa
Prunus subhirtella
Prunus subhirtella 'Asccendens
Prunus subhirtella 'Autumnalis
Prunus subhirtella 'Pendula Pl
Prunus sunset Boulvevard
Prunus tai Haku
Prunus Virginiana `Schubert`
Prunus X hillieri 'Spire'
Prunus X schmittii
Prunus X yedoensis
Prunus yedoensis
Pseudopanax crassifolius
Pterocarya fraxinifolia
Pyrus calleryana 'Chanticleer'
Pyrus calleryana 'Redspire'
Pyrus communis
Pyrus salicifolia
Quercus acutissima
Quercus castaneifolia
Quercus cerris
Quercus coccinea
Quercus frainetto
Quercus hispanica 'Lucombeana'
Quercus ilex
Quercus imbricaria
Quercus muehlenbergii
Quercus palustris
Quercus petraea
Quercus phellos
Quercus robur
Quercus robur 'Fastigiata'
Quercus rubra
Quercus suber

Quercus velutina
Quercus X ludoviciana
Rhamnus cathartica
Rhus typhina
Robinia pseudoacacia
Salix alba
Salix alba 'Tristis'
Salix babylonica
Salix caprea
Salix cinerea
Salix fragilis
Salix matsudana 'Tortuosa'
Salix pentandra
Salix X chrysocoma
Sambucus nigra
Sequoia sempervirens
Sequoiadendron giganteum
Sophora japonica
Sorbus 'Joseph Rock'
Sorbus americana
Sorbus aria
Sorbus aucuparia
Sorbus cashmiriana
Sorbus domestica
Sorbus hupehensis
Sorbus intermedia
Sorbus latifolia
Sorbus torminalis
Sorbus vilmorinii
Sorbus X hybrida
Sorbus X thuringiaca
Styrax japonica
Syringa vulgaris
Tamarix aestivalis
Tamarix angelica
Tamarix pentandra
Tamarix tetandra
Taxodium distichum
Taxus baccata
Thuja Orientalis Aurea Nana
Thuja plicata
Tilia americana
Tilia cordata
Tilia henryana

Tilia mongolica
Tilia oliveri
Tilia Petiolaris
Tilia platyphyllos
Tilia tomentosa
Tilia X euchlora
Tilia X europaea
Trachycarpus fortunei
Trachycarpus Fortuneii
Ulmus 'New horizon'
Ulmus americana Princeton
Ulmus carpinifolia
Ulmus carpinifolia 'Sarniensis
Ulmus coritana
Ulmus glabra
Ulmus glabra Camperdownii
Ulmus Lobel
Ulmus procera
Ulmus sophora 'Autumn Gold'
Ulmus X Hollandica
Wisteria sinensis
Zelkova carpinifolia
Zelkova serrata
Zizyphus guiggiolo

Appendix 2

Policy context

The following table of European, National, Regional and Local policies, regulations, strategies, plans and frameworks provides the contextual framework for Southwark's Tree Management Policy document.

Policy, Regulation, Strategy, Plan, Framework	Summary of objectives and targets
European	
EU Biodiversity Strategy to 2020 (2012)	• The European Commission adopted an ambitious new strategy to halt the loss of biodiversity and ecosystem services in the EU by 2020. There are six main targets, and 20 actions to help Europe reach its goal. Biodiversity loss is an enormous challenge in the EU, with around one in four species currently threatened with extinction and 88% of fish stocks over-exploited or significantly depleted. • The six targets cover: • Full implementation of EU nature legislation to protect biodiversity • Better protection for ecosystems, and more use of green infrastructure • More sustainable agriculture and forestry • Better management of fish stocks • Tighter controls on invasive alien species • A bigger EU contribution to averting global biodiversity loss • The new Biodiversity Strategy follows on from the 2006 Biodiversity Action Plan.
EU Biodiversity Action Plan (2006) and 2010 Assessment	The EU Biodiversity Action Plan addresses the challenge of integrating biodiversity concerns into other policy sectors in a unified way. It specifies a comprehensive plan of priority actions and outlines the responsibility of community institutions and Member Sates in relation to each. It also contains indicators to monitor progress and a timetable for evaluations. The European Commission has undertaken to provide annual reporting on progress in delivery of the Biodiversity Action Plan. A baseline report was prepared in 2010 to take stock of the 2006 Biodiversity Action Plan and assess the impact it has had on Europe's biodiversity. The report produced by the European Environment Agency, provides the latest facts and figures on the state and trends of different biodiversity and ecosystems components in the EU.
National	

25 Year Environment Plan (2018)	National government has recognised the vital role of trees in its 25 Year Environment Plan, where it recognises the importance of boosting the resilience of trees and creating new green spaces. In the strategy, the government committed to planting 1m urban trees and 11m additional trees across the country, and to the appointment of a national Tree Champion, who would help to drive a step change in tree planting
Town and Country Planning Act (1990) & The Town and Country Planning (Tree Preservation) (England) Regulations 2012	The Town and Country Planning Act 1990 is an act of the British Parliament regulating the development of land in England and Wales Local planning authorities protect trees in the interests of amenity by making Tree Preservation Orders (TPOs). Provisions are spread across primary and various secondary legislation and different rules apply depending on when the TPO is made.
Occupiers Liability Act (1957 and 1984)	The Act places a legal Duty of Care on landowners and occupiers responsible for trees, to take reasonable management measures to avoid foreseeable injury or harm. For major landholders, such as local authorities, this duty can be discharged by production and adherence to a detailed management policy such as this document.
Highways Act (1980)	• Under Section 96 of the Act, the Highway Authority is entitled to plant and maintain shrubs within verges using public sector funding. They may also erect fences and guards as a means of tree protection. • Section 142 of the Act gives power to the Highway Authority to issue licenses for the planting and maintenance of trees and shrubs by a resident in a property which adjoins the highway. • Section 154 of the Act entitles the Highway Authority to serve notice on any owner or occupier whose tree, hedge or shrub is overhanging, and compromising the safety of a publically accessible area, to carry out remedial works within 14 days. If the owner or occupier fails to comply with the notice, the Highways Authority is entitled to carry out the work and recover reasonable costs from the owner or occupier.
The Wildlife and Countryside act 1981, as amended	Consolidates and amends existing national legislation to implement the Convention on the Conservation of

	European Wildlife and Natural Habitats (Bern Convention) and Council Directive 79/409/EEC on the conservation of wild birds (Birds Directive) in Great Britain (NB Council Directive 79/409/EEC has now been replaced by Directive 2009/147/EC of the European Parliament and of the Council of 30 November 2009 on the conservation of wild birds (codified version)).
National Planning Policy Framework (NPPF) (2018)	The Government has produced a simple national planning policy framework setting out their priorities for the planning system in England in a single, concise document covering all major forms of development proposals handled by local authorities. The NPPF sets out the Government's planning policies for England and how these are expected to be applied. It sets out the Government's requirements for the planning system only to the extent that it is relevant, proportionate and necessary to do so. It provides a framework within which local people and their accountable councils can produce their own distinctive local and neighbourhood plans, which reflect the needs and priorities of their communities. Under the title 'Conserving and enhancing the natural environment' it advocates that the planning system should contribute to and enhance the natural and local environment by: • protecting and enhancing valued landscapes, geological conservation interests and soils • recognising the wider benefits of ecosystem services • minimising impacts on biodiversity and providing net gains in biodiversity where possible, contributing to the Government's commitment to halt the overall decline in biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures • preventing both new and existing development from contributing to or being put at unacceptable risk from, or being adversely affected by unacceptable levels of soil, air, water or noise pollution or land instability • remediating and mitigating despoiled, degraded, derelict, contaminated and unstable land, where appropriate The same section also supports the view that when determining planning applications, local planning authorities should aim to conserve and enhance biodiversity by applying a list of principles, the most relevant one to trees being: "Planning permission should be refused for development resulting in the loss or deterioration of irreplaceable habitats, including ancient woodland and

	the loss of aged or veteran trees found outside ancient woodland, unless the need for, and benefits of, the development in that location clearly outweigh the loss”
Biodiversity – The UK Action Plan (1994)	The Action Plan is the UK Government's response to the Convention on Biological Diversity (CBD) signed in 1992. It describes the UK's biological resources and commits a detailed plan for the protection of these resources. The first lists of Priority Species and Habitats were published by Government in 1995 as part of the UK Biodiversity Action Plan (UK BAP). They included over 300 species of which 11 were butterflies and 53 were moths.
Regional	
London Plan (2016)	The London Plan is the overall strategic plan for London, and it sets out a fully integrated economic, environmental, transport and social framework for the development of the capital to 2036. It forms part of the development plan for Greater London. London boroughs’ local plans need to be in general conformity with the London Plan, and its policies guide decisions on planning applications by councils and the Mayor. The plan outlines the overarching need for green infrastructure within the city. It recognises the benefits of trees and sets targets for tree planting over the next ten years, with an addition of two million trees by 2025. The manifesto committed to an increase in canopy cover from 20% to 25% by 2025 across London. The main aim of these targets was to mitigate for and adapt to climate change. The plan states that trees and woodlands should be protected, maintained and enhanced. It advises against removal of street trees.
London Environment Strategy (2018)	The Mayor of London committed to making more than half of London green by 2050 in the 2018 London Environment Strategy. This includes ensuring that there is not an overall loss of green cover through new development proposals, and increasing tree cover by 10% from current levels by 2050.
A Manifesto for Public Open Space: London’s Great Outdoors (2009)	London's Great Outdoors recognises that investment in public space enhances the look and feel of the city, making it a more healthy and pleasant place for residents and visitors and an environment in which businesses can thrive. It contributes to maintaining and improving London's image as the world’s most green and liveable big city and highlights London's offer as a city that can sustain economic growth. Open Spaces

	Strategies: Best Practice Guidance (2008) This document provides guidance on how to create an open space strategy. Drawing on the lessons learnt from 5 years of CABE Space strategic enabling support with local authorities across England, it updates earlier CABE Space guidance, (Green space strategies: A good practice guide, 2004), and combines this with an update of the guidance for London, (Mayor's guide to preparing open space strategies; Best practice guidance of the London Plan, 2004), to provide one comprehensive guide for England.
Connecting with London's Nature. The Mayor's Biodiversity Strategy (2002)	The document details the Mayor's vision for protecting and conserving London's natural open spaces. It seeks to ensure that there is no overall loss of wildlife habitats in London, and that open spaces are created and made accessible, so that all Londoners are within walking distance of a quality natural space. The strategy is an important step in establishing a London-wide framework for maintaining London's diversity of wildlife.
Preparing Borough Tree and Woodland Strategies SPG (2013)	The Preparing Borough Tree and Woodland Strategies Supplementary Planning Guidance, a joint publication with the Forestry Commission, has been published. It sets out an approach to trees and woodland that: • Covers the audit, protection and management of trees and woodland in line with Policy 7.21 of the London Plan • Highlights the asset value of trees and woodland, both in financial terms and the broad range of economic and environmental benefits they provide • Considers all the trees in a borough as a single unified resource – an 'urban forest' • Extends the concept of an 'urban forest' across boundaries so that the cumulative benefits of trees to Londoners can be enhanced • Takes a step by step approach to the management of trees and woodland.
All London Green Grid SPG 2012	The SPG aims to promote the concept of green infrastructure, and increase its delivery by boroughs, developers, and communities, by describing and advocating an approach to the design and management of green and open spaces to deliver hitherto unrealised benefits. These benefits include sustainable travel, flood management, healthy living, and creating distinctive destinations; and the economic and social uplift these support.
Local	

Southwark Open Space Strategy (2013) and evidence base (2013)	This report provides the evidence base setting out the current position with regard to the provision of open spaces in Southwark; This includes an updated audit of all the existing protected open spaces. The strategy sets out a number of recommendations on improving the quality of the existing open spaces and makes site specific recommendations for the different sub-areas of the borough.
Southwark Biodiversity Action Plan (2013-2019) and evidence base	A new Southwark Nature Action Plan (SNAP) has been developed to replace the Biodiversity Action Plan (BAP) and is in the process of being adopted by the Council. The SNAP has been developed by the Southwark Biodiversity Partnership in accordance with national, regional and local legislation and policies. The plans will run from 2012 to 2018. This plan provides information and guidance on protecting, managing and promoting key wildlife habitats and species within London.
Southwark Common Outcomes Framework (2016)	This framework is to be used when drawing up outlines or specifications for contract procurement or bidding opportunities for grants. It has been produced following the launch of Southwark's Voluntary and Community Strategy Common Purpose Common Cause in 2016. To take forward the strategy's vision a cross sector group met to identify ways in which commissioning can be improved. One of the products of the group is this new framework which sets out the overall vision for what commissioning will set out to achieve. This has close links to other strategic plans.

Appendix 3

Tree planting and site selection

New and replacement tree planting is essential to ensure the sustainable long-term management of Southwark's urban forest and the continued benefits that trees provide such as urban cooling and the filtration of particulate pollutants and reductions in surface water run off.

The aspiration over the next ten years is to increase canopy cover across Southwark, specifically targeting wards that have less than 20% canopy cover that are identified in table 1, roadside locations with high concentrations of NO2 as identified in the London atmospheric emissions Inventory air quality focus areas map shown in figure 1 and combat urban warming and the urban heat island effect by planting in targeted areas that are identified as having high average midnight air temperature's indicated by the darker colours in Figure 2.

Ward	Tree Canopy cover % in Southwark
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Rye Lane	10.36
North Bermondsey	10.39
Dulwich Hill	11.97
Goose Green	11.97
Surrey Docks	14.42
Newington	14.48
St. Giles	14.5
South Bermondsey	15.09
North Walworth	15.14
Faraday	15.69
Chaucer	16.66
Champion Hill	19.39

Table 1 –Target wards with less than 20% canopy cover (GLA 2016).

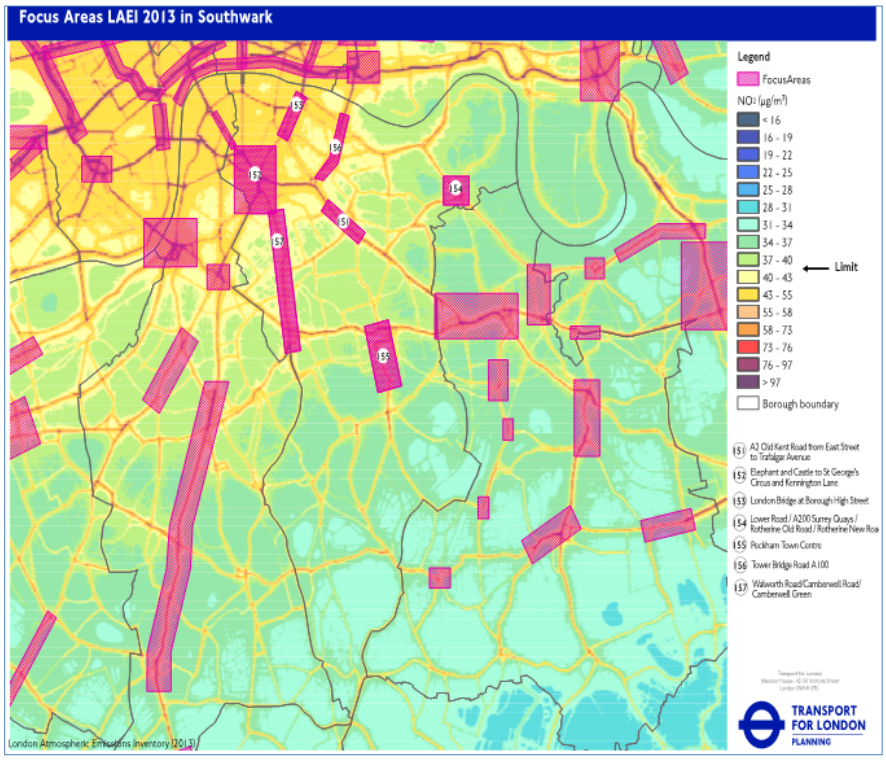

Figure 1 - London Atmospheric Emissions Inventory Focus areas (TFL 2013).

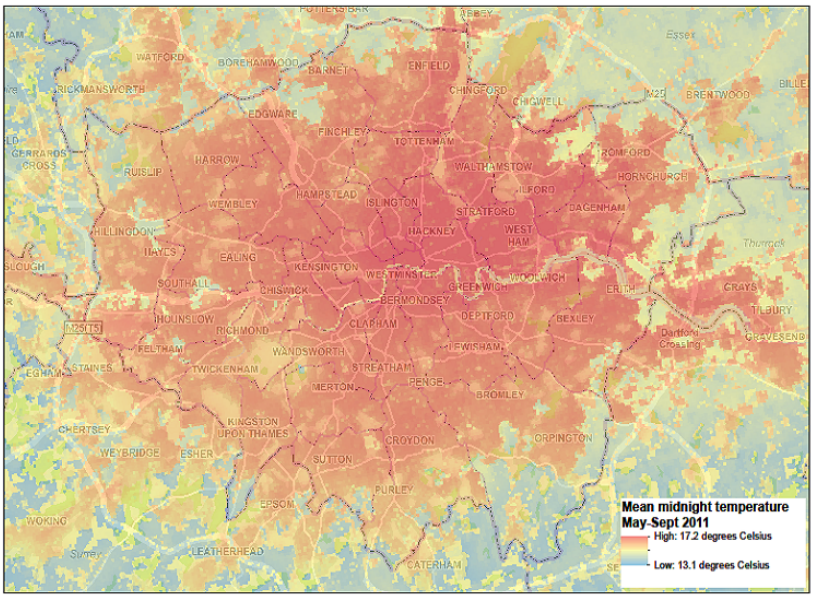

Figure 2 –Average midnight summer temperatures (GLA 2011).

There are a number of key considerations that should be addressed prior to undertaking any tree planting within Southwark to ensure successful establishment and longevity and reduce the need for intervention via pruning works.

Any tree stock purchased and planted by Southwark councils tree team both tree stock and planting practice should meet the best practice recommendations contained in BS8545

Location
Any new planting should be appropriately sited taking into account any onsite constraints such as the presence of above and below ground services ,street furniture and footpath widths , whilst considering the future growth of rates of the species to be planted.

Southwark Council will not usually undertake planting where the final footway width will be less than 1.2 metres following planting.

Tree Species
The tree is species chosen is likely to be largely influenced by the constraints identified onsite, however where appropriate preference should be given to the planting of large canopied species and trees that are considered to be resilient to climate change.

Tree species should also be tolerant of abiotic damage and environmental conditions of the intended site.

Any new planting should aim to increase the genetic diversity of species within Southwark and avoid planting greater than 20% of any one genera.

Ecosystem services and disservices
Trees that have the potential to grow 15 or more metres provide the greatest benefits to the urban environment as the ability to intercept rainwater, sequester carbon and contribute to urban cooling through evapotranspiration is greater in larger canopy trees.

Preference should be given to be planting species that are known to be efficient at filtering particulate pollutants such as PM10s and PM 2.5s.

Plants and trees produce biogenic volatile organic compounds, species such as Liquidambar and Salix that emit high levels of BVOCs should not be planted in closed canopy formations by busy roads to ensure that air circulation is maintained and emission’s are not pushed down to street level.

The siting of species that bear fruit such as Malus and Prunus should carefully considered avoiding fruit shedding in areas that are considered in appropriate such as those with high foot traffic.

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Appendix 4

Managing trees and subsidence

Subsidence occurs on clay soils, which naturally shrink or swell with changes in soil moisture. The water demand from trees and other vegetation growing on clay soils can affect the shrink/swell effect and, where close to buildings, a tree's effect on clay shrinkage can cause damage. Many properties in the south of the borough are built on sub soils with a high proportion of London clay.

Insurance Claim Mitigation

Southwark's Insurance Section supported by the Tree Section currently manages all claims relating to the Council's trees. Where a tree is implicated as having caused subsidence or damage to a property, the onus is on the claimant to provide evidence that the tree is the cause.

To manage risk and reduce liability, the maintenance regime for insurance-related pruning involves individual large trees and whole streets being pruned more frequently. Southwark Council is a signatory of the London Tree Officers Association's Joint Mitigation Protocol and the Risk Limitation Strategy, and has therefore undertaking the following actions:

- Instigate a regime of cyclical pruning of Council tree stock in areas predisposed to building movement where this is appropriate
- Provide dedicated resources for dealing with subsidence-generated claims directed at Council owned trees
- Instigate a regime of selective removal and replacement of street tree stock in areas
- predisposed to building movement where this is appropriate
- Challenge unwarranted claims based on poorly investigated or inaccurate evidence

Guidance for residents

If you believe your property is subject to subsidence damage you must contact your own insurance company who will investigate and if appropriate provide technical evidence of building damage and causality in support of any potential claim.

All of the above information is usually in a report provided by a Chartered Surveyor, who is employed on behalf of the freeholder's buildings insurance company.

Please note that Southwark Council cannot pay for any excess to be paid on an insurance subsidence policy.

If tree roots are proven to be a cause of damage, we will take action to abate further nuisance; in the meantime, we may look to take pre-emptive action, such as remedial pruning. However, each case is unique and needs to be evaluated on a case by case basis.

Tree pruning works in Southwark are prioritised and determined by the Council's tree officers.

Insurance Claim Procedure

The process for dealing with insurance claims is as follows:

- The claimant's insurers must contact the Council to report the claim and to check the tree concerned is owned by the Council.
- The claimant/property owner or their building insurers must provide the Council with
  the following:
    - A structural engineers report with a formal description of the damage
    - A site investigation report
    - A soils report
    - Positive tree and root identification, i.e. tree species, location, and nearness of roots to property
    - Level monitoring data to indicate evidence of the cyclical movement relating to the seasonal growth of vegetation
    - A drainage report
- The Council carries out its own assessment, including tree inspection. It produces a report for its Insurance Section detailing information held on a database including works previously carried out on the tree
- The Tree Section and Insurance Section collate the evidence provided to assess whether the tree roots are the primary cause of damage. If tree roots are proven to be a cause of damage, the Council will compensate the claimant and take action to abate further nuisance

Such insurance claims are dealt with on a case-by-case basis. A tree will not necessarily be felled as a result of a claim but will usually be included in the Council's 2 yearly maintenance cycle. This normally involves repeated crown reduction, which can reduce a tree's demand for water. This may in turn reduce the clay soil shrinkage and prevent further structural damage to the property. Where the decision is taken to fell a tree, the Council assesses whether it is appropriate to plant a replacement tree.

By maintaining detailed records of all Council-owned trees implicated in insurance claims, the Tree Section, in liaison with the Insurance Section, monitors where claims occur, and the maturity and species of trees involved. This enables them to develop a proactive approach to managing tree risks. It may be cost-effective to carry out pre-emptive crown reduction in high subsidence risk areas. The use of root barriers or similar tree growth restriction methods for newly planted trees should be considered in such high-risk areas.

Appendix 5

Biosecurity in Southwark

What is Biosecurity?

Biosecurity can be defined as measures or precautions designed to prevent the spread or introduction of unwanted pests and diseases.

Why is Biosecurity important?

Through human activities such as the global movement and trade in plant materials current and emerging pests and diseases are now seen as one of the biggest threats to the longevity and sustainability of the United Kingdoms treescape and Southwark's urban forest.

The introduction of pests and diseases into the country through the importation of plants and trees or via wood packaging materials has the potential to not only be damaging environmentally through the degradation of habitats and the loss of ecosystem services that trees provide but can also have an economic impact increasing budget pressures with high costs associated with the control and eradication of pest species.

What can we do?

Biosecurity measures are not required to be onerous or over complicated and generally just follow examples of Horticultural and Arboricultural best practice.

Southwark Councils Parks section will seek to follow the following biosecurity measures in the course of its operations.

* Prevent the spread and transmission of pests and diseases by regularly disinfecting and cleaning tools following pruning works.

* Regularly monitor newly planted trees in the first three years following planting to ensure that latent pathogens such as Xylella fastidiosa multiplex are not present.

* Increase the species and genetic diversity of the boroughs tree stock and avoid planting monocultures, whilst ensuring that any new planting is suitable for current climatic conditions and as far as reasonably practical plant tree species that are resilient to climate change.

* Southwark Councils Parks section will only plant tree stock and plant material that has met with the requirements of the European Unions and United Kingdoms plant passport systems and where possible source UK grown tree stock or tree stock and plant material that has been the subject of a quarantine period.

*Comply with the requirements of statutory plant health notices.

*Report any concerning tree pest or pathogens via tree alert.