Trafford Local Plan: Supplementary Planning Document 7 (SPD 7) -Trafford Design Code









# Landscape and Nature

Design codes for all developments

## Introduction

Nature contributes to the quality of a place, and to people's quality of life, and it is a critical component of well-designed places. Natural features are integrated into well-designed development. They include natural and designed landscapes, high quality public open spaces, street trees, and other trees, grass, planting and water. Well-designed places:

- integrate existing, and incorporate new natural features into a multifunctional network that supports quality of place, biodiversity and water management, and addresses climate change mitigation and resilience;
- prioritise nature so that diverse ecosystems can flourish to ensure a healthy natural environment that supports and enhances biodiversity;
- provide attractive open spaces in locations that are easy to access, with activities for all to enjoy, such as play, food production, recreation and sport, so as to encourage physical activity and promote health, wellbeing and social inclusion;
- that are well landscaped add value to an individual property or neighbourhood, which will exceed the cost of the planting.

#### Features of landscape and nature

- Hedgerow used on boundaries
- Small front gardens
- Landscape used to hide dominance of car parking
- Trees in front and rear gardens
- Paved accessible routes to entrances
- Hidden bin storage areas

#### **Contents**

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- hedge and shrub
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**Biodiversity** 

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gardens, small
spaces and public
realm

<u>Landscape and</u> <u>residential parking</u> layouts

Landscape and industrial and commercial sheds

## **Landscape-led Development**

The presence and proximity of landscape is important for health and well-being. The creation of high-quality landscapes is vital for development, playing an intrinsic role in establishing a sense of place through the creation of enhanced natural and urban environments.

#### Codes

<u>Landscape</u>—<u>led</u> <u>development</u>

The Trafford Design Code embraces a landscape-led approach. Landscape-led placemaking principles are best described by Jan Gehl as "First life, then spaces, then buildings."

In essence this involves first considering how people will want to use a site, the spaces, and the links beyond the site. Then position the amenity spaces to optimise access to sunlight and daylight, making best use of the existing landscape, and where this should be supplemented with new planting. Then consider where the buildings go - the landscape should influence how the buildings are laid out on site rather than the other way around.

Unfortunately landscape all too often ends up as a token effort to plant up the perimeter of the site, and insufficient regard is paid to planting specifications or maintenance. What little planting is undertaken often fails to become established.

This Code seeks to deliver a step change in the quantum and quality of landscape in new developments – more site area devoted to landscaped amenity space, better boundary treatments, more trees, the planting of larger plants from the outset, and stronger maintenance regimes.

# LNL 1 Landscape-led development

Applicants must demonstrate that development on a site has been landscape-led and that landscape retention and planting opportunities have been optimised across the site.

#### **Description**

All developments must be landscape-led and applicants are required, through the submission of a landscape strategy, to demonstrate this.

On a small in-fill site this may simply require assessing the existing landscape / townscape and replicating the front boundary treatment and building line. On large sites or in New Places, this involves first considering how people will want to use a site, the spaces, and the links beyond the site. Then position the amenity spaces to optimise access to sunlight and daylight, making best use of the existing

landscape, and where this should be supplemented with new planting. Then consider where the buildings go - the landscape should influence how the buildings are laid out on site rather than the other way around.

Existing landscape features help to define a place and may include well-established trees, hedges, large shrub areas, walls, topography, streams, rivers, ponds and meadows. These features can convey an important message about a site's character and history. In a similar vein, some valuable existing features may be hidden or be less visually prominent such as geological formations and archaeological features. Good quality topsoils are precious commodities and should be preserved for reuse. Applicants must demonstrate that existing trees and other landscape features have been retained where appropriate and opportunities taken to supplement these with landscape features and new tree planting.

#### Compliance

Applicants should demonstrate in their submission how this element of the Code has been complied with.

#### Documents required:

- Site Wide Landscape Strategy
- Site/Topographical Survey
- Arboricultural Impact Assessment and Method Statement
- Archaeological/Heritage Reports, as required by the Council's Validation Checklist
- Ecological Reports, as required by the Council's Validation Checklist
- Ground Condition and Contamination Assessments, as required by the Council's Validation Checklist
- Drainage Assessment Reports, as required by the Council's Validation Checklist
- Planting method statement
- Landscape and Visual Impact Assessment, as required by the Council's Validation Checklist
- Landscape Management and Maintenance Plan

#### **Trees**

Trafford is known to be the most verdant borough in Greater Manchester. Many of the streets are tree lined and mature tree cover throughout much of the Borough adds significantly to the character of Trafford's places.

Codes

Tree planting

Unfortunately, the level of landscape, and more specifically tree planting, introduced on more recent developments – residential and commercial - has been poor. There is therefore a strong desire to increase the quality of the treescape across the Borough. This can be realised by retaining existing tree cover on development sites and delivering a significant new generation of tree planting.

Quantum

Street trees

Planting requirements

#### The importance of trees

Fundamentally trees are the primary ingredient of all landscapes and contribute significantly to the character of a place. Trees can be introduced in most environments - streets, boundaries, parks, gardens, suburban edges, fields and woodland.

#### Trees offer a number of benefits:

- Structuring the landscape and underpinning a sense of place
- Being a primary biodiversity habitat
- Carbon sequestration
- Shading and cooling
- Limiting exposure and wind impact
- Reducing water run-off and flooding potential
- Screening, filtering and/or framing views
- Providing a positive sensory contribution and improving mental health
- Creating attractive landscapes which brings about increased land values

# LNT 1 Tree planting

Applicants must demonstrate that they have optimised opportunities to secure the planting of as many trees as possible across the site. The landscape scheme must include an appropriate mix of tree sizes and species with reference to best practice set out within this chapter.

#### **Description**

Trees are the primary ingredient of all landscapes. Large trees have a greater presence in the townscape and are able to support a greater level of biodiversity, so should be chosen where space allows. There will be more opportunities to deliver smaller specimens throughout developments, but a mix, including a range of sizes is essential for structural and species diversity.

Choosing the right species and ensuring that the right tree is planted in the right place is imperative for ensuring the long-term survival of trees. There are widely recognised ecological and place-making benefits for planting native species trees within both urban and rural landscapes. Nonetheless, with a changing climate and

when considering the response of some trees to planting in highly urbanised environments, suitable, non-native trees will also be welcomed. Although deciduous trees will form the majority of tree species within planting schemes, it is important to have a mix of both deciduous and evergreen tree species to deliver structural and ecological diversity, and screening where appropriate.

Applicants should refer to the best practice set out below within this chapter.

#### Compliance

Applicants should demonstrate in their submission how this element of the Code has been complied with.

### Documents required:

- Site Wide Landscape Strategy
- Site/Topographical Survey
- Arboricultural Impact Assessment and Method Statement
- Archaeological/Heritage Reports, as required by the Council's Validation Checklist
- Ecological Reports, as required by the Council's Validation Checklist
- Ground Condition and Contamination Assessments, as required by the Council's Validation Checklist
- Drainage Assessment Reports, as required by the Council's Validation Checklist
- Planting method statement
- Landscape Management and Maintenance Plan

# LNT 2 Trees in residential gardens

In residential developments, applicants must optimise the number of trees planted within gardens. In front garden areas all trees must be planted at a minimum of a 'Select Standard' size (10cm - 12cm girth). In rear and side garden areas all trees must be planted at a minimum of a 'Standard' size (8 cm - 10cm girth).

#### **Description**

Provision of trees within new residential developments is essential for greening the site and helping to realise BNG targets. With houses, ordinarily it will be expected that a minimum of one tree is planted in the front garden and one tree in rear garden. In apartment schemes, one tree per apartment is required but where this cannot be realistically met within a well-designed communal garden, a commuted sum towards off-site planting is likely to be required.

All trees within front gardens must be planted at the minimum size set by the Code to ensure that the tree becomes established and has sufficient immediate impact in the streetscene. Tree planting in rear gardens is important in greening the rear garden scene which is all too often dominated by concrete posts and timber fencing.

Applicants should refer to the best practice set out below within this chapter.

#### Compliance

Applicants should demonstrate in their submission how this element of the Code has been complied with.

### Documents required:

- Site Wide Landscape Strategy
- Site/Topographical Survey
- Arboricultural Impact Assessment and Method Statement
- Archaeological/Heritage Reports, as required by the Council's Validation Checklist
- Ecological Reports, as required by the Council's Validation Checklist
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- Drainage Assessment Reports, as required by the Council's Validation Checklist
- Planting method statement
- Landscape Management and Maintenance Plan

# LNT 3 Street trees

Street trees must be planted on all new streets, and on existing streets where existing service runs permit. At least two tree species must be provided on any individual street. Trees must be planted as 'Extra Heavy Standard' size (12 cm – 18 cm girth), and in accordance with best practice set out within this chapter.

#### **Description**

Nature contributes to the quality of a place, and to people's quality of life, and it is a critical component of well-designed places. Trees make an important contribution to the character and quality of urban environments, and can also help mitigate and adapt to climate change.

Applicants must work with the Council to ensure that the right trees are planted in the right places, and solutions are found that are compatible with highway

standards and the needs of different users. Street trees should normally be planted 12 metres to 20 metres apart at even intervals on both sides of the street. Actual dimensions and siting will depend on factors such as the width of plot frontage, the length of parking spaces, location of overhead and underground utilities and, critically, the proximity to street lights. On large sites and in New Places, utility corridors should be sited so as not to prevent the planting of street trees within the footpath or build out zone. At least two different tree species need to be planted on any individual street to protect the longevity of a network of trees down a single road.

For the avoidance of doubt, trees planted within front gardens are not considered to be street trees.

Applicants should refer to the best practice set out below within this chapter.

#### Compliance

Applicants should demonstrate in their submission how this element of the Code has been complied with.

#### Documents required:

- Site Wide Landscape Strategy
- Site/Topographical Survey
- Arboricultural Impact Assessment and Method Statement
- Archaeological/Heritage Reports, as required by the Council's Validation Checklist
- Ecological Reports, as required by the Council's Validation Checklist
- Ground Condition and Contamination Assessments, as required by the Council's Validation Checklist
- Drainage Assessment Reports, as required by the Council's Validation Checklist
- Planting method statement
- Landscape Management and Maintenance Plan

# LNT 4 Planting requirements

Applicants must demonstrate that all trees will be planted and maintained in accordance with best practice set out within this chapter.

#### Description

Planting the right tree, of the right size, in the right place, and in the right way is essential for its successful establishment, its ongoing health, form, and its longevity. Trees need to be of sufficient size to optimise their chances of becoming

established. All too often small trees are introduced, are not maintained, and do not survive.

Any plant can die if not maintained correctly. There is a duty of care, the responsibility for which needs to be made clear at the time of granting planning permission, to ensure success. Planning conditions will generally require maintenance of public realm and other communal landscaped areas for the lifetime of the development. Replacement planting will be required for a minimum period of 15 years following initial planting. Responsibility for this should be established at the outset.

# Compliance

Applicants should demonstrate in their submission how this element of the Code has been complied with.

### Documents required:

- Site Wide Landscape Strategy
- Site/Topographical Survey
- Arboricultural Impact Assessment and Method Statement
- Archaeological/Heritage Reports, as required by the Council's Validation Checklist
- Ecological Reports, as required by the Council's Validation Checklist
- Ground Condition and Contamination Assessments, as required by the Council's Validation Checklist
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- Planting method statement
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### Best practice for tree planting

### The right tree

The right trees should be planted in the right place and in the right way, and maintained correctly.

The following information is provided with the benefit of a longstanding knowledge of the local climate and soil conditions and of how to successfully establish the right type of trees within the Borough.

Wherever there is opportunity for a larger tree species, it should be taken. There will be more opportunity to deliver smaller specimens, but a mix, including a range of sizes is essential for structural and species diversity.

This section gives some key species information and design parameters for achieving successful tree planting across the range of environments/situations in Trafford.

The information set out is proven and will help to deliver successful tree planting. It is not intended to stifle innovation or variety. However, where there is a departure from the information set out herein, this should be justified by a Landscape Architect or Arboriculturalist who can demonstrate knowledge of the local climate, soil conditions and how to successfully establish the right type of trees within the Borough.

#### **Species selection**

There are widely recognised ecological and place-making benefits for planting native species trees within both urban and rural landscapes. Nonetheless, with a changing climate and when considering the response of some trees to planting in highly urbanised environments, suitable, non-native trees will also be welcomed.

Although deciduous trees will form the majority of tree species within planting schemes, it is important to have a mix of both deciduous and evergreen tree species to deliver structural and ecological diversity, and screening where appropriate.

#### Street trees

Street trees and tree planting within hard surfaces are particularly difficult to successfully establish and control to avoid disruption to the associated hardscape. Specialist input should be sought in these situations. Suitable species for street tree planting are identified below.

#### Woodland trees

Woodland trees should be a mix of native species. Other sources of information (e.g. The Woodland Trust) can be consulted for appropriate mixes, specific to Trafford.

The following table identifies a number of largely native species trees that are considered suitable for the Borough. This is not an exhaustive list and other

species will be welcomed. However, they will need to be justified through supporting information. Expert advice should be sought.

The tables that follow provide details of:

- Ultimate size of each tree (Large, Medium of Small)
- Whether the tree is deciduous or coniferous
- Suitability of the tree for different types of soils

### Large trees

Large trees are defined by virtue of ultimate height and/or canopy spread. In a woodland context, they will dominate the upper canopy and in an urban setting they will become the most significant natural features.

#### **Deciduous**

Troe (inc. Latin Name)	Soil Type		
Tree (inc. Latin Name)	Clay	Loamy	Sandy
English Oak (Quercus robur)	Y	Y	Y
Common Beech (Fagus sylvatica)	N	Y	Y
Common Lime Tree (Tilia x europaea)	Y	Y	Y
Horse Chestnut (Aesculus hippocastanum)	Y	Y	Y
Sweet Chestnut (Castanea sativa)	N	Y	Y
Birch (Betula)	Y	Y	Y
Norway Maple (Acer platanoides)	Y	Y	Y
London Plane (Platanus x hispanica)	Y	Υ	Y
Hornbeam (Carpinus betulus)	N	Y	Y
Willow (Salix)	Y	Y	Y

### **Coniferous**

Tree (inc. Latin Name)	Soil Type		
Tree (IIIC. Laum Name)	Clay	Loamy	Sandy
Scots Pine (Pinus sylvestris)	Y	Y	Υ
European Larch (Larix decidua)	Y	Y	Υ
Austrian Pine (Pinus nigra)	Y	Y	Υ
Spruce (Picea)	Y	Y	Υ
Western Red Cedar (Thuja plicata)	Y	Y	Υ
Cedar (Cedrus libani)	Y	Y	Y

### **Medium size trees**

Medium sized trees are defined as trees with a mid-height stature and/or canopy spread. These trees have the ability to give structure in a tight urban landscape and can appear large at the human scale.

### **Deciduous**

Troe (inc. Latin Name)	Soil Type		
Tree (inc. Latin Name)	Clay	Loamy	Sandy
Wild Cherry (Prunus avium)	Y	Y	Y
Bird Cherry (Prunus padus) Y Y		Y	
Field Maple (Acer campestre)		Y	Y
Common Whitebeam (Sorbus aria)	Y	Y	Y
Alders (Alnus)	Y	Y	Y
Callery Pear (Pyrus calleryana 'Chanticleer')	Y	Y	Y

### **Coniferous**

Tree (inc. Latin Name)	Soil Type		
Tree (IIIC. Latin Name)	Clay Loamy		Sandy
Yew (Taxus bacatta)	Y	Y	Y
White Cedar (Thuja occidentalis)	Y	Y	Y

### **Small trees**

Small trees are defined as those with a smaller height structure and/or canopy spread. These trees can be introduced in tight, urban situations. They may be chosen for their decorative or biodiverse qualities. They are generally the shortest-lived.

### **Deciduous**

Troe (inc. Latin Name)	Soil Type		
Tree (inc. Latin Name)	Clay	Loamy	Sandy
Rowan (Sorbus aucuparia)	N	Y	Υ
Ornamental Cherries (Prunus)	N	Y	Υ
Holly (Ilex aquifolium)	N	Y	Υ
Hawthorn (Crataegus)	Y	Y	Υ
Apples & Crab Apples (Malus)	N	Y	Y
Hazel (Corylus avellana)	N	Y	Y

### Coniferous

Tree (inc. Latin Name)	Soil Type		
rree (mc. Latin Name)	Clay Loamy		Sandy
Irish Yew (Taxus bacatta 'Hibernica')	Y	Y	Y

#### Street trees

Street trees are those that would best suit planting within hard areas. The following species are considered appropriate for street tree planting within Trafford due to their form and appearance, their ability to withstand more constrained environments and tolerate pollutants, and which do not tend to cause root damage problems if planted correctly.

The following is not an exhaustive list and the list will vary with time, subject to availability and new species becoming available and suitable.

All require special tree pit and engineering solutions to ensure the best possible ground conditions are achieved and to give the trees the best possible chance of thriving.

#### **Deciduous**

Street trees (inc. Latin Name)	Soil Type		
Street trees (inc. Latin Name)	Clay	Loamy	Sandy
Large Trees			
Common Lime (Tilia x europaea)	Y	Υ	Y
Small Leafed Lime (Tilia cordata)	Y	Y	Υ
Maple (Acer campestre 'Elegant')	Maple (Acer campestre 'Elegant')		Y
Platanus x acerifolia / hispanica (London Y		Y	Y
Medium Size Trees			
Pear (Pyrus calleryana 'Chanticleer')	Y	Y	Υ
Turkish Hazel (Corylus colurna)	N	Y	Y
Broad leaved cockspur (Crataegus prunifolia)	Y	Y	Y
Fastigiate Tulip Tree (Liriodendron tulipifera fastigiata)	Υ	Y	Y
Norway Maple 'columnare' (Acer platanoides 'Columnare')	Y	Y	Y

Small Trees			
Birch (Betula pendula fastigiata 'Obelisk')	Y	Y	Υ
Upright Hornbeam (Carpinus betulus 'Frans Fontaine')	Y	Y	Υ
Maidenhair Tree (Ginkgo biloba 'Princeton Sentry')	Y	Y	Υ
Upright Pin Oak (Quercus palustris 'Green Pillar')	Y	Y	Υ

Spacing of street trees will naturally vary by size and the effect sought. Nonetheless, as a rule of thumb, each street tree, whether planted in a grass verge or a generous paved area with an appropriate tree pit **should be planted between 12m and 20m apart from the next tree**.

### The right place

It is imperative that the right tree is located in the right place, to avoid proximity issues, amenity concerns and to give the right tree the space needed to thrive.

In urban situations, where space is often limited, any opportunity to plant a large tree should be taken. Large species trees best complement large buildings and therefore create an environment where nature can shine.

This Design Code is seeking to achieve the best outcomes, and if foundation adjustments are required to accommodate specific trees, this should be factored into any new-build design process, and should not be at the expense of achieving the best possible tree in a given location.

The category of tree size can be used to assess a suitable minimum planting distance from buildings or significant structures. Note, there will always be a technical / engineering solution to overcome root growth and soil type considerations. When planting near to a building, wall or other structure, root barriers may be required and expert advice should be sought.

Planting Principles - distances to buildings and other structures

Large Trees can be planted a minimum of 10m from a building or structure.

**Medium size trees** can be planted a minimum of **6m** from a building or structure.

**Small trees** can be planted a minimum of **3m** away from a building or structure.

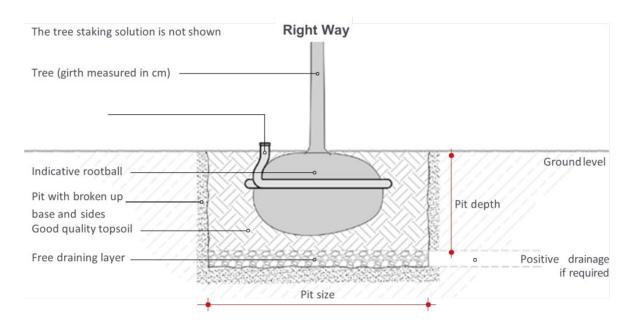
### Placed in the right way

Creating the right planting conditions for the right tree in the right place is essential for its successful establishment, its ongoing health, form, and its longevity.

Whilst there are site-specific variations and bespoke solutions for the successful establishment of new trees, the following information needs to be detailed within the submitted Site Wide Landscape Strategy to demonstrate that the proposed trees can be successfully delivered and will be long-lasting.

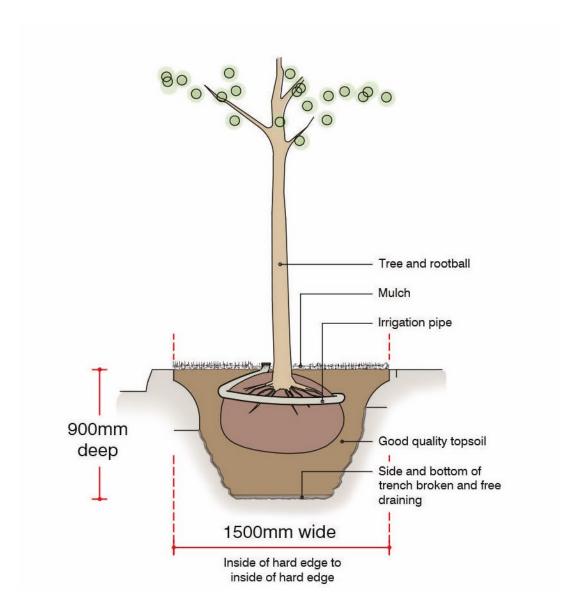
### Planting in open, unobstructed ground

The information set out below is specific to planting in open, unobstructed ground. Any trees planted in areas of limited open ground (e.g. verges) or within hardstanding will need bespoke specifications and tree pit details provided by a suitably qualified landscape specialist.



Size	Girth	Pit Size	Pit Depth
Standard	8-12cm	900 x 900mm	700mm
Extra Heavy Standard	12-18cm	1200 x 1200mm	800mm

Semi Mature	18-25cm	1500 x 1500mm	1000mm
Specimens	25cm+	2000 x 2000mm	1000mm



### **Principles**

- Positive drainage of tree pits is essential to ensure water can get away and avoid killing the tree.
- Positive irrigation (guaranteed watering/feeding) is required for the first 3 years otherwise trees are likely to die.
- All trees from standard sized trees upwards will require adequate tree staking.

 Safeguarding from animals, vehicles and/or vandalism will be required where necessary.

#### Planting in hard trafficked areas

For trees to survive, their roots need access to water and oxygen. It is imperative that the ground does not become too compacted as this will starve the tree of these essential elements.

Trees that are planted in hard areas where their eventual rooting area will be subject to load bearing impacts (e.g. street trees or trees within a car park), will require specialist engineering solutions. This is likely to involve special structural cell-type systems set within larger tree pits below the surface which will give the trees the best opportunity to thrive. In such situations, expert advice should be sought early in the design process and appropriate solutions provided.

Wherever possible, the opportunity to introduce sustainable drainage systems (SuDS) as an integral part of urban tree pits should be seized. Such multi-purpose tree pit design solutions are available.

#### Golden rules of tree planting

- · Know the soils and therefore choose the correct trees
- Consider off-site constraints so that the tree can thrive and does not become a nuisance
- Ensure sufficient soil volume is provided for each species
- Think about tree pit design and solutions from the outset
- Make sure that there is adequate drainage
- Make sure there is a local water supply for irrigation
- Allow for good quality care after planting (min. 3 years)
- Know where existing services are from the outset. Proposed services should respect tree locations
- Establish the best conditions in all scenarios to give trees the best possible chance to thrive

#### **Maintained correctly**

Any tree can die if not maintained correctly.

There is a duty of care, the responsibility for which needs to be made clear at the time of planting, to ensure success. Planning conditions will require maintenance and care and/or replacement planting for a minimum period of 15 years following initial planting. Responsibility for this should be established at the outset.

Tree planting does require specialist knowledge and any bespoke solution needs justifying by a suitably qualified Landscape specialist through the planning application process.

#### Principles of successful maintenance

Successful maintenance will involve:

- Watering
- Weeding and mulching around the base
- Checking for security / staking
- Safeguarding from livestock or rabbits, humans (vandalism)

# **Boundary Treatment – Hedge and Shrub Planting**

Boundary treatments help to define the character of a place, helping to knit it together to form a cohesive whole. It can help to deliver an intimate human scale to a development and add vibrancy to even the most built-up and densely arranged urban spaces. In Trafford, front boundary treatments typically consist of low stone or brick walls with hedges behind, whilst other boundaries are often dominated by mature planting. This planting contributes significantly to Trafford's identity. Unfortunately, too many recent developments have not had due regard to the importance of boundary treatments, with insufficient room on site allocated for planting, resulting in either non-existent or failed planting schemes, and therefore all too often harsh, bland environments. A landscape-led approach dictates that

#### Codes

Hedge and Shrub
Planting

Functional considerations

Aesthetic considerations

Planting and maintenance requirements

boundary treatments to sites and individual plots are designed before the buildings that sit within them.

#### Features of well planted boundaries

Good quality planting to boundaries and edges offers a number of benefits. It can:

- Define public and private realm
- Create defensible space to houses and apartments
- Screen or soften areas of car parking
- Provide privacy to rear gardens
- Screen developments from busy roads and un-neighbourly uses
- Soften new development
- Provide biodiversity and other environmental benefits

# LNBE 1 Hedge and shrub planting

Applicants must demonstrate that they have optimised opportunities for hedge and shrub planting on boundaries and edges across the site and have complied with the 'Boundaries and Edges' best practice set out within this chapter.

#### **Description**

Boundary treatments play a key role in delivering a sense of place, whether it is knitting various parts of a new development together or tying a new development to an existing one. In a landscape-led approach boundary treatments to sites and individual plots are designed before the buildings that sit within them.

Nature contributes to the quality of a place, and to people's quality of life, and it is a critical component of well-designed places. Natural features can include elements such as natural and designed landscapes, high quality public open spaces, street trees, and other trees, grass, planting and water. Hedge planting is important for supporting wildlife corridors and providing a nesting habitat for birds. Shrub and hedge planting also has an important role to play in screening and softening the appearance of balustrades, bin stores, cycle stores and sub stations.

Planting the right plant, of the right size, in the right place, and in the right way is essential for its successful establishment, its ongoing health, form, and its longevity. Plants need to be of sufficient size when planted to optimise their chances of becoming established. All too often small plants are introduced, not maintained, become crowded out by weeds and do not survive.

Accurate topographical and site surveys must be submitted with planning applications to ensure that boundary treatments are not sacrificed if it is subsequently found that a site isn't as large as was originally thought.

Applicants must work with the Council to ensure that a multi-functional, layered landscape approach is delivered to contribute to on-street BNG, support habitat and to soften and green up streetscenes.

Applicants should refer to the best practice set out below within this chapter.

#### Compliance

Applicants should demonstrate in their submission how this element of the Code has been complied with.

#### Documents required:

- Site Wide Landscape Strategy
- Site/Topographical Survey

- Arboricultural Impact Assessment and Method Statement
- Archaeological/Heritage Reports, as required by the Council's Validation Checklist
- Ecological Reports, as required by the Council's Validation Checklist
- Ground Condition and Contamination Assessments, as required by the Council's Validation Checklist
- Drainage Assessment Reports, as required by the Council's Validation Checklist
- Planting method statement
- Landscape Management and Maintenance Plan
- Maintenance regime defining the how, the who and the what

# LNBE 2 Functional considerations

Applicants must demonstrate that proposed boundary planting will meet the functional considerations of safety and security, ownership, privacy, screening, wildlife movement, and transition as set out within this chapter.

### **Description**

Boundary treatments perform a number of valuable functions, and it is important that sufficient space is allocated within a site or plot to ensure that appropriate boundary treatments can successfully perform their intended function. If a site layout suggests there is insufficient room for an appropriate boundary solution, it is likely that the scheme will need to be re-designed.

#### Compliance

Applicants should demonstrate in their submission how this element of the Code has been complied with.

#### Documents required:

- Site Wide Landscape Strategy
- Site/Topographical Survey
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- Archaeological/Heritage Reports, as required by the Council's Validation Checklist
- Ecological Reports, as required by the Council's Validation Checklist
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- Drainage Assessment Reports, as required by the Council's Validation Checklist
- Planting method statement
- Landscape Management and Maintenance Plan

# LNBE 3 Aesthetic considerations

Applicants must demonstrate that proposed boundary planting will meet the aesthetic considerations set out within this chapter: responding to context, designing for the public domain, making it green, and considering management and maintenance responsibilities at the outset.

#### **Description**

Boundary treatments should respond to context, taking cues from the best existing boundary treatments, prioritising the outward facing relationship and not the inward one, and using soft planting to the public realm. If a site layout suggests there is insufficient room for an appropriate boundary solution, it is likely that the scheme will need to be re-designed.

#### Compliance

Applicants should demonstrate in their submission how this element of the Code has been complied with.

#### Documents required:

- Site Wide Landscape Strategy
- Site/Topographical Survey
- Arboricultural Impact Assessment and Method Statement
- Archaeological/Heritage Reports, as required by the Council's Validation Checklist
- Ecological Reports, as required by the Council's Validation Checklist
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- Planting method statement
- Landscape Management and Maintenance Plan

# LNBE 4 Planting and maintenance requirements

Applicants must demonstrate that all hedges, shrubs and other plants will be planted and maintained in accordance with best practice set out below within this chapter.

#### **Description**

Allowing sufficient room and rooting volume for boundary and edge planting and appropriate maintenance thereafter is critical to the success of a scheme in

softening boundaries, screening cars parked on driveways and making sure plants have a chance to become established.

Any plant can die if not maintained correctly. There is a duty of care, the responsibility for which needs to be made clear at the time of granting planning permission, to ensure success. Planning conditions will generally require maintenance of public realm and other communal landscaped areas for the lifetime of the development. Replacement planting will be required for a minimum period of 15 years following initial planting. Responsibility for this should be established at the outset.

# Compliance

Applicants should demonstrate in their submission how this element of the Code has been complied with.

#### Documents required:

- Site Wide Landscape Strategy
- Site/Topographical Survey
- Arboricultural Impact Assessment and Method Statement
- Archaeological/Heritage Reports, as required by the Council's Validation Checklist
- Ecological Reports, as required by the Council's Validation Checklist
- Ground Condition and Contamination Assessments, as required by the Council's Validation Checklist
- Drainage Assessment Reports, as required by the Council's Validation Checklist
- Planting method statement
- Landscape Management and Maintenance Plan

### **Best Practice for Boundaries and Edges**

In any situation, the context will determine the appropriate scale, proportion and type of preferred boundary solution.

Where planting trees and hedgerows:

- Know the soils and therefore choose the correct tree and hedgerow
- Ensure that ultimate size, form and appearance of the chosen tree and hedgerow is suitable for the location provided
- Consider off-site constraints so that the tree and hedgerows can thrive and do not become a nuisance
- Make sure that there is adequate drainage

- Make sure there is a local water supply for irrigation
- Allow for good quality care after planting
- Know where existing services are from the outset. Proposed services should respect tree and hedgerow
- Establish the best conditions in all scenarios to give trees and hedgerows the best possible chance to thrive.

## **Establishing the Composition and Layout of Boundaries and Edges**

In any new development, whether large or small in scale, it is imperative to design the boundary treatment to meet the needs of the place.

This can be broken down into firstly a functional requirement and then aesthetic considerations can be applied to the layout and form.

#### **Functional considerations**

Boundary treatments need to consider the following requirements:

- Privacy e.g. tall boundaries for private garden areas
- Security/Safety e.g. school playgrounds or railway lines
- Ownership e.g. public versus private ownership demarcation
- Screening e.g. to screen unsightly busy roads
- Wildlife movement e.g. hedgehog highways (small openings in bases of fences or walls)
- Transition e.g. urban to rural areas, through buffer planting

#### **Aesthetic considerations**

A successful scheme can only be achieved when, firstly, the functional considerations have been determined and then importantly, the appropriate aesthetic considerations should be applied to achieve the optimum solution.

The golden rules to be applied to the aesthetic choices:

**Respond to context** – If a new development is of an infill type, it should respond positively to the best of the established boundary treatments. For new communities, all boundary treatments should elevate the sense of place.

**Design for the public domain** – All proposed development will need to show how it has prioritised the outward facing relationship within the design of boundaries and edges rather than the inward facing. The public facing presentation is considered more important than the private facing. Space should always be

afforded to permit a high-quality, uniform and/or planted public-facing boundary to thrive.

**Use "green" wherever possible** – Hedges, trees, shrub planting and climbers have the ability to enhance stark or hard boundary solutions.

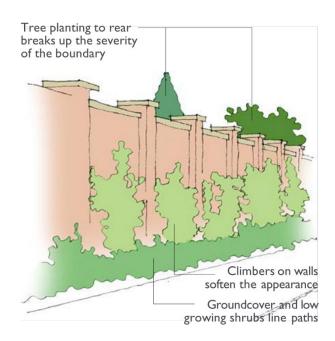
Consider management & maintenance responsibilities at the outset – Boundaries need maintaining. Practical considerations of maintenance must be considered at the design stage and responsibility.

If the functional considerations determine that inappropriate boundary solutions are required, it will be necessary to make design changes to the scheme.

### **Good Practice Solutions**

#### Privacy:

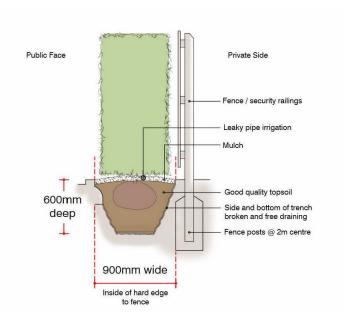
- Tall walls
- Tall hedges
- Tall fences or railings, with hedges to the public facing side



#### Security:

- Mesh fencing
- Railings

## Hedge planting against fence or security



#### **Protection:**

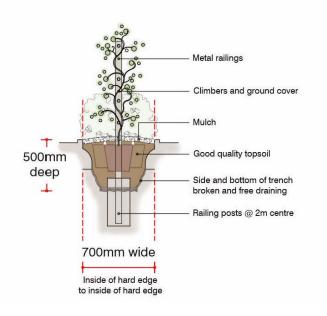
- Railings
- Low Hedges (sometimes mesh fencing)

### Ownership:

Providing clarity between neighbour ownership or between public and private domains.

Where ownership needs demarcating, this can be achieved with physical boundaries or, where openness between ownership areas necessitates, through changes in materials at the edges.

### Railings and planting within hard surface



#### Screening:

When seeking shelter from visual intrusion, screening solutions should not detract from the public domain.

Planting Solutions – with scale responding to the need:

- Tall belts of trees
- Tall hedges
- The middle layer of vegetation

#### Transition (between one land use or character to another):

These transition areas generally need to be generous given the scales involved. For example, successful visual transitions from rural to suburban areas tend to include areas of belt or layered planting.

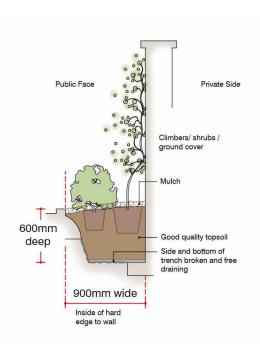
### Tall walls, fences and railings (over 1.5m):

- Trees should be provided either in front of or behind the hard boundary treatment.
- Hedges should always be included for tall fences and railings and should be visible from the public facing side of the boundary.

### Low walls, fences and railings (below 1.5m):

- Trees are always good in these situations and will be expected to be provided unless justified.
- Planting of hedges or shrubs above/behind a wall, always enhances the boundary.

#### Shrub planting against wall



#### Plant size and mix

Introducing plants of an appropriate size and mix is critical for the success of a planting scheme, both in terms of maintenance and survival but also year-round interest. Plants that are too small, whether pot grown or not, often dry out and die. Larger sized potted plants sit deeper in the soil, have less chance of drying out and end up cheaper in the long term when the cost of replacing failed plants is taken into account.

**Planting mix:** A planting mix of one third evergreen to two-thirds deciduous is recommended on development sites and is considered to represent best practice in terms of instant impact and year-round interest.

**Hedging:** All hedge plants should be introduced at a minimum of 75% of their intended ultimate maintained height. This gives the hedging plants a better chance of survival, avoiding costly replanting, and also creates an instant impact. Hedges to front boundaries should normally be maintained at a height of 1.2 metres, so should be planted at a height of 0.9 metres. If pot grown plants are to be used, the minimum pot size should be 10 litre.

**Shrubs**: Shrubs should be planted at half their ultimate height, otherwise beds tend to develop significant gaps in the planting, and become susceptible to neglect and damage as people take short cuts through them. Evidence has shown that use of 2-3 litre plant sizes, whilst sometimes claimed to be industry standard, invariably results in planting schemes that fail to become established.

Shrub beds should therefore be planted with 5 litre pots. Planting schemes will also require a number of specimen shrubs which should be planted at 10 litre pot size. Where planting schemes also include ground cover, the ground cover can be planted at 2-3 litre pot size, but only where the ground cover forms a small decorative part of the overall scheme.

#### Shrub bed planting sizes:

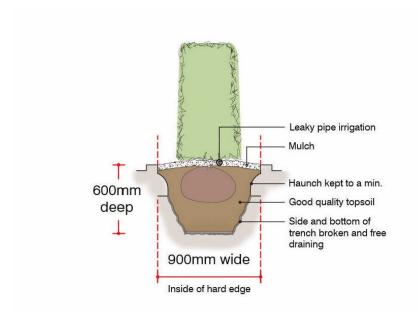
Majority of shrubs 5 litre pots Specimen shrubs 10 litre pots Limited ground cover 2-3 litre pots

#### **Establishing Hedges**

Hedges require similar growing conditions to trees. It is vitally important that the correct conditions are provided. This will require effective consideration of the following:

- Adequate Hedge Trench Size
- Sufficient Soil Volume (in which to grow)
- Soil type/quality
- Positive drainage of hedge trenches is essential to ensure water can get away and avoid killing the hedgerow
- Positive Irrigation (guaranteed watering/feeding) is required for the first 3
  years otherwise plants are likely to die
- Safeguarding from animals, vehicles and/or vandalism will be required where necessary
- All hedges should be planted from root ball stock or container grown, with a minimum pot size of 10 litres.

#### Hedge planting within hard surface



#### **Maintenance and Responsibilities**

#### **Hard Elements**

Where part of a uniform boundary arrangement, the boundary treatments should be maintained as part of a wider management strategy. Details of how these are to be effectively maintained, safeguarded and how the maintenance will be funded for a minimum of 15 years should be provided at the outset.

All rear solid boundaries must retain sufficient openings to allow continued hedgehog (and other small mammal and amphibian) migration between garden spaces.

#### **Planted Elements**

Any public facing hedgerow or tree planting will need to be covered by a private or communal management arrangement, clearly defined in the application submission, to ensure its continued success and contribution to the streetscene. There is a duty of care, the responsibility for which needs to be made clear at the time of planting boundary hedges and trees, to ensure success. Planning Conditions will require maintenance and care and/or replacement planting for a minimum period of 15 years following initial planting. Responsibility for this should be established at the outset.

Successful maintenance will involve:

- watering
- weeding and mulching around the base
- checking for security/staking
- It may also involve safeguarding from livestock or rabbits

# **Drainage and SuDS**

A large proportion of Trafford is within a nationally recognised Critical Drainage Area. This means that significant areas are at a direct risk of flooding, whilst other areas have a vital role to play in preventing excess water

Codes

**Drainage and SuDS** 

run-off impacting those more critical areas. Each and every site has its role to play in addressing flood risk.

In an increasingly unpredictable and changing climate, it is imperative that sustainable urban drainage solutions are achieved, wherever possible.

The ultimate positive solution is where the landscape and nature combine to deliver sustainable drainage.

Sustainable urban drainage systems (SuDS) have the ability to:

- · Hold back water run-off
- Prevent flooding
- Remove or reduce contaminants / pollutants from water on site
- Form an inherent part of an inspiring landscape or urban setting
- Provide habitat as part of the system

For further information on SuDS, please refer to <u>Transport for Greater Manchester:</u> <u>Streets for All</u> SuDS guidance.

# LNDS 1 Drainage and SuDS

Applicants must demonstrate that proposals for dealing with surface water drainage have optimised opportunities to deliver a landscape-led sustainable urban drainage solution within the site, consistent with the drainage hierarchy set out in government Planning Practice Guidance (PPG), and the natural drainage solutions identified in this chapter.

#### **Description**

There can be an incredibly successful symbiosis between landscape, nature and sustainable drainage systems. Applicants are expected to demonstrate they have considered landscape-led SuDS solutions from the outset of the design process. The natural drainage solutions set out in this chapter should be optimised because of the additional benefits they bring to landscape, townscape, biodiversity, health and well-being.

#### Compliance

Applicants should demonstrate in their submission how this element of the Code has been complied with.

#### Documents required:

A proposed SuDs layout plan and accompanying statement must be prepared
with any planning application submitted. Applications must also be
accompanied by a North West SuDS pro-forma, Flood Risk Assessment and
Drainage Strategy / Statement as required in the Trafford Application
Validation Checklist.

#### **Best practice**

#### Combining planting with 'natural' drainage solutions

There can be an incredibly successful symbiosis between landscape, nature and sustainable drainage systems. Hence, it will be expected that landscape, nature and SuDs are the first design tools in achieving a successful drainage scheme.

These 'natural' drainage solutions can provide all of the identified SuDs benefits. Additional benefits that these can bring to wildlife as well as human-related benefits are also well documented. 'Natural' drainage solutions must be considered and incorporated wherever possible within sites. These may include:

- Wetlands
- Planted attenuation basins and ponds

- Planted infiltration ponds
- Planted strips, trenches and swales
- Bioretention areas
- Rain gardens

### Other sustainable drainage systems

There is a well-documented hierarchy of sustainable drainage solutions.

Wherever possible, 'natural' drainage solutions should be introduced into a site's landscape design and network of connected spaces. Where this is not possible, a justification should be put forward, and other sustainable drainage solutions proposed. These can include:

- Rainwater harvesting
- Green roofs (on buildings or structures)
- Permeable surfaces
- Channels or rills
- Engineered soakaways, trenches or basins
- · Geo-cellular storage systems
- Inlet, outlet and control systems

# **Biodiversity**

Embracing ecology and biodiversity as a core component of the development process has never been more important. Biodiversity net gain (BNG) is intended to deliver measurable improvements for biodiversity by creating or

Codes

**Biodiversity** 

enhancing habitats in association with development. It seeks to make sure habitat for wildlife is in a better state than it was before development.

The Council is committed to delivering Borough-wide biodiversity enhancements. This can be achieved on all development sites and at all scales. Safeguarding existing habitat and priority species is fundamental. Delivering ecological enhancements is now a pre-requisite.

Whilst BNG requirements are set out in legislation, and national and local policy, all opportunities to incorporate biodiversity enhancements into developments on site must be taken. Trafford's landscape-led approach seeks to ensure that well-

designed places integrate existing, and incorporate new natural features into a multifunctional network that supports quality of place, biodiversity and water management, and addresses climate change mitigation and resilience; they prioritise nature so that diverse ecosystems can flourish to ensure a healthy natural environment that supports and enhances biodiversity; and they provide attractive open spaces in locations that are easy to access, with activities for all to enjoy, such as play, food production, recreation and sport, so as to encourage physical activity and promote health, well-being and social inclusion.

# LNB 1 Biodiversity

Applicants must demonstrate that the proposed scheme has optimised opportunities to integrate and enhance existing and incorporate new natural features into development sites that support biodiversity net gain at the neighbourhood street and individual plot level.

#### Description

The design process should fully acknowledge the ecological baseline of the site and demonstrate an understanding of the wider ecological context. Applicants should look at opportunities to deliver BNG on site as part of a landscape-led approach. The design process must then embrace the successful delivery of long-term ecological enhancement.

#### Compliance

Applicants should demonstrate in their submission how this element of the Code has been complied with.

Documents required as set out in Application Validation Checklist and should include:

- Baseline ecological report, including value of existing site; opportunities and proposals for ecological enhancement; the resulting benefits; long-term management proposals.
- The degree of information provided will be proportionate to the scale and nature of a development proposal. For single dwellings, the submitted information will be modest in its extent, but still demonstrate how ecological enhancement will be achieved. For larger or more complex schemes, a suitably qualified ecologist must be engaged at the outset of a project.

#### Best practice guidance

BNG solutions will embrace a full range of measures that will be required to inform a well-considered landscape response to the site.

Biodiversity protection and enhancement can be delivered in a multitude of ways and will layer up with other aspects of the Design Code. Biodiversity enhancement can be delivered alongside considerations including:

- Trees and hedgerows
- Boundaries
- Protection of existing landscape features
- SuDs and drainage solutions
- Gardens and small spaces
- Exceptional landscapes
- Management and maintenance

Healthy soils will be a vital component of a healthy landscape and nature.

#### Supporting background information

At the outset of the design process, a baseline site appraisal of existing habitats, biodiversity value and the presence of protected species should be undertaken by a suitably qualified Ecologist.

This preliminary baseline assessment and report must establish:

- The habitat types on site (or recently on site)
- Wider ecological networks
- The value (BNG) of the existing site
- The presence of any protected species or habitats suitable for protected species
- Identify opportunities and suggestions for biodiversity enhancement on site and connectivity beyond.

This baseline report should inform the design for the site **before work on the design has commenced** to avoid commercial pressures inhibiting a good design approach to a site.

This baseline report must be submitted with the application and evidence should be presented at the application submission stage to demonstrate how this information has fed into the design layout for the proposed development.

Additional report(s) will then also be required to demonstrate how any identified ecological constraints can be safeguarded or mitigated and how opportunities for ecological enhancement have been achieved. Refer to the Trafford Validation Checklist for further validation requirements.

### An Ecological Protection and Enhancement Plan

An Ecological Protection and Enhancement Plan must be prepared with any planning application submitted. This plan and associated method statements must also take into account the practicalities of the construction stage.

#### This will include:

- · The protection of existing habitats and protected species
- The composition and detail of the enhancement proposals
- The necessary long-term management requirements to ensure success.

For single dwellings, the submitted information will be modest in its extent, but still demonstrate how ecological enhancement will be achieved (e.g. wildlife-friendly fencing, bird and bat boxes within buildings, tree/shrub/hedge planting and species).

For larger or more complex schemes, this must be a comprehensive suite of proposals, prepared by a suitably qualified Ecologist to confirm that the site will deliver positively for nature. This should be in plan form with accompanying schedules, method statements and management regimes clearly set out.

#### Wildlife friendly management

It is expected that management schemes will not require harmful pesticides or herbicides, except where clearly necessary, for example, in the removal of invasive species.

# Residential Gardens, Small Spaces and Public Realm

Collectively, gardens, small spaces and public realm form a significant percentage of the Borough's green spaces - they all add to Trafford's verdant character.

The most attractive areas of Trafford and the most desirable places to live have a full and abundant landscape. Most of

Codes

Gardens for houses

Gardens for apartment schemes

this landscape is privately managed within gardens and small spaces.

The quality of landscape infrastructure delivered at the outset goes a long way towards helping to create a sense of place and determines the quality of the environment for years to come. Occupiers can then add to this initial structural planting to personalise their gardens according to their own individual taste.

Rainwater harvesting

Boundaries and
Edges –
Maintenance and
Responsibilities

Well landscaped residential gardens, small spaces and public realm always add kerb appeal and value to an individual property, an apartment block or neighbourhood which will exceed the cost of its implementation.

No garden or small space should be ignored. They contribute uniquely to the vibrancy, life and health of an area. To achieve this, there needs to be a clear focus on the detail.

For occupiers, whether residential or commercial, a private or communal garden space can have a great bearing on the quality of home or work life. How a garden, small space or area of public realm is designed and implemented is vitally important in defining this. Good design must consider:

- Levels of privacy and security
- Protection from disturbance
- Aesthetic qualities to deliver beauty and harmony
- Space to enjoy
- Opportunities for planting
- Delivering biodiversity enhancements
- How the space is experienced from the street or public realm

The Code requires a high-quality landscape-led approach to design and development, including private and communal gardens, small spaces and public realm. There is an expectation to deliver high standards of landscape implementation at the outset.

Other chapters in the Code set out requirements in relation to tree planting and boundary treatment.

# LNGS 1 Gardens for houses

Applicants must demonstrate that all residential gardens are provided with structural landscaping in the form of a tree in both the front and rear garden, hedges to the front garden and a wildlife corridor to front and rear gardens.

## **Description**

Front (public-facing) gardens will largely define the streetscene and will require an attractive and robust landscape structure. This will involve the planting of trees, hedges and shrubs at a size that delivers an instant impact. Gardens should be planted in accordance with other codes and best practice set out in this chapter of the Code. Residents will then be able to personalise their gardens thereafter.

In the interest of improving biodiversity, it is important to create wildlife corridors within front and rear gardens. A small opening must be provided in the base of fences and walls to each boundary of the plot.

Applicants are encouraged to introduce soft planting within rear gardens to soften the harsh appearance of timber fencing.

### Compliance

Applicants should demonstrate in their submission how this element of the Code has been complied with.

#### Documents required:

- Garden design submitted as part of Site Wide Landscape Strategy with the planning application
- Design and Access Statement

## LNGS 2 Gardens for apartment schemes

Applicants must design all communal outdoor amenity spaces within apartment developments to provide a useable garden space for residents in accordance with the best practice set out below.

## **Description**

Communal amenity space provision should not simply be landscaped. These areas should be designed so that residents and employees can enjoy them as garden spaces. Applicants should employ a garden designer to create spaces that are appropriate for the intended users of the garden.

A communal apartment garden should be broken down into a series of more intimate spaces that allow residents to socialise, relax and play in a reasonable degree of privacy.

## Compliance

Applicants should demonstrate in their submission how this element of the Code has been complied with.

### Documents required:

 Garden design submitted as part of Site Wide Landscape Strategy with the planning application, including a roof top or podium deck landscape plan if relevant

- Design and Access Statement
- Outline technical considerations
- Outline management plan

## LNGS 3 Small spaces and public realm

Applicants must demonstrate that they have optimised opportunities to deliver well-landscaped small spaces and public realm within a development.

## **Description**

Small spaces, pocket parks, public squares, edges and verges of all sizes have an important role to play in creating successful places and giving a development a clear identity. Small spaces and public squares help to bring people together and act as a focus for community life. All have the ability to deliver some level of planting, and applicants should look to optimise opportunities to deliver soft landscape within these spaces. Spaces that include tree and other planting are invariably more successful spaces than those without. Hard spaces can incorporate trees, hedges and/or planters within the space.

### Compliance

Applicants should demonstrate in their submission how this element of the Code has been complied with.

### Documents required:

- Site Wide Landscape Strategy
- Design and Access Statement
- Outline management plan

## LNGS 4 Rainwater harvesting

Applicants must demonstrate that they have optimised solutions for rain water harvesting within private and communal gardens and small spaces.

### Description

Opportunities to direct rainwater away from roofs, driveways and other hard surfaces can help prevent localised flooding. Green roofs to outbuildings, rain

gardens, permeable surfaces, and rainwater harvesting techniques, such as the use of water storage tanks, should be included at the planning application stage.

### Compliance

Applicants should demonstrate in their submission how this element of the Code has been complied with.

## Documents required:

 Details of rainwater harvesting solutions in Site Wide Landscape Strategy and Drainage Strategy

## **Best practice**

Well-designed homes and buildings provide good quality, accessible internal and external environments for their users, promoting health and well-being; relate positively to the private, shared and public spaces around them, contributing to social interaction and inclusion. In apartment schemes, communal gardens must be provided at ground or podium level in addition to any garden space provided on the roof of a building. It is important to provide communal amenity space at ground or podium level to create pleasant and easily accessible spaces.

Roof gardens are often exposed and windy, can be difficult for some residents to access, and in the Manchester climate do not generally provide a pleasant garden environment. Roof gardens should only be provided as a secondary option.

Well-designed shared amenity spaces should feel safe and secure for their users. They are social spaces providing opportunities for comfort, relaxation and stimulation - including play - for residents, regardless of the type or tenure of homes. They should be well overlooked and accessible.

Communal amenity space provision should not simply be landscaped. These areas should be designed so that residents and employees can enjoy them as garden spaces. Applicants should employ a garden designer to create spaces that are appropriate for the intended users of the garden.

A workspace garden should provide seating and tables to enable employees to be able to relax on breaks.

A communal apartment garden should be broken down into a series of more intimate spaces that allow residents to socialise, relax and play in a reasonable degree of privacy – applicants should consider how the space will be used, what

for, and by whom. These spaces can be created through the use of planting and other garden structures, and should include tables, chairs, benches, barbeque areas, growing areas, and lighting. The garden space should enable residents to take advantage of the sun, whilst also offering some shade. Protection from noise and pollution should be factored in. The use of artificial grass and plants should be avoided. Where apartments directly back onto the amenity space, the opportunity should be taken to deliver small semi-private garden areas to individual apartments.

Rooftops and podium gardens have the ability to deliver meaningful tree, hedge and shrub planting. Every opportunity to deliver meaningful planting in such spaces must be taken.

In order to deliver rooftop planting, a number of things must be factored in from the outset, including:

- Load bearing considerations (trees, soil and watering have a heavy load)
- Roof build-up requirements and levels implications for this
- Whether any part of the planting bed will be above or below external rooftop level
- Drainage considerations
- Irrigation capability (Including water supply and bib tap locations)
- How large species are to be delivered to the actual roof top or podium for planting
- How ongoing maintenance (or replacement planting) will be carried out once the scheme has been completed.

## **Landscape and Residential Parking Layouts**

Well-designed parking is attractive, well landscaped and sensitively integrated into the built form so that it does not dominate the development or the street scene. It incorporates green infrastructure, including trees, to soften Codes

Residential parking

the visual impact of cars, help improve air quality and contribute to biodiversity. Its arrangement and positioning relative to buildings limit its impacts, whilst ensuring it is secure and overlooked. Electric vehicle spaces and charging points need to be considered, so they are suitably located, sited and designed to avoid street clutter.

Landscaping frequently fails when introduced into areas of public realm and parking courts because insufficient space has been allowed for planting and allowing people to get in and out of vehicles.

The following landscape standards will be required when designing parking layouts in residential and commercial developments.

## LNRP 1 Residential parking

Applicants must demonstrate that all residential development adopts a landscape-led approach to car parking provision in accordance with best practice set out within this chapter.

## **Description**

Parking can be delivered in a variety of ways; but whichever parking solution is chosen the site must be appropriately landscaped.

It is difficult to successfully deliver two car parking spaces in front of a house due to the frontage width that is required to allow it to be appropriately landscaped. All too often, frontage parking results in a car dominated street and for that reason, side parking is the preferred option.

Parking courtyards can offer an efficient way of delivering parking provision and keeping vehicles hidden from the street. Well-designed parking courtyards are designed to avoid indiscriminate car parking and incorporate:

- Lighting
- Appropriate landscaping
- Sufficient room to allow residents to get in and out of vehicles
- Access to properties
- Accessible parking spaces
- EV charging infrastructure
- Larger parking spaces
- M4(2) accessibility

### Compliance

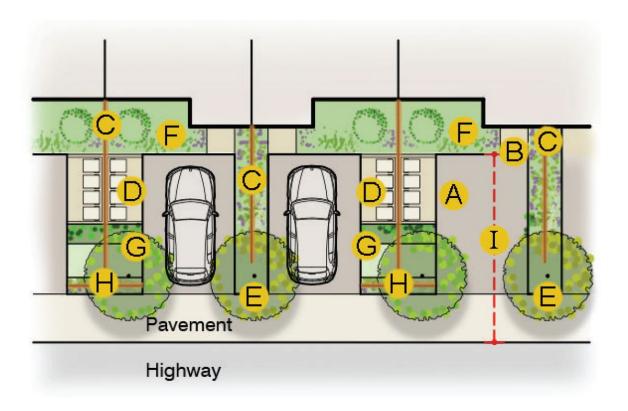
Applicants should demonstrate in their submission how this element of the Code has been complied with.

### Documents required:

- Site Wide Landscape Strategy
- Site layout plan
- Design and Access Statement

## **Residential Layout Good Practice Solutions**

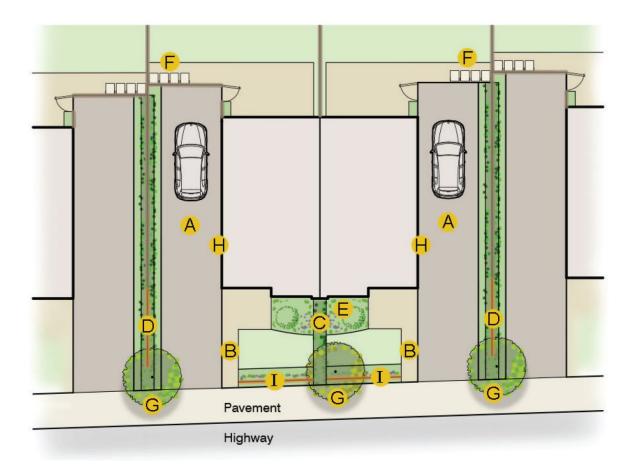
## Single bay parking in front of terraced house



- A Parking bays 3.3m wide x 5.0m deep to allow access alongside car
- B Path to front door (minimum 0.9m wide x 1.0m long)
- C Hedge (minimum soil width 0.9m), or

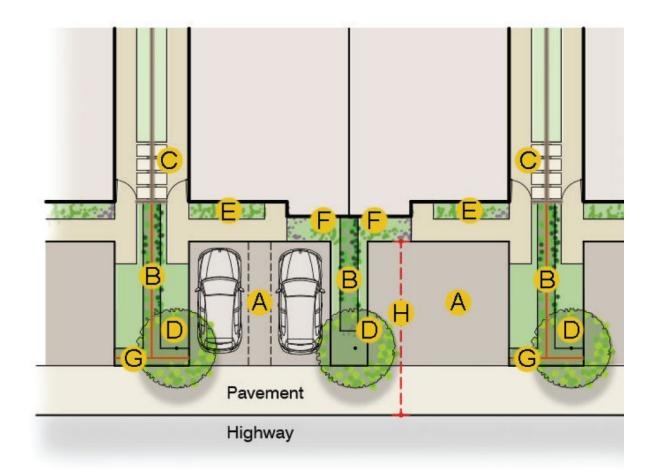
  Railings with evergreen climbers and ground cover (minimum soil width 0.7m)
  - to respond to Trafford Places and context
- Dedicated bin area within high quality screen enclosure (where rear access is not available)
- Trees to front and rear gardens (minimum 3m from building)
- F Shrubs in front garden (minimum 0.6m bed depth from building)
- G EV charging point
- H Low stone or brick wall or railing, with hedge behind (minimum soil width 0.9m) dependent on context
- I There must always be a minimum distance of 6.0m from the front of the parking bay to the kerb line to allow access to the rear of a vehicle. Where there is no pavement, the drive length itself must be 6.0m.

## Tandem side parking alongside house



- A Driveway (minimum 3.3m wide x 10m long)
- B Path to front door (minimum 0.9m wide)
- C Hedge divide (minimum soil width 0.9m)
- D Hedge (minimum soil width 0.9m), or
  Railings with evergreen climbers and
  ground cover (minimum soil width 0.7m) to respond
  to Trafford Places and context
- E Shrubs in front garden
- F Dedicated bin area screened from view
- G Trees to front and rear gardens (minimum 3m from building)
- H EV charging point
- Low stone or brick wall or railing, with hedge behind (minimum soil width 0.9m) - dependent on context

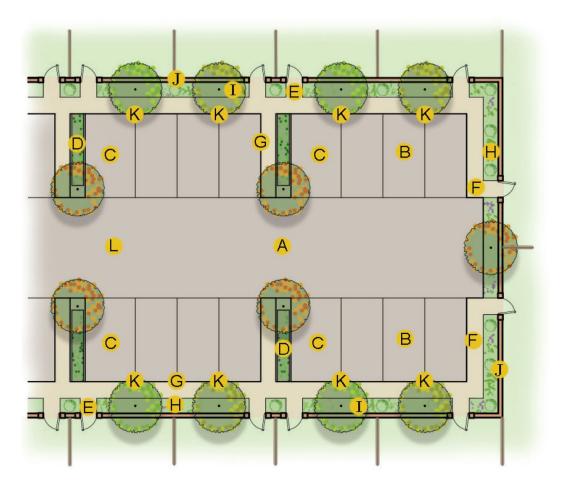
## Double bay parking in front of semi-detached house



- A 2 parking bays and path minimum 5.7m wide x 5.0m deep
- B Hedge (minimum soil width 0.9m), or
  Railings with evergreen climbers and ground cover
  (minimum soil width 0.7m) to respond to Trafford Places and context
  NB. trees next to hard surfaces may need special tree pit solutions
- Side entrance to allow storage and access for bins (screened from view) - minimum width 1.75m either side of boundary unless bin storage is to the rear of the dwelling
- D Trees to front gardens (minimum 3m from building)
- E Planting trim to front elevation (minimum 0.6m bed depth from building)
- F EV charging point
- G Low stone or brick wall or railing, with hedge behind (minimum soil width 0.9m) dependent on context
- H There must always be a minimum distance of 6.0m from the front of the parking bay to the kerb line to allow access to the rear of a vehicle.

  Where there is no pavement, the drive length itself must be 6.0m.

## **Courtyard parking layout**



- A Central turning and manoeuvring area (minimum width 6m)
- B Parking bays minimum 2.4m x 5.0m (accessible spaces to be provided in accordance with policy requirements).
- C Parking bays by hedge to allow access to and from car (minimum 3.0m wide bay x 5.0m long)
- Tree and hedge planting alongside access path to break up hard area 1.8m minimum width (comprising of: footpath 0.9m wide minimum; hedge trench and tree pit 0.9m wide minimum)
- E Path to rear garden access minimum 0.9m wide
- F End parking spaces need to allow for 0.9m wide path to side of parking space (for access to and from car)
- G Low kerb (circa 50mm upstand)
- H Shrub bed minimum 0.9m soil width (front to back of bed)
- I Trees planted in shrub bed
- J High brick or stone wall to rear boundary of properties
- K EV charging points
- L Surface material must be high quality setts or pavings

## Landscape and Industrial and Commercial Sheds

The landscape-led approach advocated in this Code applies equally to the development of commercial and industrial buildings. This is particularly important for large scale commercial sheds. Their size, form, parking, servicing and lighting requirements make them difficult to assimilate into any environment.

#### Codes

Commercial and industrial site layouts

## LNIP 1 Commercial and industrial site layouts

Applicants must demonstrate that all developments for commercial and industrial buildings adopt a landscape-led approach in accordance with best practice set out within this chapter.

## **Description**

Landscape helps to break up and relieve the mass of dense industrial form found in areas such as Trafford Park as well as adding colour and improving biodiversity. In areas such as New Carrington, some new sheds will sit in open landscape, be visible from much greater distances, and often sit close to residential properties and new areas of open space. Consequently, developments in these areas will require more landscape to help assimilate the buildings into their setting.

Generally, the larger the building, the greater the site area that will be required to create an appropriate landscape setting. Landscape will help create a sense of place, screen or soften the form and appearance of large buildings, help with light spill from floodlighting, and provide a more pleasant environment for employees, visitors and passers-by. An inadequate landscape setting all too often results in large scale buildings dominating their sites, resulting in an unwelcoming and hostile environment. In all cases it is critical that landscape is an integral part of any development scheme. It must not be seen as an afterthought to green up the edges of a site.

Within commercial and industrial car parks, trees and hedges must be included as part of the Site Wide Landscape Strategy to break up large expanses of hard surfaced vehicle parking areas. No more than ten spaces should be provided in a row without being broken up by landscape.

As illustrated in the 'Planting within large car park' scenario below, no more than ten spaces should be provided in a double row without being broken up by landscape.

## Compliance

Applicants should demonstrate in their submission how this element of the Code has been complied with.

Documents required:

- Site Wide Landscape Strategy
- Site layout plan
- Design and Access Statement

## **Commercial and Industrial Landscape Best Practice Solutions**

As part of the landscape-led approach to the Design Code it is considered important to deliver well-designed and robust landscape in association with industrial and commercial units.

The drawings below illustrate best practice in relation to landscaping provision for industrial and commercial sheds. The drawings illustrate a number of different scenarios and the relationship to adjacent land uses to provide, dependent on context:

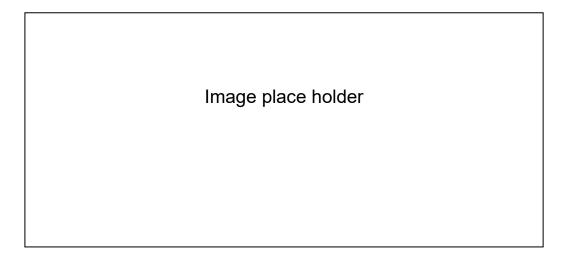
- Effective screening or filtering of the built form
- Streetscape planting to elevate the character of a place
- Safeguarding of amenity
- Biodiversity enhancement through the provision and linkage of green and blue networks
- Sustainable Drainage solutions within each site.

Each site will have differing requirements, but all will be required to provide the necessary planting solutions to achieve the stated goal to suit the context and specific situation of each site.

The best practice illustrated in the plans, sections and tables below cover five different landscape scenarios.

## **Landscape Scenarios**

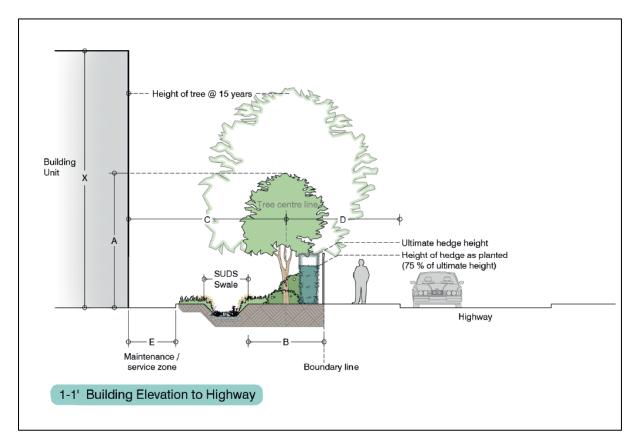
## Planting within large car park



## Scenario site plan



## SCENARIO 1 – URBAN/BUILT UP – BUILDING ELEVATION TO HIGHWAY (SMALL TO MEDIUM UNIT ELEVATION)



All developments in an urban or built-up area must be set back sufficiently from a highway / public facing boundary to allow sufficient space for planting beds and mature tree canopy spreads to be accommodated, and their associated management and maintenance. Hedgerows will be expected along the boundary. Planted swales as part of a SuDs scheme should be detailed along these boundaries where local conditions permit.

Applies to	Any small to medium sized unit elevation facing a highway or public right of way (PROW) in an urban or established			
	industrial/commercial area			
Design goal	Filtering / assimilation / streetscape enhancement			
Minimum	Robust hedgerow and line of trees			
solution	Nobust neugerow and line of trees			
"Rules"	Height of apparent building elevation (eaves or ridge dependent			
X =	on design)			

	Landscape requirements for scenario 1 (to be read in conjunction with						
	section 1-1' Building elevation to highway)						
Height of building (X)	Min. height of tree as planted @ Year 1 (A) *	Min. width of tree planting bed (B)	Min. offset between centre of line of trees and building (C) **	Min. distance from centre of line of trees to road (D)	Typical spacing of individual trees	Min. management strip requirements (E) ***	Ultimate height of trees
<5m	2.5m	1.5m	3m	3m	7m	1.0m	>10m
5m – 10m	½ X*	2m	4m	4m	7m	2.0m	>10m
10m – 15m	5m*	3m	5m	5m	7m	3.0m	>12m

- \* This height assumes a level site. If the building is set lower than the boundary/tree planting bed then it may be possible to plant at heights lower than the recommended minimum height of trees, although detailed site sections must be submitted to confirm the relationship and screening effect at Year 1.
- \*\*If the planting bed is on a slope of steeper than 1:2, a section of the planting bed along with any retaining walls will need to be submitted to ensure that planting can be successfully achieved.
- \*\*\* Only required on the highway side, if management cannot be undertaken from the highway side of the boundary may need to be larger if machinery is needed for maintenance.

## **Scenario 1 planting considerations**

#### Hedges

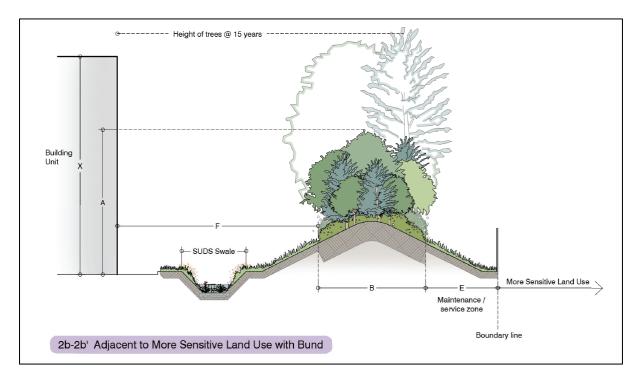
Hedgerow planting will be required along boundaries between the unit and the highway.

All hedges will be expected to be maintained at an ultimate height of 1.8m-2m. All hedge stock must be planted at 75% of the ultimate height. i.e. for a hedge with an ultimate height of 2m, the hedge plants should be planted at 1.5m tall.

### **Tree Species Considerations**

- Deciduous or Evergreen
- Dense Crown to Trees
- Positive Species for Ecology
- Appropriate eventual Crown Spread/Form for the space available.
- Larger Species will be sought. Larger ultimate tree = Larger spacing between trees and to building will be required

## SCENARIO 2 – URBAN/RURAL – MEANINGFUL BUFFER PLANTING TO MORE SENSITIVE LAND USES (ALL SIZES)



All developments in an urban or rural setting where a meaningful planted screen is required between the building/site and a more sensitive land use, will be expected to demonstrate that sufficient space has been provided to allow for dense tree belt/copse planting beds, and their associated management and maintenance. Planted swales as part of a SuDs scheme should be detailed along these boundaries where local conditions permit.

Applies to	Any elevation requiring screening from more sensitive land use or views			
Design goal	Effective screening			
Minimum solution	Woodland belt / large copse planting with or without earth bunding/building excavation to reduce visual impact.			
Location of Trees by species/type	All larger species trees should be planted within the central third of the planting bed, with woodland edge species towards the outer edges of the planting bed. This is to form a robust and effective layered buffer.			
Special Considerations	In rural or more open areas, enhanced height or depth of screening, might be required to ensure screening from identified key viewpoints (which may be from elevated ground or long-distance views). In all areas, achieving relative height of screening can include a combination of tree planting and earth			

	bunding/retaining walls/ground excavation to lower a building. Bunding maximum gradient is 1:2.
"Rules" X =	Height of apparent building elevation (eaves or ridge dependent on design)

with sect	Landscape requirements for scenarios 2a and 2b (to be read in conjunction with section 2a-2a' Adjacent to more sensitive land use and section 2b-2b' Adjacent to more sensitive land use with bund)					
Height of building (X)	Min. height of tree as planted @ Year 1 (A) *	Min. width of tree planting bed (B)	Min. offset between planting bed and the building (F)	Management strip requirements (E) **	Ultimate height of trees	
<5m	3m	3m	<sup>2</sup> / <sub>3</sub> X	1.0m	>X	
5m – 10m	<sup>2</sup> / <sub>3</sub> X	<sup>3</sup> / <sub>4</sub> X	²/ <sub>3</sub> X	2.0m	>X	
10m – 15m	7.5m	<sup>3</sup> / <sub>4</sub> X	²/ <sub>3</sub> X	3.0m	>X	
>15m <mark>***</mark>	10m	12m	10m	3.0m	>X	

- \* This height assumes a level site. If the building is set lower than the boundary/tree planting bed then it may be possible to plant at heights lower than the recommended minimum height of trees, although detailed site sections must be submitted to confirm the relationship and screening effect at Year 1. May need earth bunding to achieve the minimum height
- \*\*\* Only required where there is land outside the site boundary and in private ownership, if management cannot be undertaken from that side of the boundary \*\*\* Sheds in excess of 15m in height may require greater bed widths than shown above, greater separation from boundaries than shown above and the use of bunding or level changes, depending on local character and anticipated visual impact considerations. Details for such units, specific details of boundary planting will need agreeing with the Local Planning Authority officers.

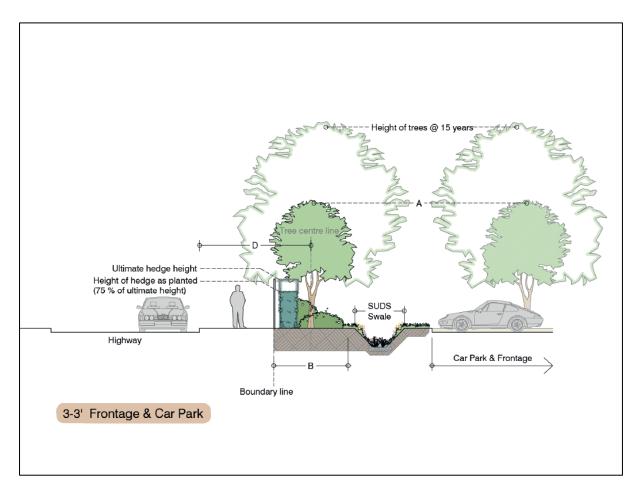
## Scenario 2 planting considerations

## **Tree Species Considerations**

- Native Woodland Mix planted to achieve Dense Woodland Effect
- 2/3 Deciduous 1/3 Evergreen
- Eventual height of trees should clearly be capable of achieving heights that provide full screening after 15 years.

 Trees of species that will ultimately achieve full screening should be included within the planting mix along the entire boundary length, and should be planted in the central section of the bed.

## SCENARIO 3 – FRONTAGE / CAR PARKING BETWEEN BUILDING AND BOUNDARY (ALL SIZES)



Where a principal frontage or car parking area faces a highway, sufficient space for planting beds and eventual tree canopy spreads need to be accommodated. The essential role of the planting is to create a setting for the building and to soften the effect of a bland/hard car park or frontage area. Hedgerows will be expected along the boundary. Trees should also form part of a planting scheme within the parking area itself. Planted swales as part of a SUDs scheme should be detailed along these boundaries where local conditions permit.

Applies to	Any parking or principal frontage area requiring filtering/screening and streetscape enhancement		
Design goal	Establishing a frame for the site. Softening large areas of hardstanding. Filtering views to the building, whilst allowing		

	some views through to identify the business. Streetscape
	enhancement.
Minimum	Hedge and line of trees
solution	rieuge and line of frees
Special	Car parking areas and frontage areas provide separation from
considerations	built form. This allows the planting of larger stock trees and trees
Considerations	of a larger species type.
"Rules"	Height of apparent building elevation (eaves or ridge dependent
X =	on design)

	Landscape requirements for scenario 3 (to be read in conjunction with section 3-3' Frontage and car park)					
Height of building (X)	Min. planting height @ Year 1 (A)	Min. width of planting bed (B)	Min. distance from centre of line of trees to road (D)	Typical spacing of individual trees (E)	Min. management strip requirements (F) **	Ultimate height of trees
<5m	4m	1.5m	3m	7m	1.0m	>12m
5m – 10m	4m	2m	4m	7m	2.0m	>15m
10m – 15m	5m	3m	5m	7m	3.0m	>15m
>15m	5m	3m	5m	7m	3.0m	>18m

<sup>\*</sup>If the planting bed is on a slope of steeper than 1:2, a section of the planting bed along with any retaining walls will need to be submitted to ensure that planting can be successfully achieved.

## Scenario 3 planting considerations

### Hedges

Hedgerow planting will be required along boundaries between the unit and the highway.

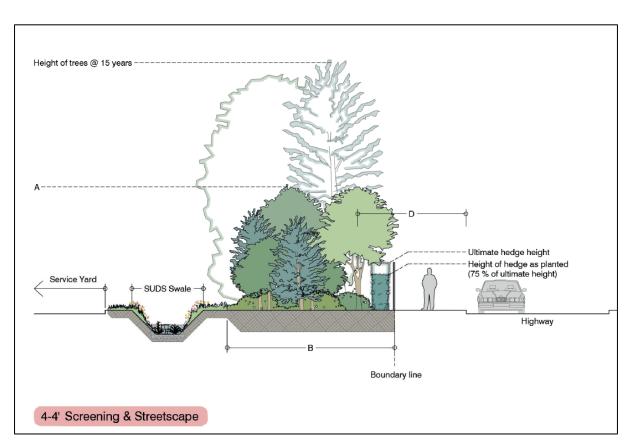
All hedges will be expected to be maintained at an ultimate height of 1.8m-2m. All hedge stock must be planted at 75% of the ultimate height. i.e. for a hedge with an ultimate height of 2m, the hedge plants should be planted at 1.5m tall.

<sup>\*\*</sup>Only required on the highway side, if management cannot be undertaken from the Highway side of the boundary – May need to be larger if machinery is needed for maintenance.

## **Tree Species Considerations**

- Deciduous or evergreen
- Dense crown to trees
- Positive species for ecology
- Larger tree species will be expected here given the ability for trees to grow larger above and across car parking areas.
- Appropriate eventual crown spread/form for the space available.
- Larger species will be sought. Larger ultimate tree = larger spacing between trees and to building will be required

## SCENARIO 4 – SERVICE YARD ON A MAIN FRONTAGE, SET BETWEEN BUILDING AND BOUNDARY (ALL SIZES)



Large sites with large servicing areas should be screened with planting. This will typically apply to large service yards and loading areas, fronting onto a public area. The planting solution will often include a combination of hedgerow, copse and individual tree planting to provide both positive streetscape effects and dense screening. Planted swales as part of a SuDs scheme should be detailed along these boundaries where local conditions permit.

Annline to	Any service yards or loading areas requiring screening from a
Applies to	frontage, that also has streetscape presence.

Design goal	Effective screening / filtering / streetscape enhancement
Minimum solution	Hedge and line of trees. Denser tree copse planting behind (where meaningful screening is required).
Special considerations	In urban or heavily developed areas, filtering and streetscape considerations might be relevant (see scenario 3) in addition to achieving a meaningful screening option (see scenario 2)
"Rules" X =	Height of apparent building elevation (eaves or ridge dependent on design)

	Landscape requirements for scenario 4 (to be read in conjunction with section 4-4' Screening and streetscape)					
Height of building (X)	Min. planting height @ Year 1 (A)	Min. width of planting bed (B)	Min. distance from centre of line of trees to road (D)	Typical spacing of individual frontage trees	Min. management strip requirements (E) **	Ultimate height of trees
<5m	4m	3m	3m	7m	1.0m	>12m
5m – 10m	4m	5m	4m	7m	2.0m	>15m
10m – 15m	5m	8m	5m	7m	3.0m	>15m
>15m	5m	10m	5m	7m	3.0m	>18m

<sup>\*</sup>If the planting bed is on a slope of steeper than 1:2, a section of the planting bed along with any retaining walls will need to be submitted to ensure that planting can be successfully achieved.

## Scenario 4 planting considerations

### **Hedges**

Hedgerow planting will be required along boundaries between the unit and the highway.

All hedges will be expected to be maintained at an ultimate height of 1.8m-2m. All hedge stock must be planted at 75% of the ultimate height. i.e. for a hedge with an ultimate height of 2m, the hedge plants should be planted at 1.5m tall.

<sup>\*\*</sup> Only required on the highway side, if management cannot be undertaken from the highway side of the boundary – may need to be larger if machinery is needed for maintenance.

## **Tree Species Considerations**

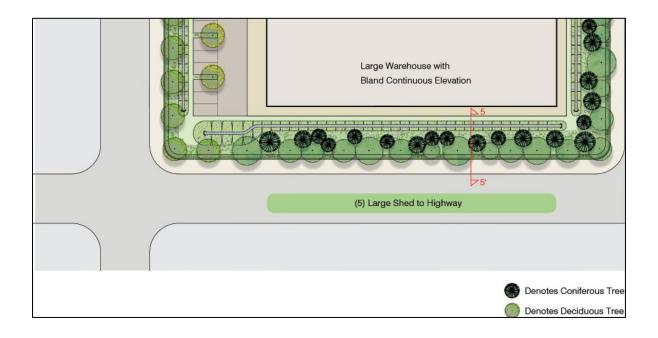
Adjacent to the highway (streetscape):

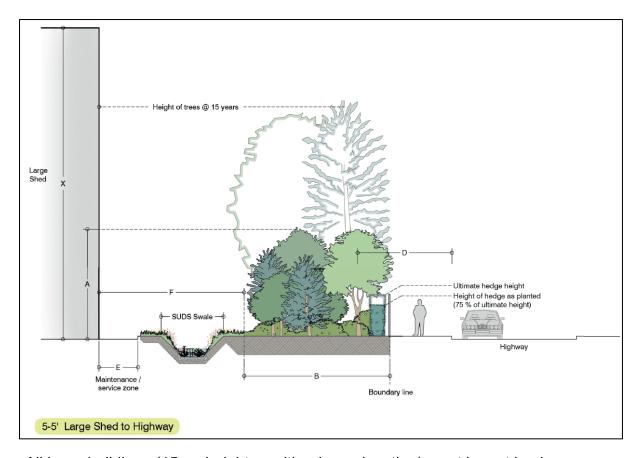
- Deciduous or evergreen
- Dense crown to trees
- Positive species for ecology
- Larger tree species will be expected here given the ability for trees to grow larger above and across car parking areas.
- Should relate to other site frontage areas (see Scenario 1 & 3)
- Larger species will be sought. Larger ultimate tree = larger spacing between trees and to building will be required

### Behind the frontage "streetscape" planting:

- Native woodland mix planted to achieve dense woodland effect
- 2/3 deciduous 1/3 evergreen
- Eventual height of trees should clearly be capable of achieving heights that provide full screening after 15 years
- Trees of species that will ultimately achieve full screening should be included within the planting mix along the entire boundary length, and should be planted in the central section of the bed.

## SCENARIO 5 – LARGE SHED ELEVATION TO HIGHWAY (LARGE UNIT ELEVATION)





All large buildings (15m+ height or with a long elevation) must be set back sufficiently from a highway / public facing boundary to allow sufficient space for effective layered planting beds to achieve a density and robustness to tree planting and to allow eventual tree canopy spreads to be accommodated. Hedgerows will be expected along the boundary. Planted swales as part of a SuDs scheme should be detailed along these boundaries where local conditions permit.

Applies to	Any large sized building (15m+ height or with a long elevation) facing a highway or public right of way (PROW)			
Design goal	Screening / assimilation / streetscape enhancement			
Minimum solution	Robust hedgerow and effective depth of tree planting			
"Rules" X =	Height of apparent building elevation (eaves or ridge dependent on design)			

Landscape requirements for scenario 5 (to be read in conjunction with section							
5-5' Large shed to highway)							
Height of building (X)	Min. height of tree as planted @ Year 1 (A) *	Min. width of tree planting bed (B)**	Min. offset between trunks of closest trees and building (C)	Min. distance from trunk of closest trees to road (D)	Typical spacing of individual frontage trees	Min. management strip requirements (E) ***	Ultimate height of trees
15m + ****	5m	7m	5m	5m	7m	1.0m	>18m

- \* This height assumes a level site. If the building is set lower than the boundary/tree planting bed then it may be possible to plant at heights lower than the recommended minimum height of trees, although detailed site sections must be submitted to confirm the relationship and screening effect at Year 1.
- \*\*If the planting bed is on a slope of steeper than 1:2, a section of the planting bed along with any retaining walls will need to be submitted to ensure that planting can be successfully achieved.
- \*\*\* Only required on the highway side, if management cannot be undertaken from the Highway side of the boundary May need to be larger if machinery is needed for maintenance.
- \*\*\*\* Sheds in excess of 15m in height may require greater bed widths than shown above, greater separation from boundaries than shown above and the use of bunding or level changes, depending on local character and anticipated visual impact considerations. Details for such units, specific details of boundary planting will need agreeing with the Local Planning Authority officers.

### Scenario 5 planting considerations

## Hedges

Hedgerow planting will be required along boundaries between the unit and the highway.

All hedges will be expected to be maintained at an ultimate height of 1.8m-2m. All hedge stock must be planted at 75% of the ultimate height. i.e. for a hedge with an ultimate height of 2m, the hedge plants should be planted at 1.5m tall.

## **Tree Species Considerations**

- Deciduous or evergreen
- Dense crown to trees
- Positive species for ecology
- Appropriate eventual crown spread/form for the space available.

Larger species will be sought. Larger ultimate tree = larger spacing between trees and to building will be required.

## **Maintenance and Responsibilities**

Good management contributes to the resilience, attractiveness and beauty of a place. Well-designed places are robust, durable and easy to look after. They are designed so management and maintenance responsibilities are clearly defined for all parts of a development. Well-designed places consider management and maintenance regimes from the early stages of the design process and set them out in a management plan.

#### Codes

Landscape management and maintenance responsibilities

Well-designed places enable their users to develop a sense of ownership and belonging over time, while also feeling welcoming to visitors and passers-by.

## LNMR 1

# Landscape management and maintenance responsibilities

Applicants must demonstrate that all communal gardens, small spaces, public realm and landscaping associated with industrial and commercial developments will be designed, planted and maintained in accordance with best practice set out within this chapter.

### Description

A successful landscape is a product of good quality implementation and good quality management. Implementation may take weeks or months, but for a landscape scheme to be successful, it must be managed and maintained forever.

Responsibility for landscape management should be with a private management company, the details of which must be provided as part of the application submission. Applicants must submit details of a management and maintenance plan that includes details of:

- Management company and contact details for residents
- How the area will be managed for the lifetime of the development
- Maintenance responsibilities

A lack of clarity at an early stage can lead to indecision or conflict and then ultimately the landscape will suffer.

## Compliance

Applicants should demonstrate in their submission how this element of the Code has been complied with.

## Documents required:

- Site Wide Landscape Strategy
- Landscape Management and Maintenance Plan

## Planting, Maintenance and Aftercare Best Practice

For all scenarios:

- All planting techniques and densities should comply with best practice for establishing hedge and tree planting.
- Positive drainage to be included within all planted areas.
- · Good quality soils must be used.
- An automated irrigation system will be required for all new hedge and standard (and above) tree planting stock, for at least two years. Water supply / bib tap locations need consideration at the early stage of the design process.
- All new planting should be regularly maintained to best practice guidelines.