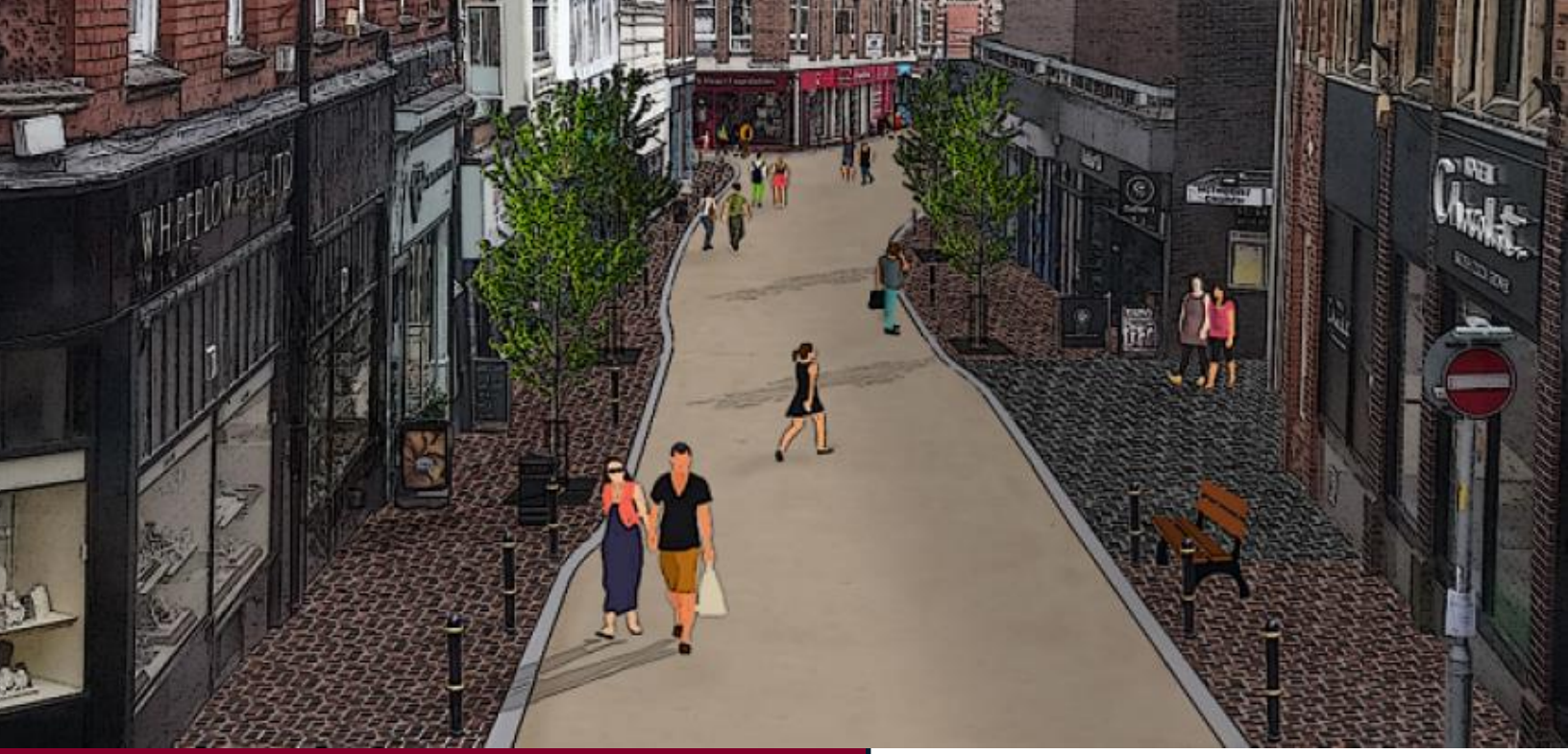

Appendix F: Street Trees Information and Checklist

Streetscape Design Guide 2025

Worcestershire County Council

worcestershire county council

Appendix F: Street Trees and Information Checklist

1. The right tree in the right place

Trees and other soft landscaping form an important part of the network of highways that make our communities sustainable, enjoyable, and inclusive. These elements of new developments can be valuable assets to the overall scheme. There is well documented evidence that the wellbeing of residents and success of the local economy is improved through green space, such as:

> "*The impacts on mental wellbeing, social networks and sustainable communities probably work through a variety of mechanisms and it's in these areas that the strongest evidence is emerging that urban green space can improve the public's health"*

UK Health Security Agency 2016

We advocate and encourage 'the right tree in the right place' and this principle must be applied at the early stages of design to ensure that trees can thrive and reach their full potential to remain as assets for as long as possible. This principle is not restricted by road classification.

Futureproofing newly planted trees, in so far as is practicably possible, will reduce their future maintenance requirements. This should then enable their successful adoption as part of the highway.

2. First Principle - Avoid tree and hedgerow loss

Schemes must consider the retention of existing landscape features identified through an appropriate assessment. Preliminary design of residential access roads, cycleways, and footpaths to serve the development should (as far as possible or unless wholly justified), be sympathetic to the Local Authority's and Highways wishes during the design stage. For example, if a tree of value was situated within the visibility splay, all attempts should be made to reposition the access if this can be done safely.

Any development, where practicable, should be designed so that it is positioned outside the canopy spread and root protection area of existing trees; however, where space is limited, this may not be possible. Any development that is to take place within the root protection area and or crown spread of trees that are on or adjacent to the site, should be carried out in accordance with an arboricultural report. The arboricultural report should adhere to the guidance set out in BS5837:2012.

Thorny species are not acceptable immediately adjacent to footways and cycle tracks. It is expected that non-highway hedges adjacent to the prospective highway will be transferred to the frontages or the site wide management company, to ensure future maintenance is addressed. Highway landscape features should be maintained by the developer for a minimum period of 5 years from planting.

Existing trees, which will become maintainable at public expense, shall be the subject of a condition survey to ascertain their health and may be subject to Commuted Sum payments to cover their future maintenance cost. Please see the section on our website for more information about Commuted Sums.

The minimum headroom required for trees above a publicly maintained highway is:

1. All Roads: 5.1 metres
2. Cycleway: 2.3metres (see LTN 1/20 chapter 5 - Headroom Requirements)
3. Footway: 2.4 metres
4. Horse-riding routes other than underbridges or subways: 3.4 metres (2.8 metres for momentary obstructions)

The minimum required horizontal clearance a carriageway or vehicular route is 0.45 metres (0.6 metres preferred) to the edge of the carriageway/route.

3. Second Principle - Strengthen our landscapes with trees:

Worcestershire County Council is willing to consider new replacement or compensatory trees within the existing or adoptable highway, which may be subject to a Commuted Sum. The Local Authority will work closely with the local Arboricultural officer to agree the most suitable species and ensure it is compatible with the site wide approach to green infrastructure.

It is essential that highway tree planting is considered in detail at the early stages of the design process when the initial concept layout is formed. As a growing structure, the tree will require much more space above and below ground as it matures from when it was planted.

Tree canopy size and soil volume requirements at maturity are often overlooked at both the design and construction phase, regularly resulting in poor vitality and short life span. This in turn leads to a reduction in visual amenity value, an increase in maintenance costs, and the premature removal of trees. Soil moisture levels, particularly in areas of heavy clay, are important data to acquire before any decisions are made on tree species. An initial design concept which includes tree lined boulevards can be decimated at the detailed design stage when the reality of their spatial requirements is considered in detail.

It is, therefore, essential that the initial layout design recognizes and provides space for the eventual size of mature trees with careful consideration of the following points:

1. Appropriate root protection systems must be provided for all new trees, and specifications must demonstrate careful consideration of any nearby structures or services.

2. It is important that street lighting design layouts are considered at the outset of any landscape/tree proposals so that maturing canopies do not obscure or reduce the effectiveness of lamps and, conversely, that lighting infrastructure will not inappropriately illuminate spaces intended to be of value for biodiversity.
3. Appropriate advice from suitably qualified ecological, landscape archaeology, heritage and arboricultural professionals should be sought and included in the design from an early stage, as all these specialisms contribute to determining applications. Worcestershire County Council will not accept adoption unless the proposals and implementation meet the county's requirements, are aligned with Worcestershire County Council's 'Green Infrastructure Strategy' and are climate, pest, and disease resistant free.

Worcestershire County Council will adopt trees and landscaping which at the time of completion of the s278/S38 maintenance period, show good vitality (leaf size/leaf colour/leaf canopy density/extension growth/incremental girth development/stem taper development) and structure. Spot checks will be carried out throughout the construction and maintenance periods. Developers will be prompted to take remedial action, if required, for 5 years from the date of planting.

Technical submissions are to include specifications relating to installation and post-planting and maintenance of trees to ensure contractors are adequately trained and experienced. We encourage discussions with council officers/engineers in relevant teams (e.g., trees, highways, lighting, road safety, drainage, urban design) in the early stages of the design. For external developers and their consultants, this should be through the Worcestershire County Council's Section 278 and 38 Development Control team. Worcestershire County Council will need to see evidence of the criteria, guidance and methods used when incorporating street trees into designs. The following references should be referred to where appropriate when planning schemes:

a) Manual for Streets (1 and 2)
b) BS 8545 Trees: From nursery to independence in the landscape –Recommendations
c) BS 5837 Trees in relation to design, demolition, and construction –Recommendations
d) BS 3998 Tree Work –Recommendations
e) BS 3936-1 Nursery stock Part 1: Specification for trees and shrubs
f) BS 4428 Code of Practice for general landscape operations
g) BS 5489-1 Code of Practice for lighting of roads and public amenity areas
h) BS 3882 Topsoil
i) BS 8601 Subsoil
j) Code of practice for the Sustainable Use of Soils on Construction Sites
k) Trees in Hard Landscapes – A Guide for Delivery (Trees & Design Action Group)
l) Trees and New Development – For All Working in the Built Environment (Trees & Design Action Group/University of Birmingham/BIFOR)
m) TDAG Tree Species Selection for Green Infrastructure
n) TDAG_FSAQ_2017.pdf

o) TDAG - Trees and New Development
p) NJUG Volume 4 Guidelines for the planning, installation, and maintenance of utility apparatus in proximity to trees (National Joint Utilities Group)
q) Building Near Trees -NHBC Standards Chapter 4.2 (National House Building Council)
r) Worcestershire County Council - Landscape Character
s) Worcestershire County Council - Woodland Guidelines
t) Urban Tree Manual https://www.forestresearch.gov.uk/tools-and-resources/fthr/urban-tree-manual/

4. Tree checklist for developers

When exploring feasibility/concepts:	**Yes**	**No**
Plan for the inclusion of street trees, covered by five-year post planting care?		
When trees are present on site, ensure a BS5873:2012 compliant tree survey and tree constraint are produced, and results used to inform design?		
Give attention to below-ground conditions, by ensuring information related to soils and location of any existing utility apparatus is gathered and factored in? This may include any implications related to foundation design where shrinkable clay soils are present.		
Gather information on landscape character and local treescape including veteran/ ancient/ notable trees and ancient woodland, to inform initial concepts as well as later detailed designs?		
When developing designs for securing development approval: **Explore all opportunities to make space for trees i.e.:**	**Yes**	**No**
On greenfield sites, ensure that the inclusion or retention of large trees is considered in parallel with the siting and dimensions of building, roadways, utilities and drainage?		

In retrofit situations, review carriageway and car parking allocations or consider planting (or enhancement to the rooting environment of existing trees) on the roadside of the kerb where footway width is too limited?		
Fully exploit tree benefits, whether existing or new to:		
Help to achieve the desired operational vehicular speed? e.g. gateway features		
Enhance the walking and cycling environment?		
Receive and manage surface water runoff, while also considering how this can benefit the tree?		
Enhance people's health and wellbeing?		
Enhance and support urban wildlife?		
Provide microclimate control (e.g. shading, shelter from wind, reducing overheating on glazed frontages) and associated impacts on buildings?		
Enhance or conserve cultural and historic amenity?		
Increase the climate and disease resilience of existing tree populations?		
Ensure above ground compatibility, i.e.:		
Factor tree growth over time in the positioning of new trees in respect to surrounding buildings and other infrastructure?		
Follow guidance to achieve good visibility for road users, commercial signs and shop windows, street lighting, and CCTV?		
Review all options to make informed and context sensitive choices for the surface and edge treatment around new or existing trees?		
Seek input from a tree specialist to:		
Provide quality rooting environment compliant with BS 8545:2014 paragraph 10.2, and adequate tree support, protection and other above-ground measures as per BS 8545:2014 paragraph 10.3?		
Select species that suit the identified physical and biological constraints of the site, will be sustainable in the future and follow the 30:20:10 rule?		

Provide a BS5837:2012 compliant Tree Protection Plan and Arboriculture Method Statement to protect existing trees?		
Ensure trees are sourced and incorporated following an evidenced Biosecurity and Phytosanitary Policy?		
When finalising documentation and preparing for construction:	**Yes**	**No**
For large sites, explore advance procurement with the design specialist to precisely secure the right tree species with the right specifications?		
Work with a tree specialist to write a competent tree specification, following the recommendations in chapter 8 of BS8545:2014?		
Ensure arboricultural supervision during construction to maintain compliance with method statements and updating of protection measures?		
Make effective arrangements for the handover of information between the planning/design team and the construction team relating to agreed protection measures for trees, soils and preparation of the tree rooting environment?		