

**Report to** Cabinet  
08 June 2016  
**Report of** Head of planning services  
**Subject** Landscape and Trees Supplementary Planning Document

**Item**

13

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### **Purpose**

To seek approval to adopt the Landscape and Trees Supplementary Planning Document

### **Recommendation**

To adopt the Landscape and Trees Supplementary Planning Document in accordance with regulation 14 of the Town and Country Planning (Local Development) (England) Regulations 2012.

### **Corporate and service priorities**

The report helps to meet the corporate priority a safe, clean and low carbon city and the service plan priority to implement the local plan.

### **Financial implications**

None directly.

**Ward/s:** All Wards

**Cabinet member:** Councillor Bremner – Environment and sustainable development

### **Contact officers**

Mike Burrell, Planning Policy Team Leader 01603 212525

Eleanor Larke, Landscape Architect 01603 212424

### **Background documents**

None

## **Report**

1. This report seeks cabinet endorsement and authority to adopt the Landscape and Trees Supplementary Planning Document (SPD), as recommended by Sustainable Development Panel on 23 March 2016.
2. The SPD provides information for planning applicants to enable cost effective and efficient implementation of national planning and adopted Norwich Local Plan policies relating to landscape, trees and development. It achieves this through the provision of guidance on landscape design principles and by setting out best practice in relation to the incorporation of landscape within development proposals.
3. It also aims to encourage greater awareness of the importance of landscape and trees in development, and to ensure early consideration is given by the applicant to tree and landscape matters in order that the design of the development evolves to create a strong sense of place and character.
4. Appended to this report as Appendix A is the Landscape and Trees Supplementary Planning Document as proposed for adoption.

### **Consideration by Sustainable Development Panel (24 June 2015)**

5. The SPD was considered in draft form by the Panel in June 2015 following which it was subject to six weeks consultation. The consultation generated little comment. Indeed only two responses were received and both of these were supportive.
6. Following further consideration of the implications of the SPD on the speed and efficiency of decision making on planning applications, the council ran a consultation on revising its local validation requirements. Validation requirements are reviewed from time to time to address changes to government guidance and to ensure the local plan is implemented effectively. The proposed revisions to the validation requirements would enable the SPD to focus on providing good practice guidance, and ensure that applicants have to provide appropriate and proportionate supporting information on landscape and trees at the time a planning application is submitted for it to be registered as valid.
7. The SPD was revised to focus on providing good practice guidance, whilst procedural requirements would be addressed through the revised validation checklist. This approach retained coverage of all the topic areas consulted on in the draft SPD in July 2015, whilst providing a greater focus on good practice to assist developers in submitting good quality applications and enabling applications to be processed effectively.

### **Report to Sustainable Development Panel (23 March 2016)**

8. Once the SPD had undergone changes as discussed above, it was again reported to the Sustainable Development Panel.

9. Members were generally positive about the document and agreed to recommend adoption by cabinet subject to three minor changes:
  - a) An amendment to include text which links to work being done on the River Wensum Strategy, to increase biodiversity along the rivers and soften the hard edge of the river in the urban areas. This has been reflected in section 2.5 Environment and Green Infrastructure considerations
  - b) An amendment to include a reference to fruiting plants within the text on ecological planting within section 2.5 Environment and Green Infrastructure considerations
  - c) Strengthening the text relating to the provision of street trees, Section 2.6 Street Layout to ensure the text directly relates to the requirements of Policy DM 7.
10. In addition two other minor changes were considered necessary to improve the quality of the document:
  - a) Paragraph numbers to the document for ease of reference.
  - b) Replacement of two of the photographs for better quality images.
11. These changes have now been made to the document attached.

### **Consultation on Validation requirements**

12. Proposed revisions to the validation requirements will be re-consulted on along with the forthcoming consultation on community involvement; it is anticipated that this will provide a greater response rate, as no responses were received as part of the previous consultation.

### **Conclusions**

13. Officers are confident that, as amended, this SPD will provide clarity to those involved in the submission of planning applications, of the standards that the Council will expect from new development proposals as they relate to trees and the landscape. It will therefore provide a sound basis for the cost effective and efficient implementation of national planning and adopted Norwich Local Plan policies relating to landscape, trees and development.

## Integrated impact assessment



**NORWICH**  
City Council

Report author to complete	
Committee:	Cabinet
Committee date:	8 <sup>th</sup> June
Head of service:	Head of Planning Services
Report subject:	Landscape and Trees Supplementary Planning Document - adoption
Date assessed:	20 <sup>th</sup> May 2016
Description:	Integrated Impact Assessment of the Landscape and Trees Supplementary Planning Document

	Impact			
<b>Economic</b> (please add an 'x' as appropriate)	Neutral	Positive	Negative	Comments
Finance (value for money)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	No significant impact identified
Other departments and services e.g. office facilities, customer contact	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	No significant impact identified
ICT services	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	No significant impact identified
Economic development	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	No significant impact identified
Financial inclusion	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	No significant impact identified
<b>Social</b> (please add an 'x' as appropriate)	Neutral	Positive	Negative	Comments
Safeguarding children and adults	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	No significant impact identified
<u>S17 crime and disorder act 1998</u>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Human Rights Act 1998	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Health and well being	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	The SPD helps to deliver quality landscape and green infrastructure which can enhance peoples physical and mental health and well being
<b>Equality and diversity</b> (please add an 'x' as appropriate)	Neutral	Positive	Negative	Comments
Relations between groups (cohesion)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

	Impact			
Eliminating discrimination & harassment	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Advancing equality of opportunity	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Environmental (please add an 'x' as appropriate)	Neutral	Positive	Negative	Comments
Transportation	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	The SPD includes reference to appropriate provision for footpaths and cycle routes and an integrated approach to green infrastructure.
Natural and built environment	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	The SPD will encourage greater awareness of the importance of landscape and trees in development, and ensure early consideration is given to landscape matters so that development will have a stronger sense of place and character. This will help achieve a higher quality environment.
Waste minimisation & resource use	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	No significant impacts identified.
Pollution	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	No significant impacts identified.
Sustainable procurement	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	No significant impacts identified.
Energy and climate change	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	No significant impacts identified, but it should be noted that as trees and landscape are a cross cutting topic, many of the policies that the SPD supports relate to sustainability and the environment.
(Please add an 'x' as appropriate)	Neutral	Positive	Negative	Comments

		Impact			
<b>Risk management</b>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	No significant impacts identified.

Recommendations from impact assessment	
Positive	
	The SPD will lead to positive impacts to the natural and the built environment, through an integrated approach the SPD will also lead to positive impacts to transport, health and wellbeing
Negative	
	There are no significant negative effects from the SPD.
Neutral	
	The majority of the impacts of the SPD are assessed as neutral.
Issues	
	No significant issues are highlighted as a result of the SPD.





# Landscape and Trees Supplementary Planning Document

# **Landscape and Trees**

## ***Supplementary Planning Document***

### **Structure**

#### **1.0 Introduction**

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##### **1.3 The importance of Landscape and Trees in Norwich**

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##### **2.2 Integrating development into surroundings**

##### **2.3 Making good use of the site and existing features**

##### **2.4 Incorporating open space**

##### **2.5 Environment and Green Infrastructure considerations**

##### **2.6 Street layout**

##### **2.7 Future maintenance**

#### **3.0 Appendices**

##### **Appendix 1 – The design and construction process and tree care**

##### **Appendix 2 – British Standards relevant to vegetation management and development**

##### **Appendix 3 – Tree planting and establishment costs 2016-2017**

##### **Appendix 4 – The Legal and Policy Framework**

##### **Appendix 5 – Nature conservation**

##### **Appendix 6 – Glossary**

##### **Appendix 7 – Schedule of consultee comments and Norwich City Council responses**

## 1.0 Introduction

### 1.1 Summary

- 1.1.1 This Supplementary Planning Document (SPD) provides information for planning applicants to enable cost effective and efficient implementation of national planning and adopted Norwich Local Plan policies relating to trees, landscape and development. It achieves this through the provision of guidance on landscape design principles and sets out best practice in relation to the incorporation of landscape within development proposals.
- 1.1.2 It also aims to encourage greater awareness of the importance of landscape and trees in development, and to ensure early consideration is given by the applicant to tree and landscape matters in order that the design of the development evolves to create a strong sense of place and character.
- 1.1.3 The required supporting information to be submitted with applications, in particular drawings and documents is outlined in the Norwich City Council validation requirements list. This includes further information for each type of document, including landscape and Arboricultural specific information in line with the type, scale and size of proposal.

### 1.2 Purpose of the document

- 1.2.1 This SPD aims to encourage greater awareness of the importance of landscape and trees in development, and to ensure early consideration is given to tree and landscape matters so that development will have a stronger sense of place and character and will help to achieve a higher quality environment. Consultation responses for the draft Landscape and Tree SPD are included in appendix 7.
- 1.2.2 The main purpose of this document is to provide clarity for those involved in the submission of planning applications, of the standards that the Council will expect from new development proposals as they relate to trees and the landscape.
- 1.2.3 Where additional advice is required, the professional services of a landscape designer, landscape architect or arboriculturalist should be sought as appropriate. Contact details for Landscape Architects and explanation of their services can be obtained from the Landscape Institute at [www.landscapeinstitute.org](http://www.landscapeinstitute.org) and arboricultural services at [www.trees.org.uk](http://www.trees.org.uk).
- 1.2.4 Applicants should be aware that adherence to the local plan policies is a material consideration in the assessment of all planning applications and should therefore consider the content of the relevant policies set out below.

1.2.5 Adherence to the principles set out in this guidance will help ensure that schemes requiring a planning application will assist:

- in meeting National and local legislative and policy requirements and
- and ensure that trees and landscape features are afforded due consideration in the development of the design.

1.2.6 The relevant local policies include:

**Joint Core Strategy**

JCS1 (Climate change and Environmental Assets)

JCS2 (Design), which promote high quality landscaping to create a strong sense of place in new development and the development of green infrastructure networks,

**Development Management policies**

DM3 (Design),

DM6 (Natural Environment)

DM7 (Trees)

1.2.7 As trees and landscape are a cross cutting topic and play a vital role in ensuring development is of a high quality and is sustainable, the SPD also relates to a number of other policies, including DM1 (Sustainable Development), DM2 (Amenity), DM5 (Flooding), DM8 (Open Space), DM12 (Housing development) and DM28 (Sustainable travel).

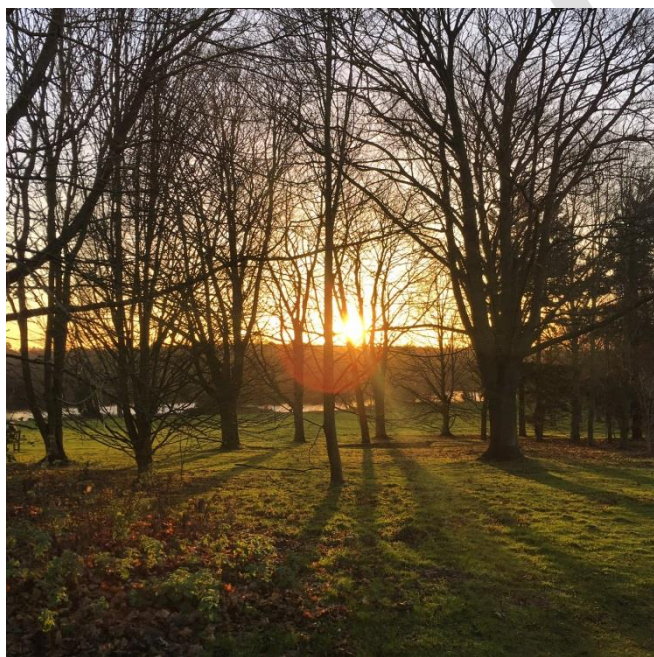
1.2.8 The [Norwich site allocations and site specific policies local plan](#) sets out detailed policies and proposals on 72 sites across the city where change is anticipated or proposed, setting out preferred land uses for those sites including housing and employment. Site allocations policies set development requirements on allocated sites in relation to landscape and trees, including requirements to retain specific tree groups, create links to existing woodland, retain views and, mainly on larger sites, create new open spaces and enhance biodiversity.

1.2.9 The JCS policies are available [here](#) and the DM policies [here](#). A summary of the legal framework and the policies is in appendix 4.

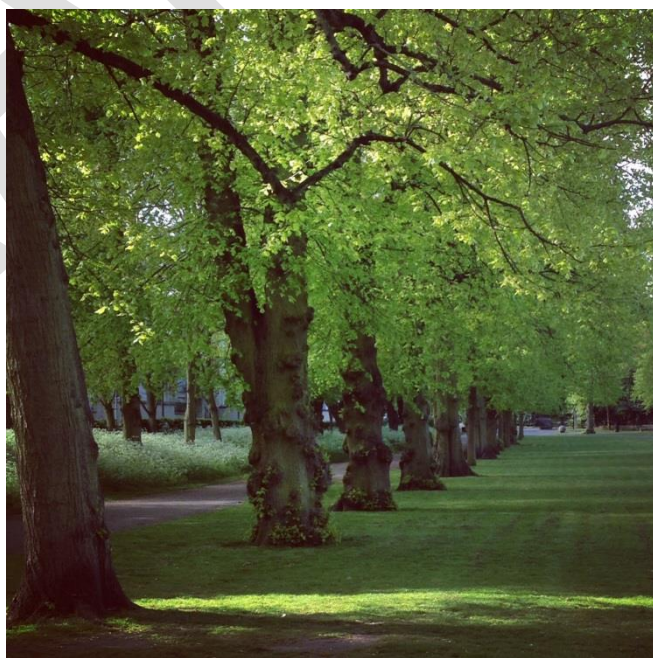
1.2.10 Applicants should be aware that planning applications require a range of supporting information. The nature and extent of this information in relation to trees and landscape is set out in the Norwich City Council planning validation requirements checklist.

### 1.3 The importance of landscape and trees in Norwich

- 1.3.1 Landscapes evolve through time as the result of both natural and human activities and are a representation of the complex relationship between people, place and nature. Landscape is more than just a view, or natural scenery. For the purposes of this SPD the term 'landscape' is a zone or area whose visual features and character are the result of the action of natural and or cultural factors and includes the trees within it.
- 1.3.2 Norwich's built and natural environment is of generally high quality and is characterised by a tight urban form, well provided with green open spaces and trees and exhibiting a historic townscape of particularly high quality reflecting its development over the past 1,000 years. It is these qualities that provide the local distinctiveness and character that new developments are expected to take account of.
- 1.3.3 From natural environments such as the Yare Valley, to parks and gardens, street planting and community spaces, landscapes and individual trees, all add great beauty and a sense of place and character to our city's built and natural environment and are valuable for a number of reasons.



*Landscape character within the Yare Valley, parkland near the UEA Broad*



*Tree lined walkway, Chapelfield Gardens*

- 1.3.4 Well-designed landscapes offer a variety of form, texture, colour, shape and seasonal change; they also complement the built environment by providing screening, perspective, focal points, privacy and seclusion. They define and separate open spaces whilst providing vital habitats for wildlife. Green spaces and quality landscapes are proven to have health and social benefits, they also help promote economic growth by creating attractive environments which promote investment. Landscape and trees also have an important role in climate change adaptation and water management in the urban environment; by providing shelter, cooling shade and helping to slow rainwater runoff.
- 1.3.5 Trees in particular enhance the structure and layout of our city, many providing important landmarks. Due to the status of trees as a landscape feature they are also subject to specific guidance and regulations regarding their protection. Additional guidance on the protection of trees can be found on the council's website and specific guidance is provided within the [validation checklist](#) on the documentation required to demonstrate adequate protection of trees during design, planning and construction. Relevant British Standards should also be referred to for additional guidance relevant to vegetation management and development proposals, the design and construction process and tree care from BS 5837: 2012 is summarised in the table appendix 1, and other relevant British Standards listed appendix 2.

## 2.0 Design principles for landscape

### 2.1 General

- 2.1.1 Alongside the retention of existing landscape elements and trees, many opportunities for new tree and landscape planting arise through the development process. Where early consideration is given to tree and landscape matters, it is likely that the design of the development will promote a stronger sense of place and character and thereby achieve a higher quality environment.
- 2.1.2 To comply with adopted Local Plan requirements, the Council therefore expects to see evidence that landscape matters have been clearly considered as part of the design process.
- 2.1.3 The principles set out below are intended as a series of prompts for planning applicants and their designers. They are intended to be objective and provide guidance on basic design issues that will be relevant to most sites. However, the design response will need to be specific to each site and therefore it is not intended that the information provided in this document is prescriptive about how to deliver the design principles. These principles also illustrate aspects considered by the Planning Authority's officers when considering an application.

## 2.2 Integrating development into surroundings

### Key principles

- 2.2.1 All sites form part of a wider landscape or townscape, any change has the potential to positively or negatively impact the surroundings. New developments should seek to enhance the local character and positively link to their surroundings

### Guidance

- 2.2.2 Norwich has a diverse character, with a historic area centred on a main river, extensive areas of open space, historic parks and gardens, wildlife sites and wooded ridges in the city. Policies DM1 and DM3 specifically recognise the importance of local distinctiveness and character. The most successful schemes will be those that fit in with in their surroundings and have a strong sense of place, character and quality.
- 2.2.3 Consideration and analysis of a site's context and setting will help identify the important factors laying outside the site that have an influence on it and it will also help establish associated design opportunities and constraints for the site. To understand the relationship between the site and its surroundings, desktop studies of local environment and local plan context should be supported by on site analysis of the local landscape or townscape character. Accesses, boundaries, linkages, consideration of the visibility of the site and identification of sensitive views should be considered.



Analysis plan, Bowthorpe Three Score

- 2.2.4 Designs should seek to enhance the local character whilst physically and perceptually linking to their surroundings. This is of particular importance to sites in areas designated for nature conservation, green infrastructure and the built environment. Norwich has specific appraisals relating to [Conservation Areas](#), which along with urban design and streetscape analysis contain important information on natural character and highlight opportunities for management and enhancement in each Conservation Area. These should be referred to as part of the analysis. The river networks of the Yare and Wensum are, in part within the city, designated as National Park, therefore specific consideration needs to be given to developments lying adjacent to their banks.
- 2.2.5 The design of site boundaries is important. Screening can be useful in protecting boundaries and views and can also buffer land uses. However, boundary treatments should be designed to protect quality scenic views and vistas in and out of developments. The assessment of the site's context should help to determine the appropriate types of boundary treatment which should be designed to take account of local landscape character to avoid becoming visually intrusive in themselves. Simply screening a development is not a substitute for good design or a replacement for adopting measures to integrate a design into an area.
- 2.2.6 On sites where buffer zones are required, these may comprise grass, shrubs and trees; structure planting belts; sympathetically graded earth mounding; walls or fencing; or a combination of several of these.
- 2.2.7 Physical links provided by planting and access routes to the surrounding areas are of equal importance and can be an effective means of integrating a shared identity and community. Sites should wherever possible also link their boundaries into surrounding landscape through Green Infrastructure (GI).

### Considerations

- *Context analysis*
- *Visibility of site and identification of sensitive views*
- *Analysis of access, boundaries, physical links*
- *Boundary treatments*
- *Integration into surroundings*

### Integrating development into surroundings

*Policies DM1, DM 2, DM3, DM6, DM7, DM12, DM28*

## 2.3 Making good use of the site and existing features

### Key principles

- 2.3.1 Developments should make efficient use of land and topography, and retain or enhance existing features of value. Developments should be designed to take advantage of the site itself and its location.

### Guidance

- 2.3.2 When undertaking a site analysis, characteristics and features within the site that could influence design need to be taken account of. Existing features which provide a positive contribution to the character of an area should be identified, assessed and incorporated into designs where possible. These features could include wooded areas, mature trees and hedgerows, watercourses, and other ecologically valuable features.
- 2.3.3 Analysis of site topography will also highlight constraints or opportunities for a development especially in relation to the treatment of site boundaries.
- 2.3.4 Historically or culturally significant buildings and built features built may also form part of landscape character and should be acknowledged as such. Consideration of the physical and perceptual characteristics of a site may also influence the use of materials for new buildings and landscape within the site.



*Hard and soft landscape materials influenced by site character, The Great Hospital  
Image courtesy of Tessa Hobbs Garden Design*

- 2.3.5 The retention of positive or beneficial existing site features can contribute to the local distinctiveness and character of a development, as recognised under policy, and help to provide sense of place and early maturity.

#### Considerations

- *Existing features identified, retained and integrated into development*
- *Physical and perceptual characteristics identified and protected*
- *Design influence by existing character*
- *Materials influenced by existing features and characteristics*

#### **Making good use of the site and existing features**

*Policies DM1, DM3, DM6, DM7, DM12*

## **2.4 Incorporating open space**

### **Key principles**

- 2.4.1 The protection of existing open space and provision of new open space on development sites are requirements under Policy DM8, supported by the Supplementary Planning Document for Open Space and Play. In addition, where there is a requirement for open space, Policy DM3 recognises the importance that public and private open space is well integrated into the overall design of the development.

### **Guidance**

- 2.4.2 Open space should be located and designed to achieve good natural surveillance, good access and connectivity to the surrounding area, and wherever possible will maximise opportunities to link into the wider strategic green infrastructure network.
- 2.4.3 The design of open spaces should contribute to the character of the surrounding area either by reflecting distinctiveness and identity and enhancing the character of the existing surroundings or by creating new character for a development if little exists.
- 2.4.4 Open spaces need to provide a clear purpose, use and respond to the needs of the local community to ensure their success. In most cases it will be possible to take a multifunctional approach with opportunities for enriching ecology, alleviating pressures from flood, and to promote health and wellbeing through spaces for sport, play, recreation and community events.



*Play area incorporating SuDs features provides a practical and educational function, making our relationship with water visible to the local community, Eagle Walk*

- 2.4.5 Open space should be attractive and contribute to promoting biodiversity. An approach to planting that achieves biodiversity and year round interest is encouraged. There are often opportunities within open spaces to plant specimen trees that would be too large for streets or gardens, which may offer great value in terms of character and focus for the community.
- 2.4.6 It is important that the hierarchy between public, semi public and private spaces is balanced through the design. This can be achieved through the use, position and character of soft and hard materials.
- 2.4.7 Additional guidance on the provision of open space can be sought through the pre-application advice service, as encouraged within the Open Space SPD.



*Useful networks of footpaths connect historic and new buildings, in this space flexible enough to use for community events, The Great Hospital.*

*Image courtesy of Tessa Hobbs Garden Design*



*Multifunctional features and planting providing seasonal interest, Leonard Street Play area*

### Considerations

- *Good natural surveillance*
- *Space linked to wider network of landscape and routes*
- *Clear purpose, which responds to needs of community*
- *Dual or multi functions*
- *Contribute to local character*
- *Diverse and interesting planting*

### Incorporating open space

*Policies DM1, DM2, DM3, DM5, DM8*

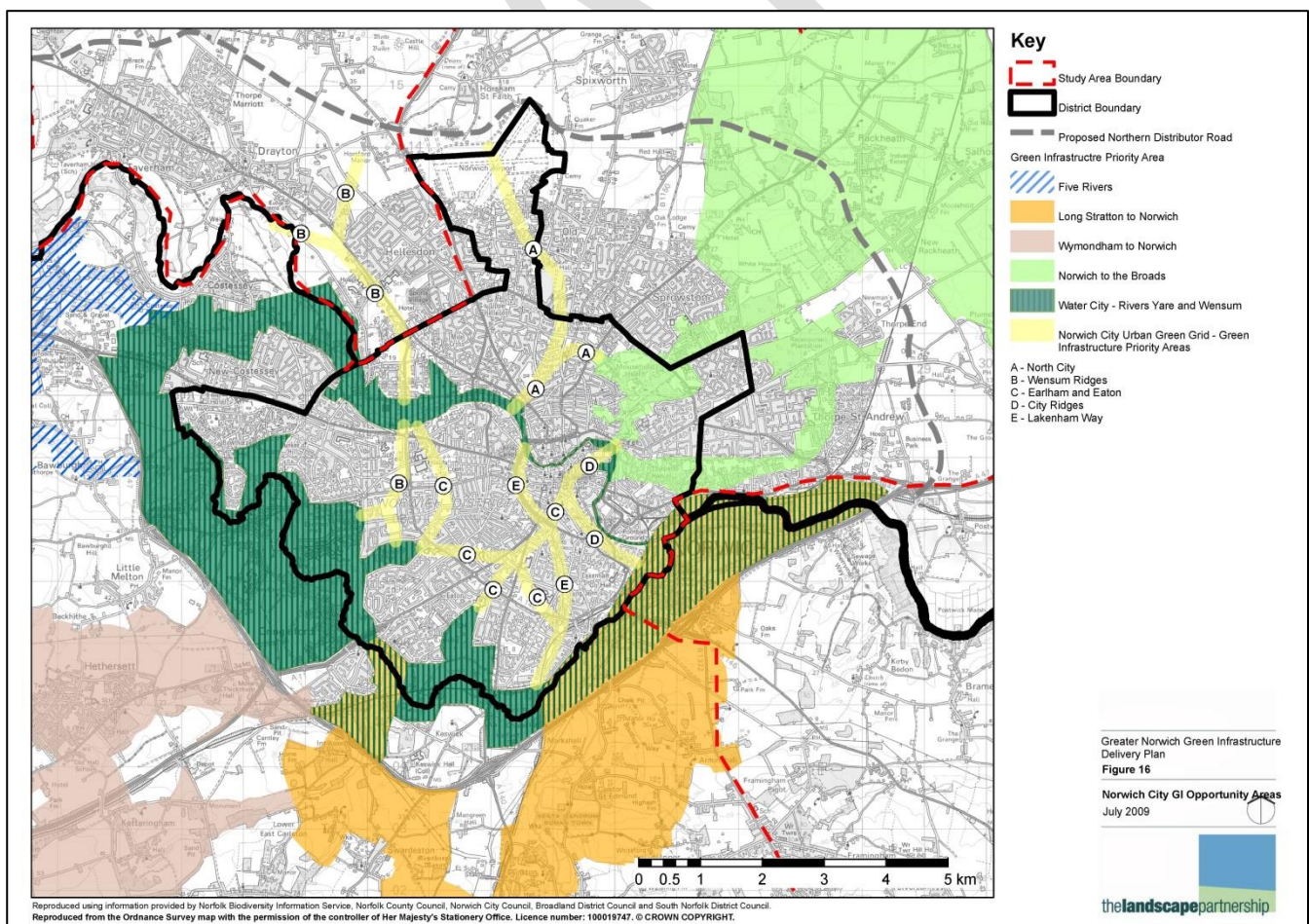
## 2.5 Environment and Green Infrastructure considerations

### Key principles

2.5.1 Good planning of landscape offers the opportunity to achieve multiple benefits. The council welcomes landscape designs that incorporate the principles of sustainability. Wherever possible, landscaped spaces will need to increase biodiversity and wildlife enhancement, include SuDs and provide accessible routes and networks to facilitate connections (people, plants and animals) to surrounding areas. Developments should also aim to make space for trees.

### Guidance

2.5.2 The provision of green space within a development is important and will provide value and a range of benefits, additional consideration of strategic connections to other nearby features will significantly increase the benefit. Wherever possible, sites should link their boundaries to surrounding landscapes through green infrastructure (GI). Sites should be designed to contribute to the GI network in Norwich. The core area of the network is set out in the [Greater Norwich Green Infrastructure delivery plan](#).



Greater Norwich Green Infrastructure Delivery Plan, Norwich City GI Opportunity Areas

2.5.3 By definition, green infrastructure can provide a variety of functions and benefits including biodiversity enhancement, water management, connectivity, health and wellbeing in addition to providing an attractive area. Therefore where a green infrastructure approach is possible this will be of mutual benefit to meeting other policy requirements. Where enhancements to the green network and strategic green infrastructure are required, they should be appropriate to the location and character of the area. The Greater Norwich Green Infrastructure Delivery Plan provides additional guidance on opportunity areas.

2.5.4 Existing vegetation on sites can often provide important, established habitats. Developments should seek to retain native landscape features and consider opportunities to extend similar or provide new types of habitats in key locations to ensure that ecology is an integral part of the site proposals and wider ecological network. Consideration should be given to the selection of boundary treatments such as mixed species hedges that have potential to improve biodiversity rather than prohibit wildlife. Sites that have boundaries with rivers or other water courses also present opportunities for habitat enhancement. This could include for example provision of floating vegetation platforms, where appropriate, which will increase and diversify vegetation along the river, and include native and high yield pollination species.



*Amenity space incorporating seating, connectivity to river walk, and a naturalistic approach to planting, Dragonfly House*



*Extract from Green Infrastructure improvements analysis, Newmarket Road Bus Rapid Transit Route*

- 2.5.5 It is acknowledged that some sites require solid boundary treatments such as timber fences, and where this is the case should include hedgehog holes to make sure they are permeable. Even the most difficult sites have the potential to limit their environmental effects; the use of lighting for example should be sensitively designed to limit impact on wildlife populations, and artificial habitat features including bat and bird boxes and habitat piles can provide positive enhancement.
- 2.5.6 Ornamental planting and semi-ornamental planting also has potential to serve an ecological function, and the use of ecologically informed non-native planting mixes will be particularly encouraged on urban sites where a native species approach is not appropriate. The style of planting can also contribute to ecological value, for example an informal or naturalised planting will provide more variation of species and plant communities than mass planting. Flowering, fruit and berry bearing plants will provide a good food source for insects and birds. Generally speaking, double-flowered plant varieties are of much less value for insects and should be avoided. Further information and advice can be found on the web sites of UK nature conservation organisations, listed appendix 5.

2.5.7 There are a number of SuDs techniques that not only help comply with national and local flood policy, but offer benefits to landscape and ecology due to their ability to incorporate a range of habitats and plant material. These include green roofs, SuDs basins, ponds and constructed wetlands, filter strips, swales and rain gardens, all of which provide opportunities to enhance the visual appearance of a development and contribute to biodiversity. Where any of these measures are included in a development, early discussion with the Natural areas officer on the use of planting appropriate to the specific context is encouraged.

#### Considerations

- *Link boundaries to surrounding landscape*
- *Retain and enhance habitats*
- *Link into wider ecological network*
- *Planting designed to contribute ecology*
- *Consideration of landscape enhanced SuDs*
- *Limit environmental effects*

#### Environment and Green Infrastructure considerations

*Policies DM1, DM3, DM5, DM6, DM8*

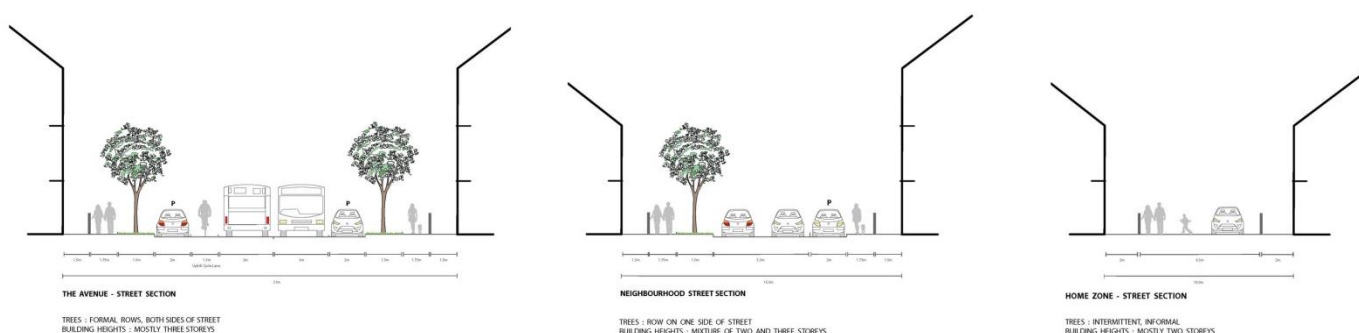
## 2.6 Street layout

### Key principles

- 2.6.1 The layout of developments and their streets will determine access networks both within and beyond its boundaries. Buildings and landscape associated with streets should reinforce the street hierarchy principles of the site layout which will help the user to understand this hierarchy and thereby improving usability.

### Guidance

- 2.6.2 Where layouts and street designs work with the character of the development and the surroundings they will respond to the way people access and move through the site, with appropriate provision for vehicles, cyclists and pedestrians. For larger developments effective landscape proposals will also contribute to achieving a hierarchy of circulation, highlighting key routes and providing appropriate variation in character.



*Different approaches to street design, with variation of width, building heights and uses, providing different characters*

- 2.6.3 Many factors including the scale, massing and layout of built form and formality the layout will influence the character of streets. Consideration should be given to how appropriately the street layout relates to the local character and distinctiveness and reference should be made to [Conservation Area Appraisals](#). As streets provide the main navigation routes through developments, consideration should be given to key views and vistas they create, into and out of a development. The appropriateness of focusing views on new marker buildings of significant quality, or existing local landmarks or landscape features beyond the site boundaries should be considered on a site by site basis.

- 2.6.4 The design and use of boundary treatments and semi-private spaces fronting on to streets will undoubtedly contribute to character and distinctiveness of an area, so their design should be carefully considered.
- 2.6.5 Adequate provision of street trees and other planting, along with choice of hard materials, street furniture and lighting will also contribute to the character and appearance of streets and the public realm and provide balance to ensure that parking areas and carriageways do not dominate a scheme. Key considerations when specifying these elements should be for the robustness of materials, appropriateness for context and local character and ability to maintain them in perpetuity.



*Materials specified to be in keeping with local character and to adoptable standards, Quayside*

- 2.6.6 Street trees provide a number of functions within a design, the environmental benefits include providing shading, improved air quality, providing soft areas to assist in natural drainage and enhancing biodiversity. They also have a function in terms of our experience of a space and can effectively enclose a street to provide a human scale, provide a sense of maturity and quality, enhance character, and reinforce the nature of the street hierarchy to aid navigation.
- 2.6.7 In accordance with Policy DM 7, major development proposals that have a frontage onto a new or existing highway of more than ten metres will only be permitted where they provide

for the planting and maintenance of street trees of appropriate species at intervals appropriate to the site, except where the site's location requires a clearly building-dominated design approach that would be prejudiced by the inclusion of street trees. Schemes should therefore include an appropriate amount of space for trees within street layouts.

- 2.6.8 On a site specific basis Council officers will specify the number of street trees required with due consideration given to available planting space and planting distances. Where the highway is not within the development boundary and planting is appropriate on that frontage, a commuted payment for street tree planting will be sought through a section 106 agreement or a unilateral agreement.
- 2.6.9 The commuted sum will be based upon the planting and establishment costs that are current on the signing date of the section 106 agreement, and will be sufficient for a thirty year period, an example for the financial year 2016-2017 is indicated appendix 3 and is based upon the minimum initial cost for a tree. The costs are in line with the Council's current tree contract; selection of trees will be carried out by the Council's arboricultural officer as scheduled into the Council's next planting programme.
- 2.6.10 Widths of footpaths and carriageways should be appropriate to the streets function, and in accordance with national and local guidance including National Planning Practice Guidance on design, the Manual for streets, the city council's local Streetscape design manual and ACPO's Secured by Design website.
- 2.6.11 Policy requires that areas for vehicle movements and parking areas create convenient, safe and attractive environments rather than dominate a scheme. Car parking requirements should be balanced with adequate landscaped areas the location and size of which should support the proposed planting. To maximise ecological and aesthetic benefit of landscape within parking areas, landscaped areas should be linked across a site and into site boundaries and small isolated areas of landscape should be avoided. Where trees are proposed in hard landscaped areas, sufficient consideration will need to be given to tree pit design to support the tree root volume requirements and protection of surrounding hard landscaped areas from root damage. There are a variety of proprietary products on the market that may assist in helping to achieve good and sustainable growing conditions for trees.



*Pedestrian access along the river frontage is well surveyed by buildings, and spaces are defined with soft planting and boundary treatments to establish private and publicly accessible areas, The Moorings*

### Considerations

- *Provision for vehicles, pedestrians and cyclists*
- *Clear hierarchy of circulation, with appropriate variation in character*
- *Appropriate materials, designed to adoptable standards if relevant*
- *Views and vistas protected and planned in*
- *Clearly defined public, private and semi-private spaces*
- *Sufficient space for trees and landscape in streets and parking areas*

### Street layout

*Policies DM1, DM3, DM7, DM28*

## 2.7 Future maintenance

### *Key principles*

2.7.1 Planned maintenance operations are required for hard and soft landscape areas to sustain attractive and successful landscape settings. To ensure landscapes are managed from the outset and in perpetuity it is important that responsibilities are established during the planning process.

### *Guidance*

- 2.7.2 Arrangements for future management and maintenance of public and other spaces should be fully understood at a design stage so that they can be properly planned for. Consideration should be given at a design stage to who will take over the landscape management responsibility for the site. This could be a management company, community trust, or the responsibility could be retained by the applicant. The local authority may adopt areas that are designed to adoptable standards for hard and soft landscape materials. The council will not adopt verges containing shrub and herbaceous planting, however trees are acceptable and further detail can be found in section 2.6.
- 2.7.3 Maintenance issues can be designed out by avoiding isolated areas of landscaping with no sense of ownership, providing clear boundaries and clarity over hierarchy of public, semi-private and private spaces, and selecting appropriate plant material. Provision of footpaths on desire lines, the use of robust materials in areas accessible to the public and planning in natural surveillance can assist in minimising issues of misuse or vandalism.



*Poorly planned boundary treatments creating difficult to maintain areas with no sense of ownership*



*Failure of small isolated planting bed within parking area*

### Considerations

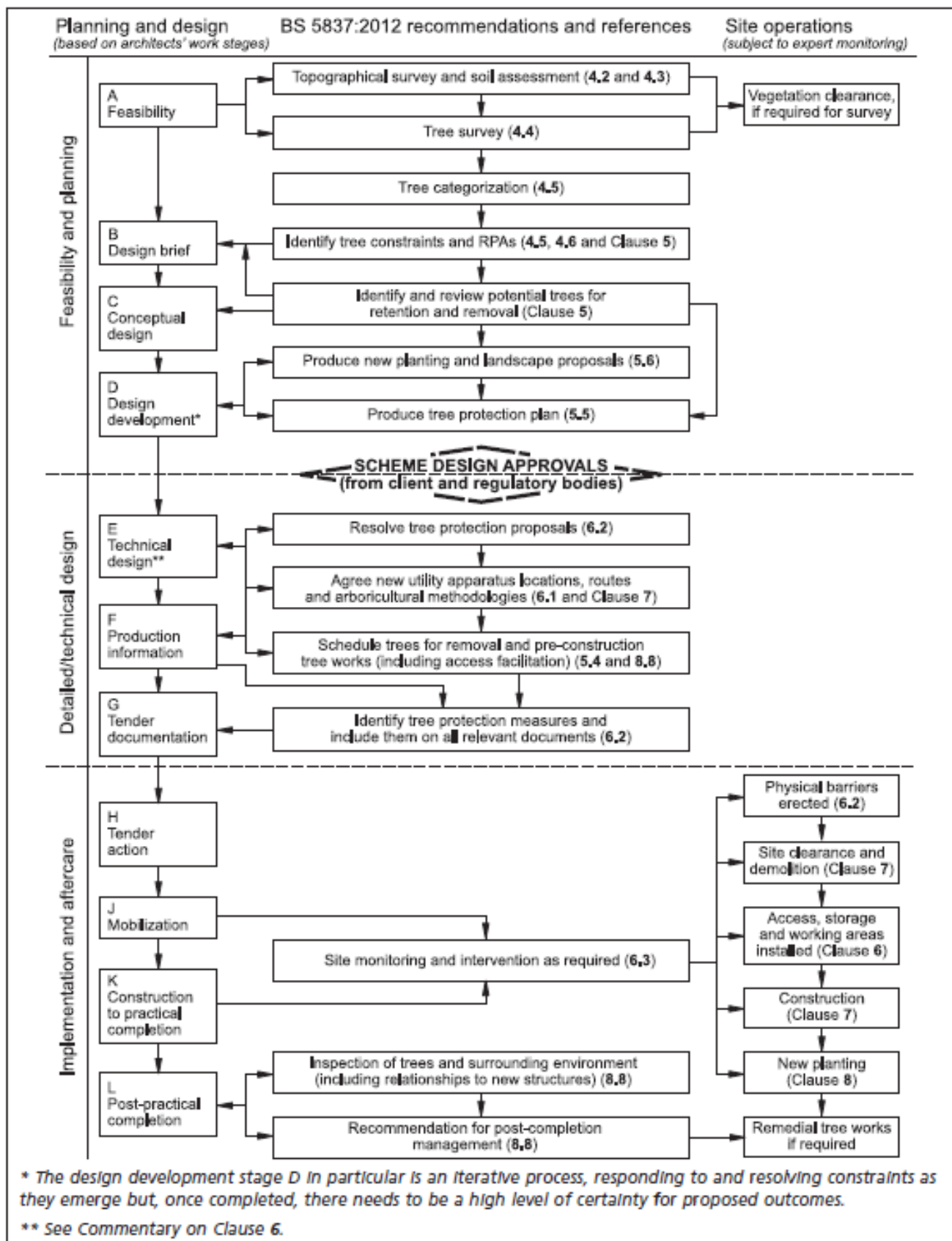
- *Maintenance considered and a clear demonstration of ability to deliver*
- *Clarity over maintenance responsibilities*
- *Clear sense of ownership for planted areas*
- *Good surveillance*
- *Provision of footpaths on desire lines*

### Future maintenance

*Policies DM1, DM7*

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## Appendix 1 - The design and construction process and tree care



## Appendix 2 - British Standards relevant to vegetation management and development proposals

British Standards that apply to vegetation management and development proposals. *(NB BSI standards are subject to regular revision)*

<b>BS 5837</b>	Trees in relation to construction - Recommendations (2005)
<b>BS 1192</b>	Construction drawing practice Part 4 Recommendations for landscape drawings
<b>BS 1377</b>	Methods of test for soils for civil engineering purposes
<b>BS 1722</b>	Fences Part 1 Specification for chain link fences Part 4 Specification for cleft chestnut pale fences
<b>BS 3936</b>	Nursery Stock Part 1 Specification for trees and shrubs Part 4 Specification for forest trees Part 5 Specification for poplars and willows
<b>BS 3998</b>	Recommendations for tree work
<b>BS 4043</b>	Recommendations for transplanting root-balled trees
<b>BS 4428</b>	Code of practice for general landscape operations (excluding hard surfaces)
<b>BS 5930</b>	Code of practice for site investigations
<b>BS 8004</b>	Other relevant publications: 'Low-rise building on shrinkable clay soils: Part 1'
<b>BRE</b>	BRE Digest 240 : 1980  BRE Digest 298 : 1985 'The influence of trees on house foundations in clay soils'  NHBC Standards, Chapter 4.2 'Building near trees'
<b>NJUG</b>	National Joint Utilities Group – Guidelines for the Planning, Installation and Maintenance of Utility Apparatus in Proximity to Trees.
<b>AAIS</b>	APN1. Driveways Close To Trees

## Appendix 3 - Tree planting and establishment costs 2016 -2017

**Note: Costs are updated annually in line with retail price index (RPI)**

Tree planting and establishment costs 2016 -2017		contract inflation	2.2910%
<b>Year 1</b>		16/17	
Tree purchase		£68.70	
Plant heavy standard		£52.57	
Wood tree surround		£27.48	
Erect tree surround		£17.54	
Mulch tree		£9.36	
Water tree (12 visits p/a @ £4.43)		£55.63	
Young tree maintenance		£18.72	
		<b>£250.00</b>	
<b>Year 2 - 4</b>	Each tree will be inspected <b>2</b> times between years 2 and 4		
Water tree (12 visits p/a @ £4.43)		£111.26	
Young tree maintenance		£37.44	
		<b>£148.70</b>	
<b>Year 5 - 15</b>	Each tree will be inspected <b>3</b> times between years 5 and 15		
Crown raise		£40.74	
Formative prune		£13.58	Once
Remove frame		£5.86	Once
Weed tree pit		£14.05	
		<b>£74.23</b>	
<b>Year 16 - 20</b>	Each tree will be inspected <b>3</b> times between years 16 and 20		
Crown raise		£40.74	
Weed tree pit		£14.05	
Formative prune		£13.58	Once
		<b>£68.37</b>	
<b>Year 21 - 25</b>	Each tree will be inspected <b>3</b> times between years 21 and 25		
Crown raise		£163.01	
Weed tree pit		£14.05	
		<b>£177.06</b>	
<b>Year 26 - 30</b>	Each tree will be inspected <b>3</b> times between years 26 and 30		
Crown raise		£162.99	
Clean out / remove deadwood		£162.99	
Weed tree pit		£14.03	
		<b>£340.01</b>	
<b>Total</b>		<b>£1,058.37</b>	

## Appendix 4 - The Legal and Policy Framework

### Legislation

14. Section 197 of the Town and Country Planning Act 1990(as amended) states that it shall be the duty of the local planning authority

(a) “To ensure whenever it is appropriate that, in granting planning permission for any development, adequate provision is made by the imposition of conditions for the preservation or planting of trees”.

(b) “To make such orders (*Tree Preservation Orders*) under Section 198 as appear to the authority to be necessary in connection with the grant of such permission, whether for giving effect to such conditions or otherwise”.

In support of Norwich City Council’s duty as set out in the 1990 Act, policies relating to trees and woodlands are incorporated within the Local Plan.

Local authorities also have a duty to have regard to the conservation of biodiversity in exercising their functions. This duty was introduced through the Natural Environment and Rural Communities Act and came into force on 1 October 2006. The duty affects all public authorities and aims to raise the profile and visibility of biodiversity, to clarify existing commitments with regard to biodiversity, and to make it a natural and integral part of policy and decision making. Conserving biodiversity includes restoring and enhancing species populations and habitats, as well as protecting them.

### National policy

The National Planning Policy Framework (NPPF) requires local authorities to protect valued landscapes. It also sets a requirement to minimise impacts on, and provide net gains in biodiversity, where possible, aiming to halt the overall biodiversity decline which has occurred over recent years.

The NPPF also states that plans should identify and map local ecological networks, including: international, national and local sites of importance for biodiversity, wildlife corridors and areas identified by local partnerships for habitat restoration or re-creation. This involves planning positively for the creation, protection, enhancement and management of networks of biodiversity and green infrastructure.

## Local policies

The Norwich Local Plan contains a number of relevant policies, most particularly JCS 1, 2, 11 and 20 and DM 3, 6 and 7.

A summary of these policies is set out below, along with other relevant policies (DM1, DM2, DM4, DM5, DM8, DM12 and DM28).

## The JCS

Policies in the [Joint Core Strategy](#) (JCS) for Broadland, Norwich and South Norfolk (adopted 2011, amendments adopted 2014) provide the strategic framework for the Norwich Local Plan.

**JCS1** (Climate change and Environmental Assets) protects environmental assets and requires the development and maintenance of the green infrastructure network set out on page 33 of the JCS. This network was identified through evidence studies supporting the JCS. This includes the map in appendix 3 of this document which identifies the Yare and Wensum valleys and as sub regional green infrastructure corridors and green infrastructure hubs. It proposes development of a new corridor from Mousehold Heath to the north east into Broadland. It also identifies local corridors and County Wildlife Sites.

**JCS2** (Design) requires development to be designed to the high possible standards to create a strong sense of place and to respect local distinctiveness. Landscaping will play a key role in this.

**JCS10** (Locations for major new or expanded communities in the Norwich Policy Area). The green infrastructure map supporting this policy on page 69 of the JCS also identifies the Yare and Wensum valleys and as priority areas for green infrastructure.

**JCS11** (Norwich City Centre) requires an integrated approach to economic, social, physical and cultural regeneration to enable greater use of the city centre and enhancement of its regional centre role. To support this, improvements will be required to open spaces, green linkages and connections between open spaces, linking the river corridor and the open countryside. The City Centre key diagram identifies opportunities for enhanced principal Green Links.

**JCS12** (Remainder of the Norwich urban area) promotes development to support sustainable housing and employment growth and regeneration in the rest of the urban area and fringe

parishes, including the promotion of green infrastructure links and protecting the landscape setting of the city.

**JCS20** (Implementation) requires development to provide and maintain open space and green infrastructure to secure sustainable development, specifically identifying the need for trees, hedgerows, woodland and landscaping as well as habitat creation and parks.

## **DM Policies Local Plan**

The [Development Management Policies local plan](#) provides more detailed policies for Norwich.

**Policy DM3** requires all new developments to achieve a high quality built and natural environment, building on the strength of existing design and promoting local distinctiveness. It requires all new development to make appropriate provision for the protection of existing and provision of new green infrastructure. The policy expects identified gateway sites to be marked by development of exceptionally high quality that reflect distinctiveness, and seeks to manage and control development which could affect key long views.

DM3 also requires developers to make efficient use of space, provide a permeable and legible network of routes and spaces for public access, and incorporate well-designed and well-defined private, semi-private and public open space for all developments. The design of streets, routes and spaces that enhance the environment will be required.

**Policy DM6** implements national and JCS requirements to ensure the protection, management and enhancement of the city's valued natural environmental assets and, along with policy DM3, requires green infrastructure networks to be promoted through development.

**Policy DM7** specifically covers trees and development. It requires trees and significant hedges and shrubs to be retained as an integral part of the design of development except where the trees are in poor condition or there are exceptional benefits in accepting their loss, and sets out the requirements for replacement planting where the loss of trees is accepted.

DM7 also requires street trees to be provided on new developments, either on site or through a section 106 or unilateral agreement as and where appropriate.

In addition the SPD also relates to the following policies:

- **Policy DM1** sets out sustainable development principles for Norwich and establishes the expectation that development proposals will protect and enhance the physical

environmental and historic assets of the city and safeguard the special visual and environmental qualities of Norwich for all users;

- **Policy DM2** requires for residential developments the provision of external private or communal amenity space, appropriate for and integral to the residential development and forming a key part of the overall design of the site;
- **Policy DM4** identifies landscaping as a mitigation measure to minimise potential negative visual impacts of renewable energy generation schemes;
- **Policy DM5** stipulates that development proposals will be assessed and determined having a regard to the need to manage and mitigate against flood risk;
- **Policy DM8** requires all new development involving the construction of new dwellings to contribute to the provision, enhancement and maintenance of local open space;
- **Policy DM12** requires proposals for residential development to have no detrimental impact upon the character and amenity of the surrounding area including open space and designated and locally identified natural environmental assets;
- **Policy DM28** requires proposals to incorporate measures to aid sustainable travel, including integral links within the development and the surrounding area, along with specific treatments where development proposals front on to the rivers Wensum and Yare.

These policies will ensure that development is planned to take a comprehensive view of tree issues and landscape features at an early stage in the design process.

## Appendix 5 – Nature Conservation

Additional information and resources for nature conservation

### Strategic

#### [Natural England](#)

The government's adviser for the natural environment in England, helping to protect England's nature and landscape for people to enjoy and for the services they provides

#### [Landscape Institute](#)

The Landscape Institute is the **Royal** Chartered Institute for Landscape Architects and Landscape professionals, including landscape designers, landscape managers, landscape planners, landscape ecologists and urban designers

#### [JNCC](#)

JNCC is the public body that advises the UK Government and devolved administrations on UK-wide and international nature conservation.

#### [National Character Area profiles](#)

The NCA profile documents explain how you can access and use environmental evidence and information about places.

### General

#### [Buglife](#)

An organisation devoted to the conservation of all invertebrates, includes 29 member organisations

#### [Buglife member organisations](#)

29 Member organisations who help support and develop the work of Buglife

#### [RPPB](#)

The RSPB is the country's largest nature conservation charity, inspiring everyone to give nature a home

#### [Norfolk Wildlife Trust](#)

Norfolk Wildlife Trust is the oldest Wildlife Trust in the country. The purchase of 400 acres of marsh at Cley on the north Norfolk coast in 1926 to be held 'in perpetuity as a bird breeding sanctuary' provided a blueprint for nature conservation which has now been replicated across the UK

#### [RHS](#)

The activities of the RHS are focused on delivering a real benefit to all those involved and interested in horticulture and gardening in the UK

## Appendix 6 – Glossary

**Green Infrastructure:** Green spaces and interconnecting green corridors in urban areas, the countryside in and around towns and rural settlements, and in the wider countryside. It includes natural green spaces colonised by plants and animals and dominated by natural processes and man-made managed green spaces such as areas used for outdoor sport and recreation including public and private open space, allotments, urban parks and designed historic landscapes as well as their many interconnections like footpaths, cycleways, green corridors and waterways.

**SuD:** Sustainable Urban Drainage System are efficient drainage system which seeks to minimise wastage of water, including the use of appropriate groundcover to enable maximum penetration of clean water run-off into the ground and, where appropriate, recycling grey water within the development. Designed to minimise the impact of development on the natural water environment.

**Sustainability:** The effective protection of the environment, including the ability of something to be maintained or to sustain itself, without use of additional natural resources, and without jeopardising the potential for people in the future to meet their needs.

## Appendix 7 – Schedule of consultee comments and Norwich City Council responses

Consultee	Comments	Norwich City Council Response
Norfolk County Council	<ol style="list-style-type: none"> <li>1. This is an excellent comprehensive document and NCC fully supports the City Council in adopting this SPD.</li> <li>2. The proposed Trees and Landscape SPD is comprehensive and reflects current national guidance.</li> <li>3. The document reflects Norfolk County Council practice with regard to Highway tree planting and provides a high level of detail while allowing enough flexibility for adaption for different site conditions.</li> <li>4. In terms of landscape, the document concisely outlines what is required of an applicant and refers to relevant national guidance. There are frequent reference to Norwich City and Joint Core Strategy Policy within which Green Infrastructure (GI) is a specific requirement</li> </ol>	<ol style="list-style-type: none"> <li>1. <b>Response noted and welcomed.</b></li> <li>2. <b>Response noted and welcomed.</b></li> <li>3. <b>Response noted and welcomed.</b></li> <li>4. <b>Response noted and welcomed.</b></li> </ol>
Anglian Water	<ol style="list-style-type: none"> <li>1. Tree planting – It is important to provide guidance on tree type and size to ensure the correct type of planting and consideration must be given to the long term impact of planting in close proximity to underground infrastructure. Root damage from maturing trees and shrubs can be a risk to sewers and water mains.</li> <li>2. Sewers for Adoption 6<sup>th</sup> Edition has useful guide lines for planting adjacent to sewers. Briefly, low lying shrubs – no problems, larger hedge type bushes should be 3 metres distance from the pipe; Ash, Oak, Elm type trees 6 metre distance, and Poplar/ Willow type trees 12 metre distance.</li> </ol>	<ol style="list-style-type: none"> <li>1. <b>Noted. Text amended accordingly.</b> Officer advice will be given on suitable tree species.</li> <li>2. <b>Noted. No amendment to text.</b> As noted above, Council Tree and Landscape Officers will comment on the suitability of planting specific to individual applications.</li> </ol>