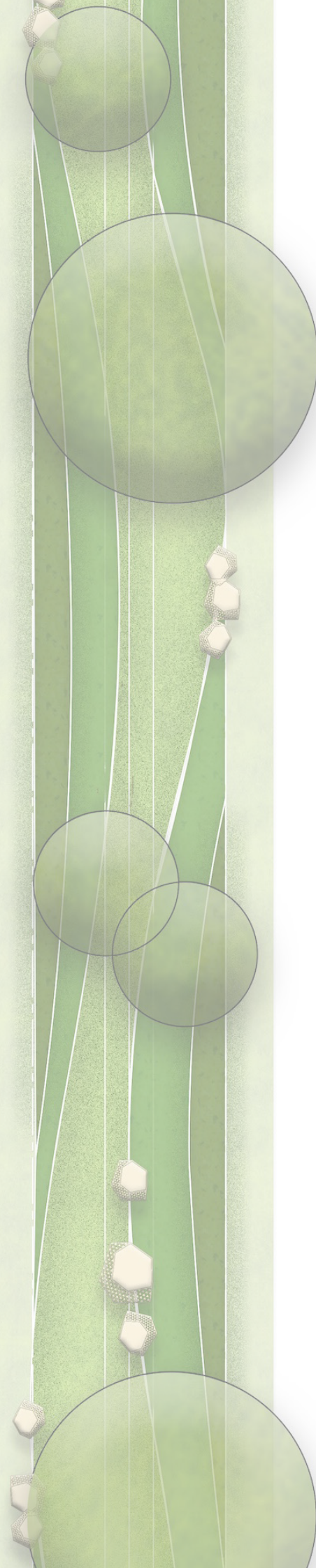




Bridge Farm, Twyford

RESERVED MATTERS

Landscape Design Statement

CH038-001M

19 March 2025

ilex

Landscape Architects

for

croudacegroup





Refer to	
• CH038-002	Landscape Master plan
• CH038-003	S106 Open Space Typologies
• CH038-004	Tree Planting Plan 1
• CH038-005	Tree Planting Plan 2
• CH038-006	Tree Planting Plan 3
• CH038-007	Tree Planting Plan 4
• CH038-008	Tree Planting Plan 5
• CH038-009	Tree Planting Schedule
• CH038-010	Canopy Cover Calculator

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Introduction

Planning history

An **outline application** (212720) (with all matters reserved except access to the site) for the development of up to 200 dwellings, including 40% affordable housing and associated infrastructure, open space, biodiversity enhancements, landscaping and green infrastructure, following demolition of existing agricultural buildings was submitted to Wokingham Borough Council. It was approved and **permission granted on 5 July 2023.**

The approved details are;
5563.003 Rev I Proposed Access Arrangements
PRB-TWY-013E Illustrative Land Use Plan
PRB-TWY-012F Illustrative Storey Heights Plan

Condition 15 of the approval states;

‘The reserved matters application shall be accompanied by a **Landscape Design Statement** and plan to give details of the landscape proposals and structural planting including street tree planting in accordance with the landscape measures detailed in the submitted Landscape Report, in advance of the landscape details required to be provided to comply with the detailed landscape condition 16.

Reason: In order to ensure that provision is made to allow satisfactory maintenance of the landscaping hereby approved. Relevant policy: Core Strategy policy CP3 and Managing Development Delivery Local Plan policies CC03 and TB21’

Landscape design principles established in outline

The **Report on Landscape and Visual Matters** and Landscape Strategy Plan (David Williams Landscape Consultancy) set out various principles, aims and objectives. In summary, these are to;

- Retain existing vegetation as far as possible.

- Provide a landscape buffer along the A4 Bath Rd comprising retained trees, new trees & shrubs and grasslands.
- Introduce informal squares and ‘greens’ particularly along the main north-south street extending from Muddlers Lane.
- Integrate swales as landscape features (along streets) that connect to attenuation basins.
- Retain the western and southern parts of the site that lie in flood risk areas as public open space and;
 - manage the waterside vegetation
 - provide new planting to create a mosaic of habitats
 - include informal footpaths as a riverside walk
 - provide play facilities
- Provide open space in the south eastern corner of the site including an orchard and a tree & shrub planting buffer between it and existing residential uses to the south.
- Implement a comprehensive landscape scheme to front gardens to create pleasant and attractive amenity.

In addition, the **Ecological Appraisal** (Aspect Ecology) sets out recommendations for biodiversity enhancement including;

- the enhancement of the existing flood plain grasslands with supplementary planting including new riverine trees and the pollarding of existing Crack Willow Trees along the riverbank.
- the creation of new wetland habitats including SuDS features and a series of shallow, linear wader scrapes in the flood plain that would provide damp foraging habitats for birds such as Snipe.
- The provision of bird and bat boxes through the development.

Tree canopy cover

The Twyford Neighbourhood Plan states that development proposals on sites of 0.5 ha or more should achieve a future canopy cover of 25% of the site area principally through the retention of existing trees and the planting of new trees.

Purpose of this Landscape Design Statement

This Landscape Design Statement demonstrates how the landscape and ecological principles established at the outline stage will be embedded in the landscape design and provides details of the proposals including structural planting. It also demonstrates how the 25% canopy cover will be achieved.



Extract from Outline ‘Landscape Strategy Plan’ (David Williams Landscape Consultancy).

Landscape Design Concept

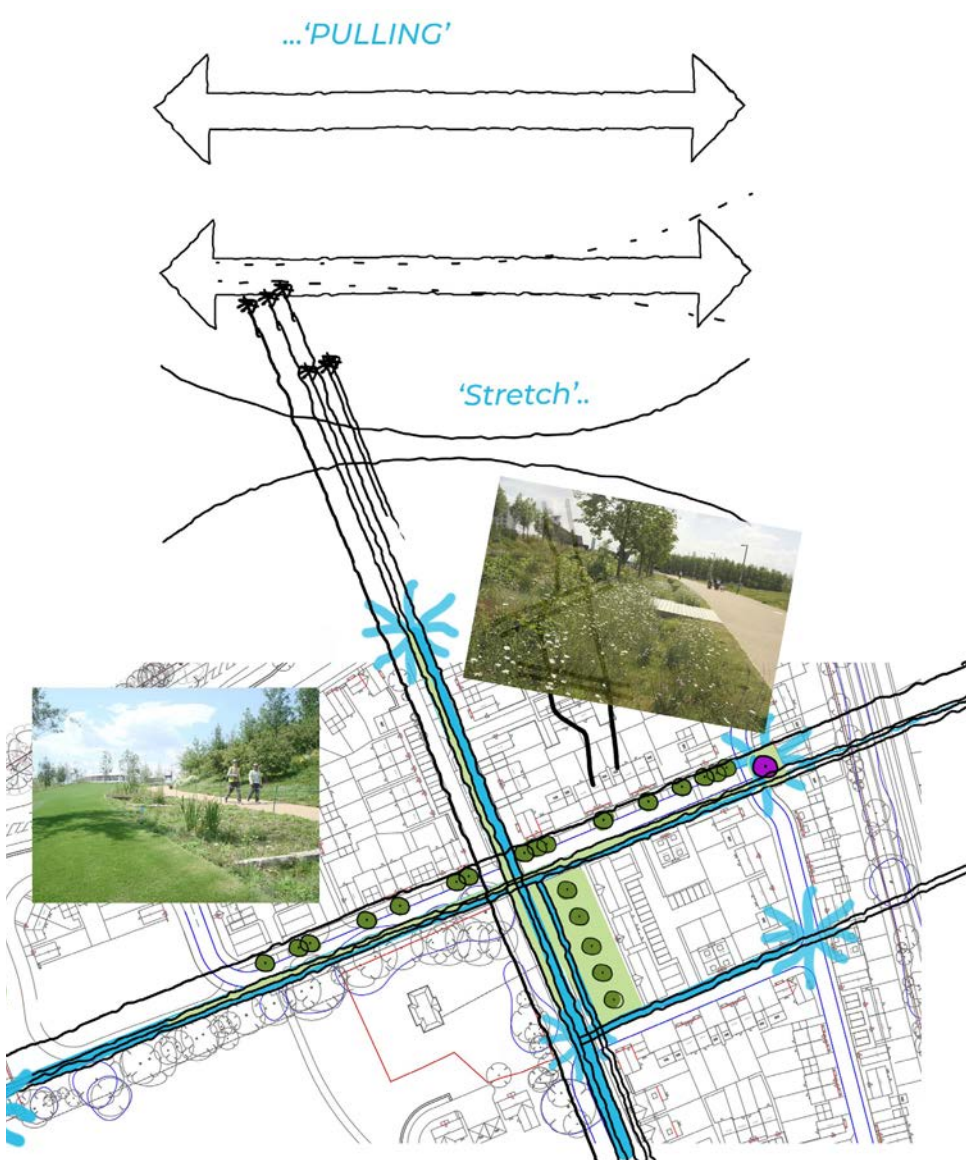
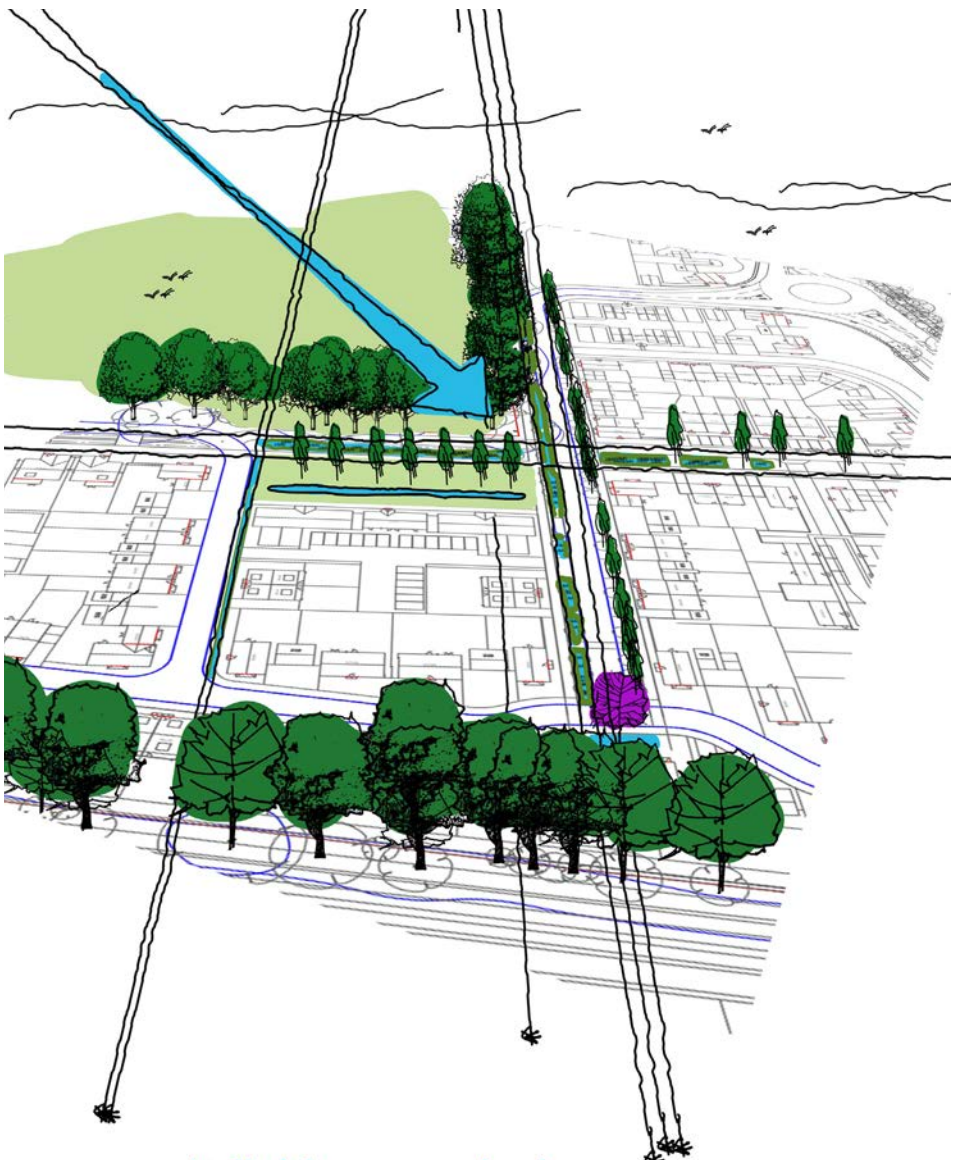
‘A Fluid Connection’

Croudace Homes produced an overarching landscape design concept for the site that is inspired by its riverside context.

The landscape design concept is to create a visual and physical connection between the development and its natural surroundings by;

- Using water (SuDS) as a unifying element through the development
- Integrating SuDS swales as attractive landscape features along streets, and SuDS basins as landscape features within the open space
- Potentially harvesting meadow seed from existing, high quality flood plain grasslands in the local area for the production of site-specific wet meadow turf to be laid in swales
- Retaining the flood plain as a nature-rich open space with strong connections back into the development

The application of the concept has the potential to create a locally distinct and biodiverse character for the development that is anchored to and integrated with its context.



Landscape Design Concept Sketches by Croudace Homes



Precedent Images; Wet meadow grasslands, attenuation basins and swales

Proposed Open Space Types

The proposed site layout has progressed since the outline approval. It delivers a variety of open space types linked by SuDS features that run through the development area. The diagram opposite sets out their locations.

Shared surface **courtyards and plazas** appear along minor streets at the core of the development. These are predominantly hard landscaped spaces with integrated parking. Trees are set in areas of planting to provide amenity and /or to help to define gateways and thresholds.

Soft landscape buffers are comprised of retained trees, native tree planting in a woodland / scrub planting matrix as well as areas of meadow grassland.

‘The Water Meadows’ occupy the flood plain and provide nature-rich, recreational open space between the development and the River Loddon.

‘Loddon Green’ is a semi-formal open space along the historic ‘Muddlers Lane’ north-south route.

A Connective space provides a link between the water meadows and the heart of the development. A mown path winds through an area of low native woodland shrub and bulb planting.

The **community orchard** includes local Berkshire varieties.

An area towards the edge of the water meadows will provide a **NEAP and MUGA**.

SuDS features include swales and bioretention strips along streets. They connect to a large attenuation basin in the water meadows as part of a ‘SuDS Train’.

The following pages set out the landscape master plan and details of the layout and planting of the open space types.



- Courtyards and Plazas
- Soft Landscape Buffers and Roundabout
- The Water Meadows
- Loddon Green
- Connective space
- Community Orchard
- NEAP and MUGA
- Bioretention swales with tree planting
- Drainage swale with riverine planting
- Attenuation basin / outflow
- Scrapes for wading birds (ecological enhancement)
- * Gateway feature tree

Landscape Master Plan

The Landscape Master plan (CH038-002, shown opposite) embeds the principles established at the outline stage. It integrates the development into the broader landscape, provides a high quality setting for new homes and a good standard of amenity for residents whilst enhancing biodiversity.

Green streets and a range of engaging, nature-rich open spaces are suitable for active and passive recreation. It includes a space allocated for a Neighbourhood Equipped Area for Play (NEAP). SuDS elements are integrated as landscape features.

- Native meadow
- Species rich amenity grassland / mown paths through meadow
- Wet native meadow in SuDS features (basins and swales)
- Native marginal & aquatic planting (Permanent Water)
- Native Scrub planting
- Native Woodland planting
- Ornamental planting
- Native tree planting
- Street tree planting
- Feature tree planting
- Orchard tree planting
- Tree planting in rear gardens
- Low hedges (front plot boundaries 0.6m tall)
- Tall hedges (rear plot boundaries 1.8m tall)
- Potential 'Incidental Play' / interpretive signage / wayfinding locations
- Retained trees
- Site boundary



The Water Meadows

‘The Water Meadows’ occupy the flood plain and provide nature-rich, recreational open space between the development and the River Loddon. Mown paths meander through it and around the attenuation basin forming a ‘nature trail’. They provide a circular route and connect to a swathe of short grassland around the edge of the built area from which the amenity of the riverside can be appreciated. Native tree and shrub planting and the provision of ecological features enhances the existing habitat.

Planting Details (refer to CH038-009 Planting Schedule for full specification)

Trees; 10-12cm girth, Selected Standard or Large Feathered
Within the flood plain; Crack Willow, White Willow, Common Alder,
Downy Birch, and Black Poplar.

Along the eastern boundary adjacent to the built up area; Small Leaved Lime, Common Alder, and Aspen.

Native Scrub planted in a matrix as transplants, 60-100cm tall, with rabbit guards and stakes @ 3 per m2 including; Goat Willow, Hazel, Hawthorn, Blackthorn, Dog Rose, Honeysuckle, Dogwood , Crab Apple, Guelder Rose, and Elder.

Native woodland planting matrix is described at page 8.

Grasslands

Species rich amenity grass areas will be sown with Emorsgate EL1 'Flowering Lawn' and maintained short for amenity use.

The existing grassland will be retained and managed for biodiversity in **native meadow areas** with no more than two cuts per year with cuttings raked up disposed off-site at a composting facility. Reinstatement with Emorsgate 'EM8 Meadow Mixture for Wetlands' for areas within the 1:100 year flood zone, or Emorsgate 'EM2 Standard General Purpose Meadow Mixture' for areas above the flood zone.



The Orchard

The orchard will include varieties of Apple and Cherry in line with the ecologist’s recommendations. It will also include local varieties (Berkshire) such as Cox’s Orange Pippin Apple and Charles Ross Apple. The orchard trees will be grown in the existing grassland.

Planting Details

Orchard trees will generally be planted as half standards; Species will include;

Apples on semi-vigorous roostock such as MM106

- Apple ‘Charles Ross’
- Apple ‘Cox’s Orange Pippin’
- Apple ‘Bramley’s Seedling’

Pears on semi-vigorous rootstock such as Quince A

- Pear ‘Buere Hardy’
- Pear ‘Doyenne du Commice’

Cherries and Plums

- Plum ‘Victoria’ on St Julian Rootstock
- Cherry ‘Stella’ on Colt Rootstock

Other orchard trees

- Black Mulberry
- Medlar

Trees along the street edge

Elm ‘New Horizon’, 16-18cm girth, Extra Heavy Standard and Red Oak, 14-16 cm girth Extra Heavy Standard

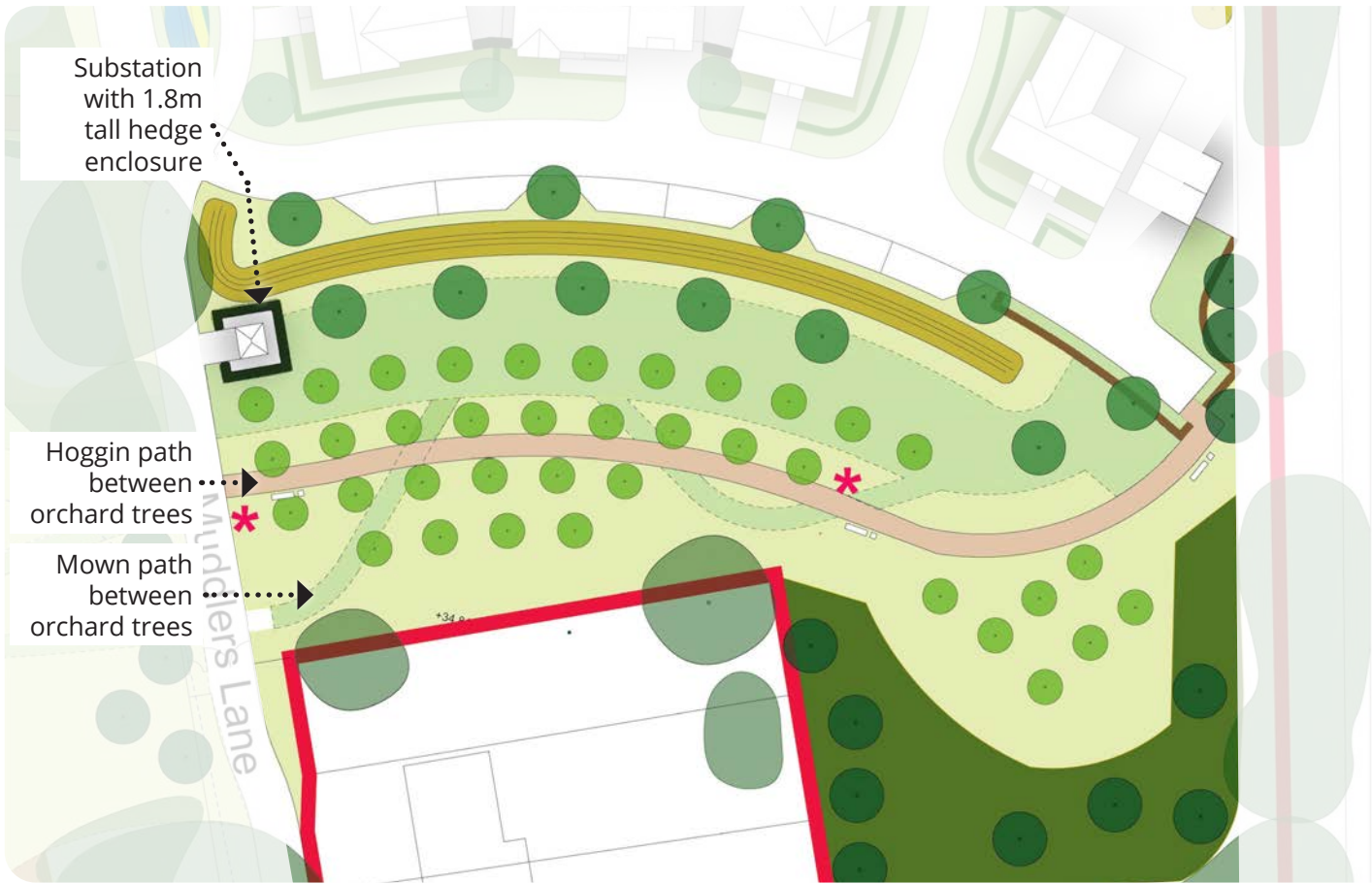
Native Trees along the southern boundary; 10-12cm girth, Selected Standard; Hornbeam, Field Maple, Oak, Small Leaved Lime.

Native Woodland will be planted in a matrix as transplants, 60-100cm tall, with rabbit guards and stakes @ 3 per m2 including; Goat Willow, Hazel, Hawthorn, Hornbeam, Field Maple, Silver Birch, Holly, Yew, Wild Service Tree.

Grasslands

Species rich amenity grass areas will be sown with Emorsgate EL1 ‘Flowering Lawn’ and maintained short for amenity use.

The existing grassland will be retained and managed for biodiversity in **native meadow areas** with no more than two cuts per year with cuttings raked up disposed off-site at a composting facility. Reinstatement with Emorsgate ‘EM2 Standard General Purpose Meadow Mixture’.



- Native meadow
- Species rich amenity grass
- Connective planting
- Native Woodland planting (southern landscape buffer)
- Street trees
- Native trees
- Orchard trees
- Potential incidental play' / interpretive signage / wayfinding locations
- Bins & Benches



Precedent images; Orchard

Loddon Green

‘Loddon Green’ is a semi-formal open space along the historic ‘Muddlers Lane’ north-south route. It provides setting to adjacent apartment blocks and opposite the existing ‘Orchard Cottage’ as well as usable amenity space.

A hedged area to the rear of the apartments provides amenity space with bench seating for residents of the apartment blocks.

Planting Details

Trees; 14-16cm girth, heavy standard
Hornbeam ‘Franz Fontaine’, Crab apple ‘Golden Hornet’
Feature Trees; Tulip Tree

Hedging; pre-formed, ‘instant’ hedge
Low, 60cm tall; Portuguese laurel
Tall, 180cm tall; Portuguese laurel

Ornamental shrub planting;
A mix of shrubs and herbaceous plants with an emphasis on ‘plants for pollinators’, planted in 5ltr pots @ 4 per m2.

Grassland;
Species Rich Amenity Grass seed; Emorsgate EL1 ‘Flowering Lawn’, or Wildflower Turf ‘Species rich lawn turf’
Native meadow; Emorsgate EM2 Standard general purpose meadow mixture or Wildflower Turf ‘Landscape 34 Wildflower Turf’.



Precedent image;
Meadow grassland border and ornamental planting



Precedent image;
Incidental play feature



- Native meadow border
- Species rich amenity grass
- Street trees
- Feature trees
- Ornamental planting
- Clipped evergreen hedge 1m tall
- Clipped evergreen hedge 1.8m tall
- Potential ‘Incidental Play’ / interpretive signage / wayfinding locations
- Bins & Benches

Play

An area towards the edge of the water meadows will provide a **NEAP and MUGA**. It will be set within shrub and hedge planting and provide a variety of thematic play experiences for a range of age ranges, divided into a number of connected zones.

The NEAP will connect to a path leading through the open space that will be designed as a 'nature trail'. The NEAP will be overlooked from the north by housing. Planting will be arranged to ensure sight-lines to the NEAP.

The potential design of the NEAP is explored in more detail overleaf. The detail of the NEAP and its equipment will be progressed through planning conditions.

Planting Details

Trees;

Native Trees; Whitebeam 10-12cm girth, Gean 10-12cm girth
Feature Trees; Double Gean, 14-16cm girth / Black birch 12-14cm girth

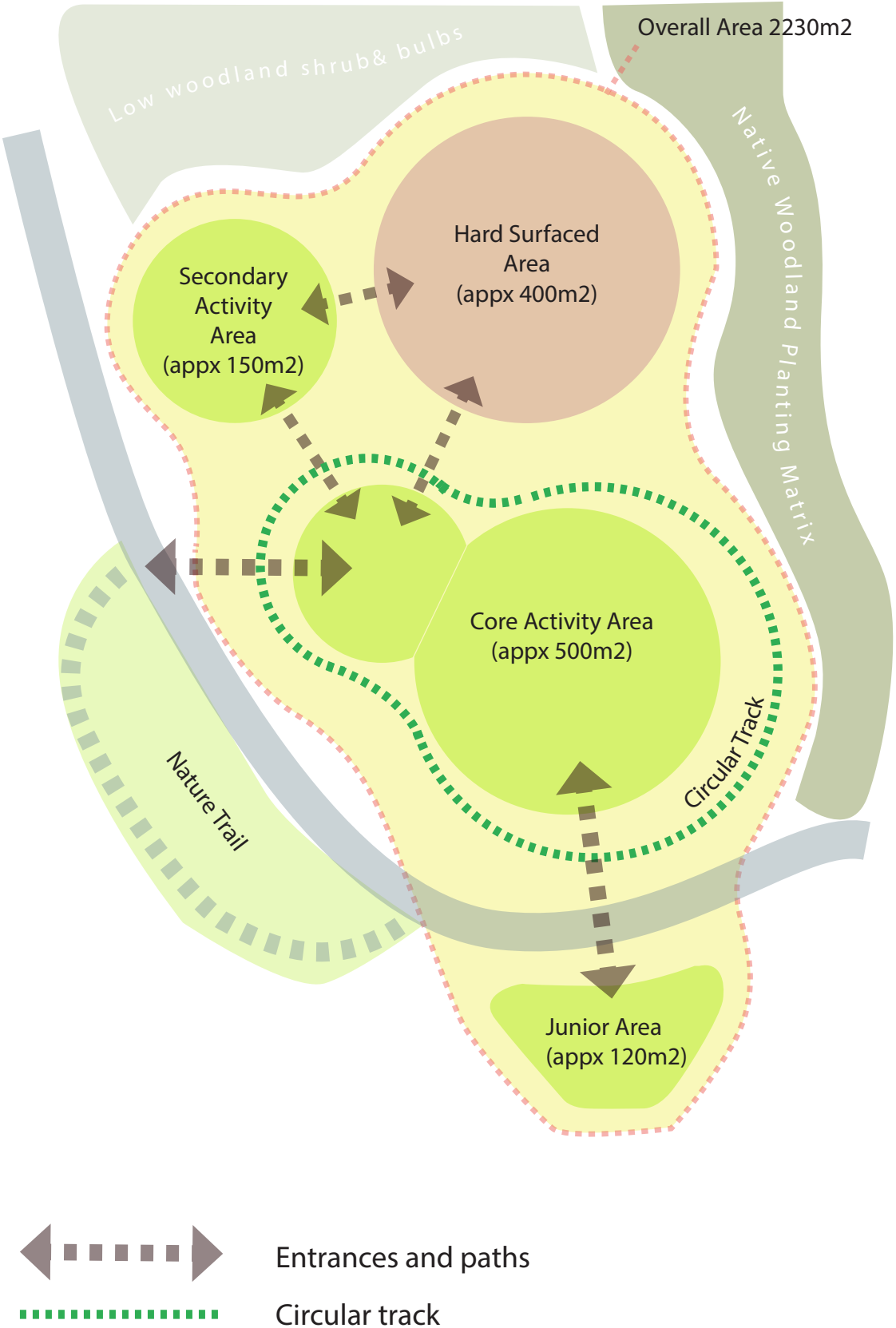
Native Hedge; Low pre-formed hedge 60-80cm tall; Hornbeam

Ornamental shrub planting; A mix of robust shrubs and herbaceous plants with an emphasis on 'plants for pollinators', planted in 5ltr pots @ 4 per m2.

Grass; Species Rich Amenity Grass; Emorsgate EL1 'Flowering Lawn' seed, or Wildflower Turf 'Species rich lawn turf'

Native Woodland Planting Matrix (to the rear of the play area, transplants. Refer to specification on page 8.

Low native woodland shrub and bulb planting matrix (to the north of the play area;
Bluebells, Male Fern, Hearts Tongue Fern, Honeysuckle, Dogwood, Gorse, Broom, Redcurrant and Blackthorn. Refer to Plant Schedule.



Incidental Play Examples;



Grass mounds



Boulders as play elements

The landscape master plan also indicates potential locations for '**Incidental Play and Interactive interpretive signage**'; a mix of informal, creative play elements (e.g. grass mounds and boulder clusters) and interactive signage that helps to interpret the landscape and ecological value and interest of the open space areas. These are dispersed around the open spaces to encourage their exploration.

Play

Croudace have explored some initial ideas with Timberplay Ltd for design development through planning conditions.

There is potential to integrate;

- Amphitheatre, or raked seating around some of the core play areas
- Sensory Play
- Adventure Play
- Water Play
- Nature Trail

The hard surfaced area could be enlivened with art painting of its surface, and the marking out of areas for informal games.



Potential amphitheatre or raked seating

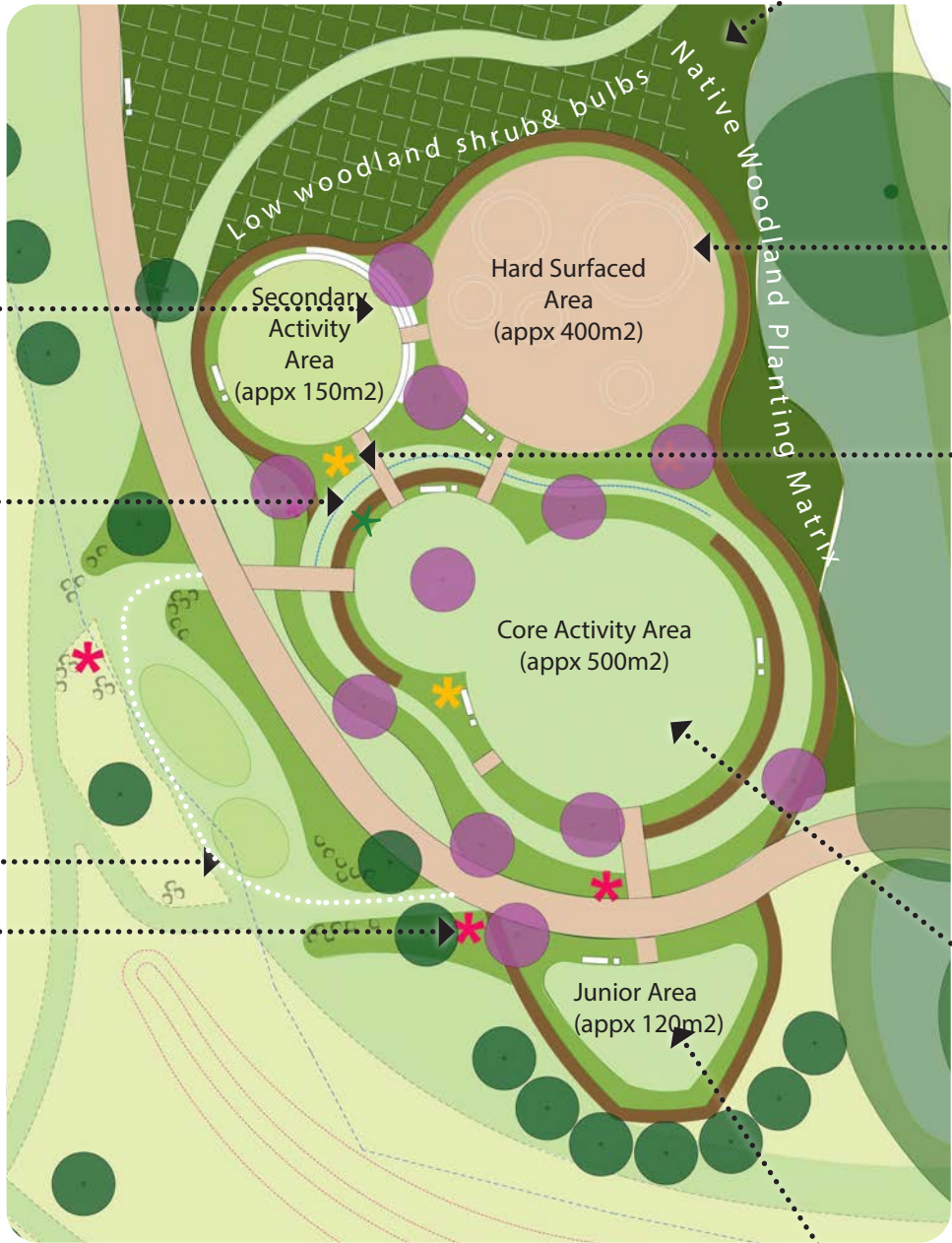


Potential water play element

Nature trail



Potential interpretive / interactive signage



Native woodland planting to enhance existing north-south tree corridor along Muddler's Lane in line with ecologists recommendations



Hard surfaced area with art / games line painting; (Informal MUGA)



Informal / creative / sensory play elements integrated with soft landscape setting



Core activity area in landscape setting (Artist's impression by Timberplay Ltd)

Junior area

The northern buffer with Bath Road



The **landscape buffers** comprise retained trees, native tree planting in a native woodland / scrub planting matrix as well as species rich amenity grass verge. They are designed to provide a degree of separation between the development and Bath Road (and to adjacent residential uses to the south).

Planting Details

Trees; 10-12cm girth, Selected Standards

Native Trees; Hornbeam, Field Maple, Oak, Whitebeam, Gean , Small Leaved Lime

Feature Trees; Ginkgo / Maidenhair tree (14-16cm girth, Extra Heavy Standard)

Native Woodland Planting Matrix; transplants, 60-100cm tall, with rabbit guards and stakes @ 3 per m2 including; Goat Willow, Hazel, Hawthorn, Hornbeam, Field Maple, Silver Birch, Holly, Yew, Wild Service Tree.

Grassland

The short verge will be **species rich amenity grass;** Emorsgate EL1 'Flowering Lawn' seed, or Wildflower Turf 'Species rich lawn turf'

Native Hedge

The native hedge will be pre-formed 'instant hedging' supplied at 60-80cm tall and to be maintained at 1m height and width. It will comprise no less than five species including Hawthorn, Holly, Hazel, Blackthorn, Guelder Rose.



Woodland Planting Matrix



Meadow grassland

Site gateway

The landscape design helps to define a strong site gateway.

The new roundabout to be delivered as part of the S278 works will be planted with coniferous trees.

Wide swales flank the entrances and will be enclosed with estate railing on the front edge to Bath Road and native hedge planting on the back edge with the development.



(Pinus maritima)



Feature Tree Seat



Native shrub under-storey below pine trees; Dogwood, Pendulous Sedge, St John's Wort



Structural planting within character areas

Character Areas

The development area has been divided into proposed character areas as shown on the plan opposite. These are described in the Design & Access Statement.

The character areas are;

-  **Bath Road Edge**
-  **Central**
-  **The Green (including Loddon Green)**
-  **Railway Edge**
-  **River Edge**
-  **Main Avenue Street**
-  **Swale Street**

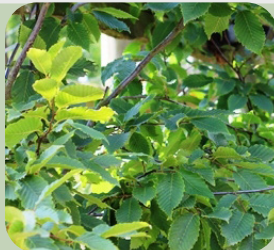
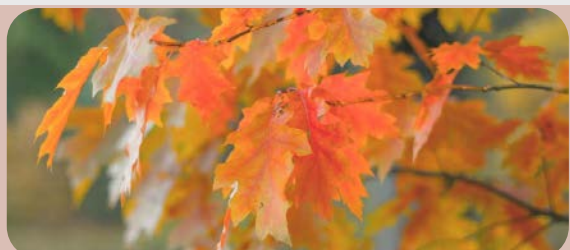
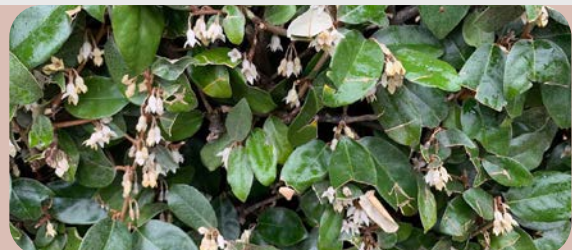
The planting design has an important role to play in contributing to the definition of these character areas. It is the structural elements of planting that have the most impact; particularly the trees and hedges that sometimes form front and rear plot boundaries.

The tree and hedge species planned for each character area are shown overleaf.



Extract from Character Areas Plan by Croudace Homes

Structural planting within character areas

	Street Trees	Feature Trees	Hedging
	12-14cm girth or 14-16cm girth in streets clear stem 175-200cm.	12-14cm girth or 14-16cm girth in streets clear stem 175-200cm.	Pre-formed / instant hedge. 60cm tall.
Bath Road Edge	 Sorbus aria 'Lutescens'	 Ginkgo biloba	 Photinia 'Red Robin'
Central	 Pyrus 'Chanticleer' / Sorbus 'Joseph Rock'	 Acer buergerianum	 Ligustrum ovalifolium
		 Prunus avium 'Plena'	
The Green	 Carpinus betulus 'Franz Fontaine' / Malus 'Golden Hornet'	 Liriodendron tulipifera	 Prunus lusitanica
			
Railway Edge	 Amelanchier 'Robin Hill' / Malus 'tschonoski'	 Prunus serrula	 Giselinia littoralis
			 Osmanthus burkwoodii
River Edge	 Quercus rubra	 Liriodendron tulipifera / Acer saccharinum	 Elaeagnus ebbingei

Main Street
16-18cm girth, extra heavy standards, clear stem 200cm.



Ulmus 'New Horizon'

Swale Street
14-16cm girth, extra heavy standards, clear stem 200cm.



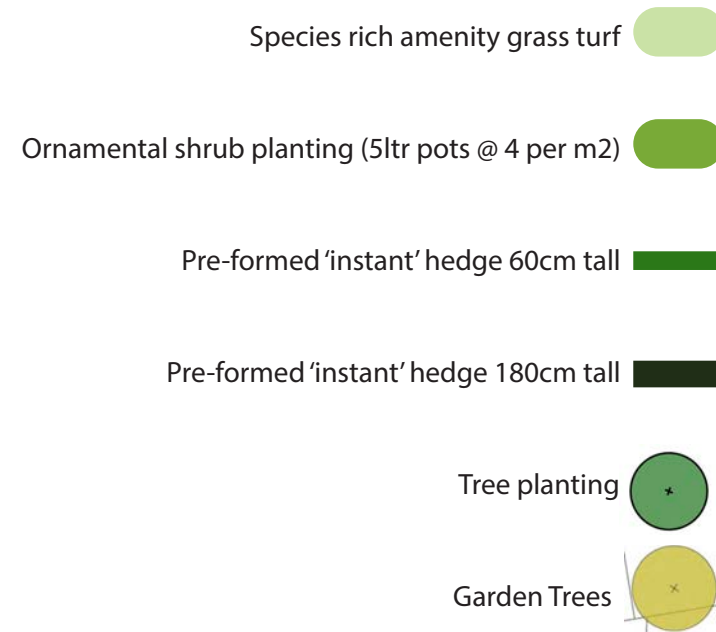
Acer campestre 'Elsrijk'

Typical plot planting layout

Block and plot layouts vary and so the planting design for each plot requires a unique approach. Plots with wider front gardens may include amenity grass lawns.

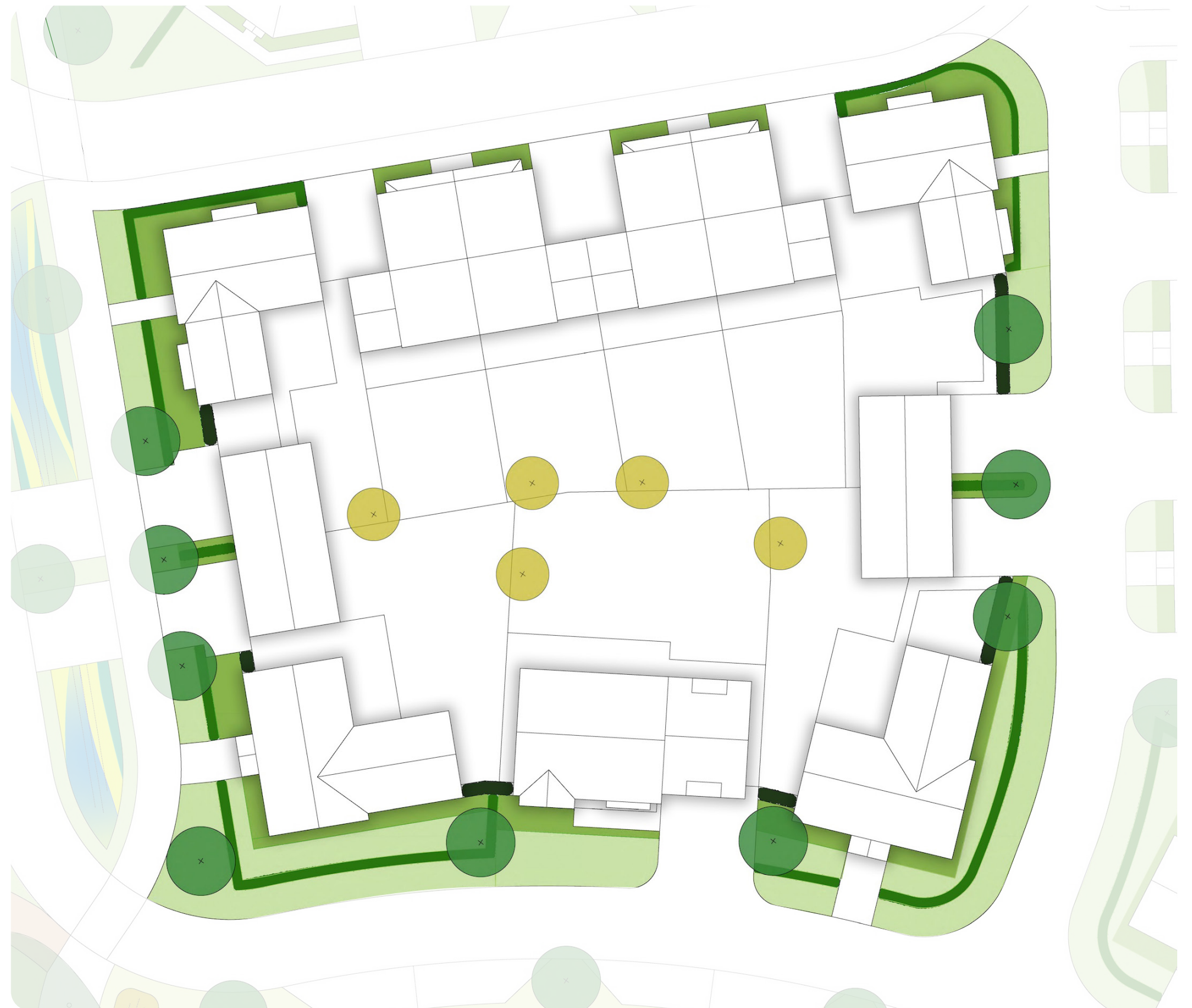
Where possible, hedge boundaries are placed at block corners where they help to define streetscape junctions. Tree planting is generally located to the side of buildings rather than to their fronts.

Ornamental planting comprises a mix of shrubs and herbaceous perennials, with typical palettes indicated overleaf.



General planting specifications

- Tree planting with double timber stakes, irrigation tubes and 5cm depth bark mulch
- Native woodland / native scrub planting matrix with biodegradable guards, timber stake and 5cm depth bark mulch
- Shrub planting with 5cm depth bark mulch



Typical ornamental shrub planting



Heavenly Bamboo



Lavender and Stipa



Hebe 'Rakaiensis'



Choisya



Catmint '6 Hills Giant'



Tawhiwhi 'Irene Paterson'



Culver's Root 'Cupid'



Daphne



Spindle 'Emerald Gaeity'



Japanese Sedge



Mahonia ganpinensis



Dogwood 'Midwinter fire'



Heuchera 'Lime Marmalade'



Skimmia 'Kew Green'



Lillyturf



American Sword Fern



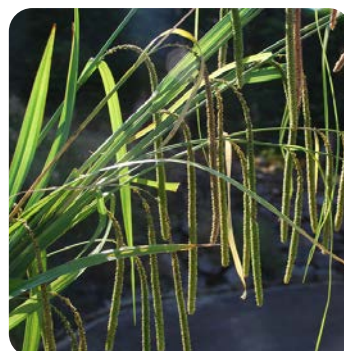
Lenten Rose



Japanese Forest Grass



Judds Viburnum



Pendulous Sedge



Elephant's Ears 'Silberlicht'



A variety of shrub and herbaceous planting mixes will be specified for the front gardens of plots in 5ltr pots at 4 per m2. Similarly, ornamental mixes are also present in open space areas such as the NEAP.

The emphasis for plant selection is on creating a simple, contemporary feel, with seasonal interest.

Planting mixes are tailored to the planting aspect.

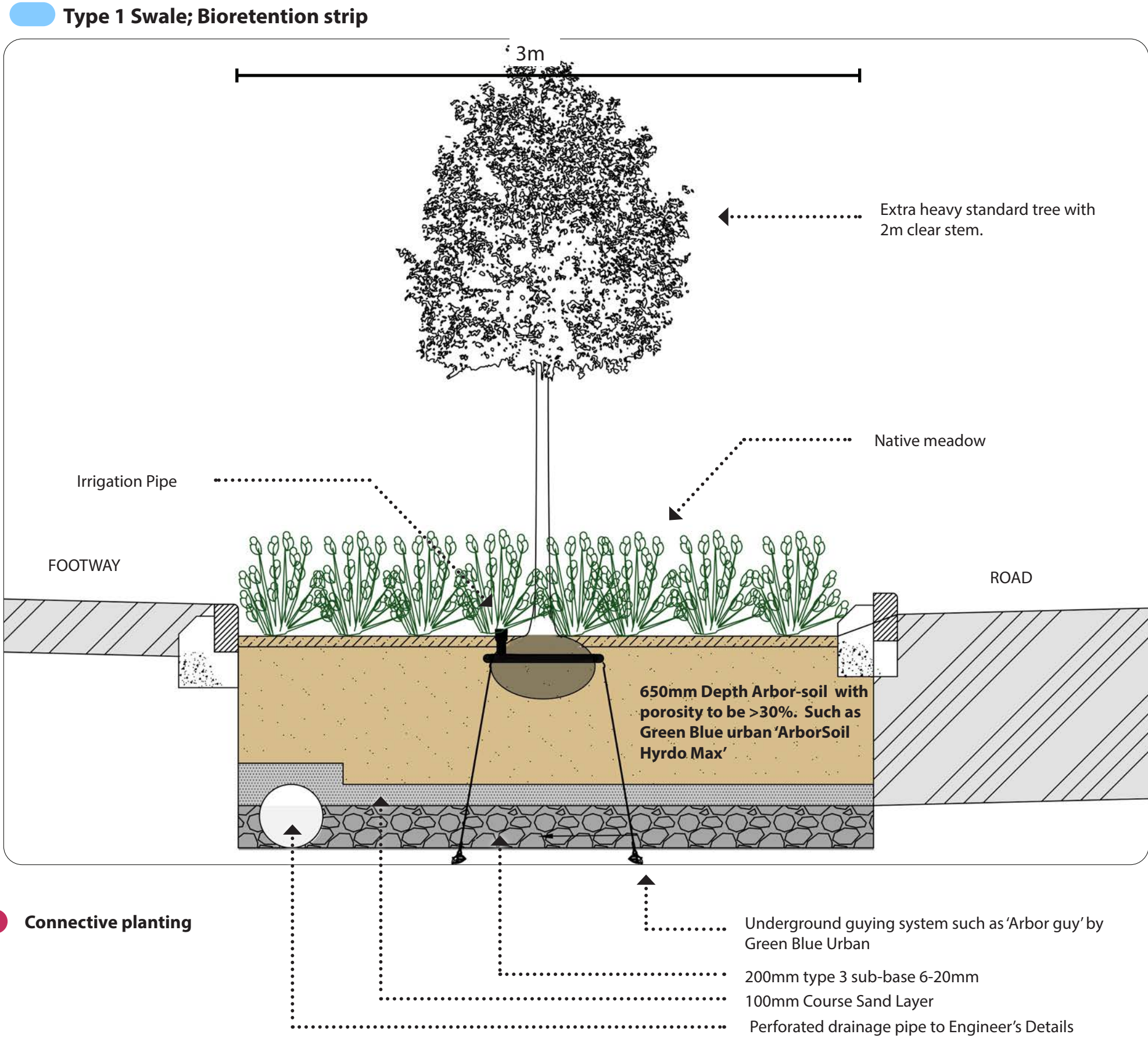
The plants specified will include a mix of hardy shrubs, herbaceous perennials and ornamental grasses, many of which are of known ecological value, for example, to pollinators.



Swales & attenuation areas

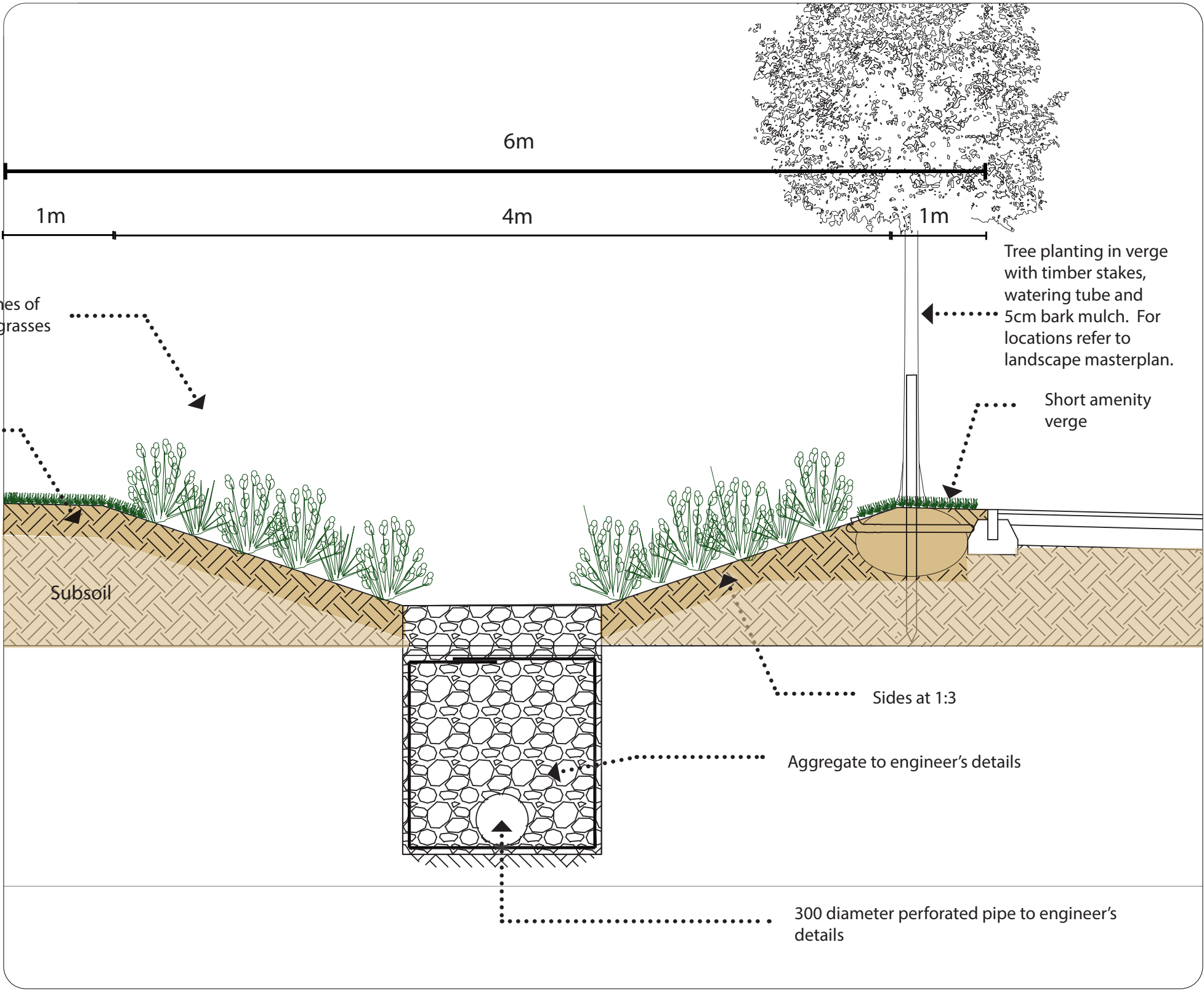
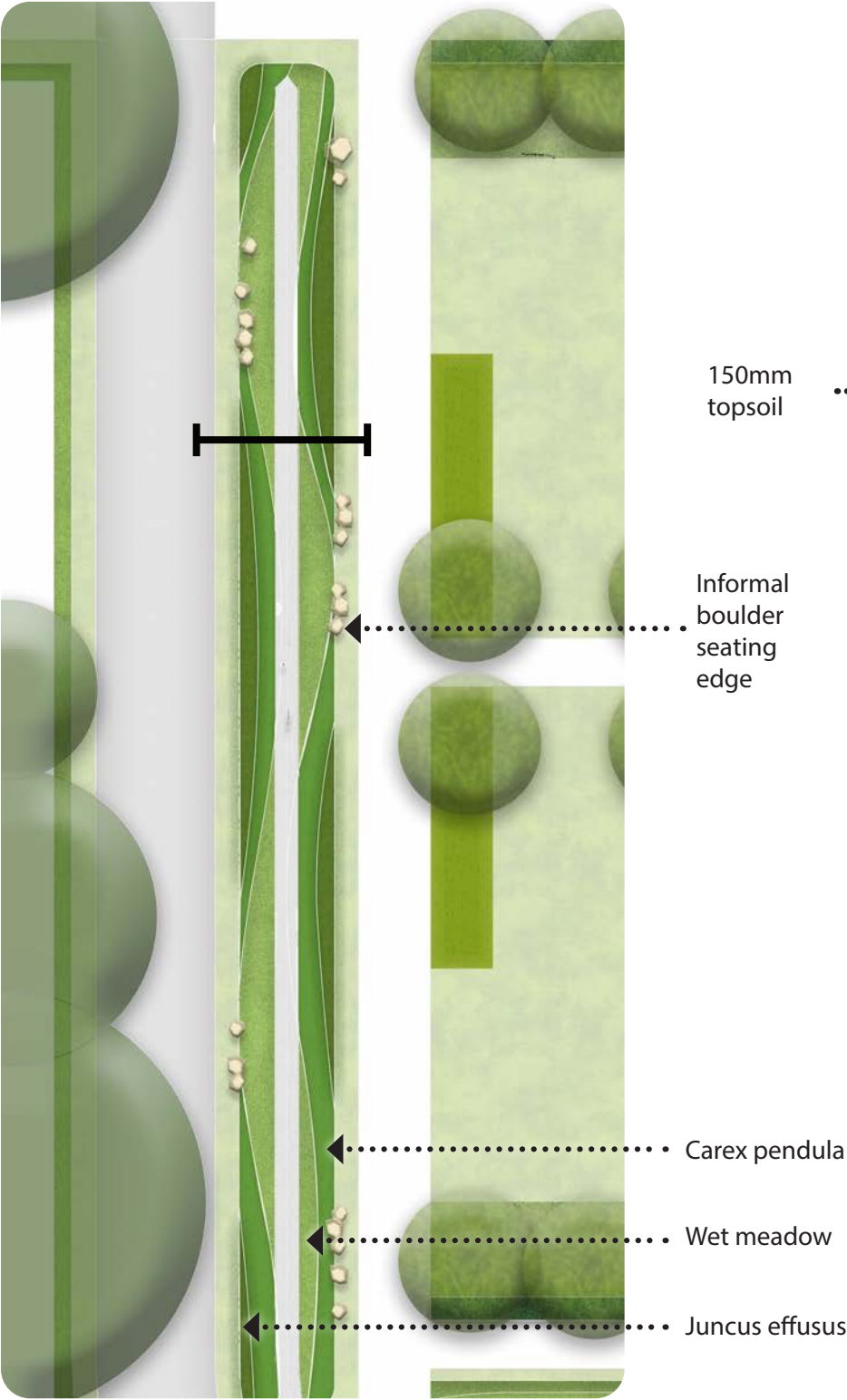


- Swale type 1 (Bioretention Strip) 3m wide**
Type 1 swale runs west - east along streets and includes tree planting
- Swale type 2 ('Riverine Swale') 6m wide;**
5m width swale @ 1:3 with 0.5m amenity grass margins
Type 2 swale runs along the main north - south street and includes meadow grassland and swathes of grasses.
- Attenuation basins**
The attenuation basins will have sloping banks at 1:5 with wet meadow grassland.
- Shallow Scrapes** in the meadow (up to 40cm deep for wading birds to ecologist's recommendations).



Swales & attenuation areas

Type 2 Swale; With Riverine Grasses



Riverine Swales are 6m wide and will be planted with swathes of native grasses and native wet meadow to create a visual feature along the main north-south connection through the development connecting with Muddler's Lane. Trees will be planted along its edge (where houses abut the street). The swale edge will also include boulders as informal seating elements.

Wildflower Turf 'SuDS Turf' or potentially turf to be cultivated from seed collected from the existing riverside grasslands.

Planting swathes (5ltr pots @ 4 per m2); Pendulous Sedge (*Carex pendula*), Soft Rush (*Juncus effusus*), Yellow flag iris (*Iris pseudacorus*).

Swales & attenuation areas

Attenuation Basin

The attenuation basin is designed as an integrated landscape feature. It has shallow 1:4 banks that negate the need for fencing or railings.

Mown paths provide circular routes around it with informal boulder seating set at its edge. Scrub is planted in pockets around its banks and around headwall inlets to soften their appearance..

The basins will be turfed or seeded with native wet meadow (with the potential to use seed harvested from species rich wet grassland in the local area). Areas designed to hold water permanently will include native aquatic planting and native marginal planing at their edges.

Native Marginal Plants;

2Ltr pots @ 4 per m2. Yellow Flag Iris, Marsh Marigold, Pendulous Sedge, Sharp Flowered Rush.

Native Aquatic Plants;

Native Water Lilly, Native Water Hornwort, Native Water Mint, Native Bog Bean.

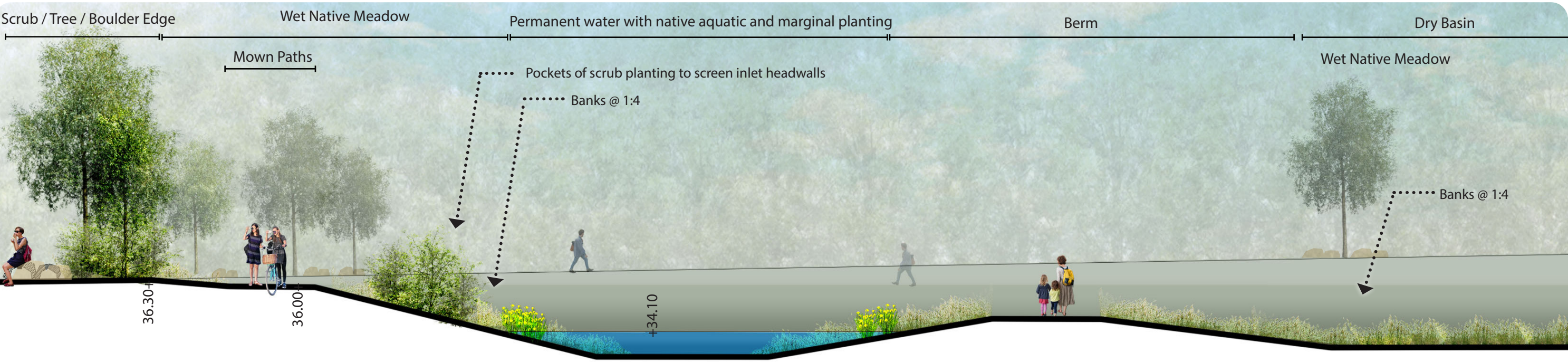
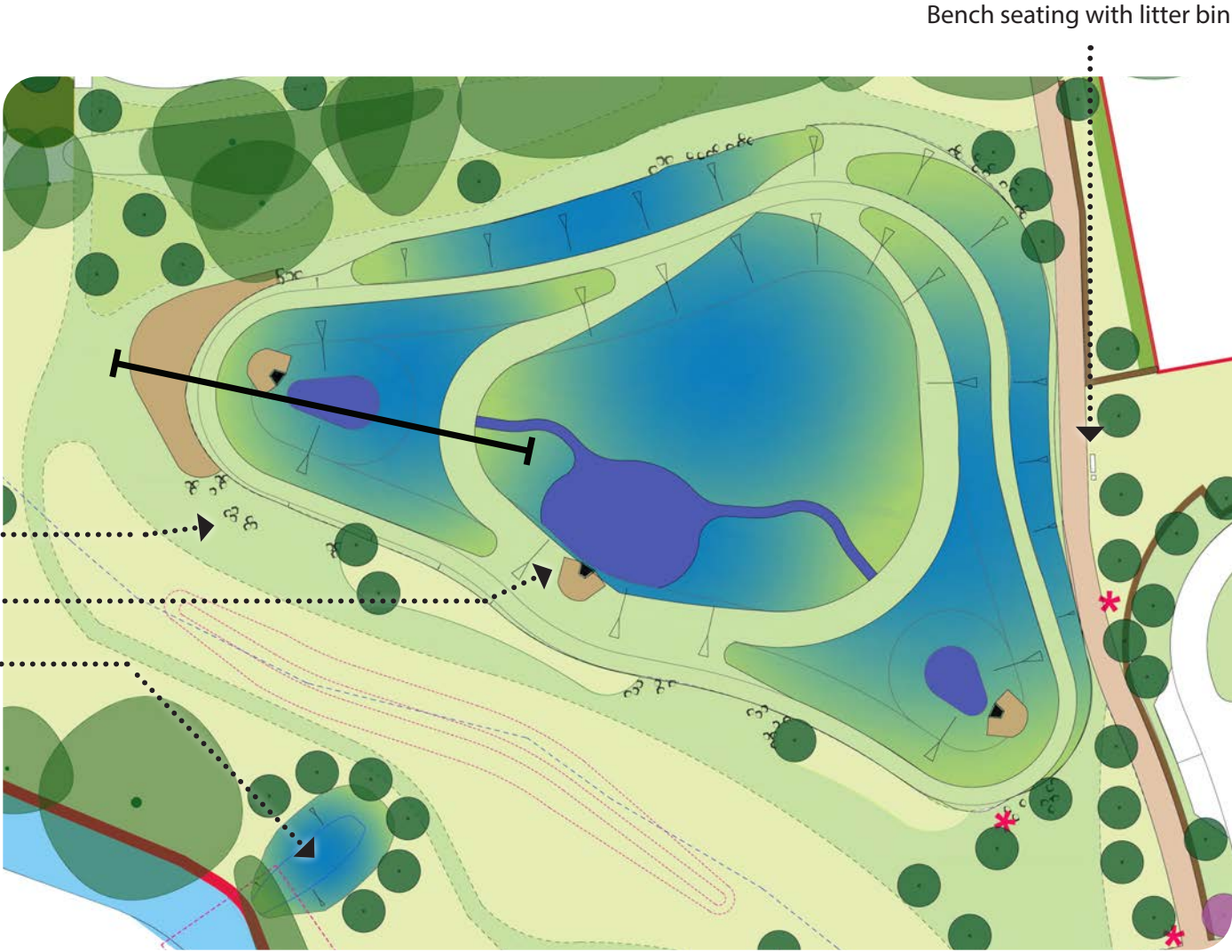
- Native meadow
- Native scrub planting
- Native tree planting
- Species rich amenity grass
- Native wet meadow on banks
- Permanent water with native aquatic / marginal planting

Boulder seating

Headwall inlet

Outfall to river

* Potential informal play elements / creative interpretation and wayfinding signage to be explored through planning conditions



Illustrative cross section of attenuation basin

Connective planting and ecological scrapes

Connective Planting

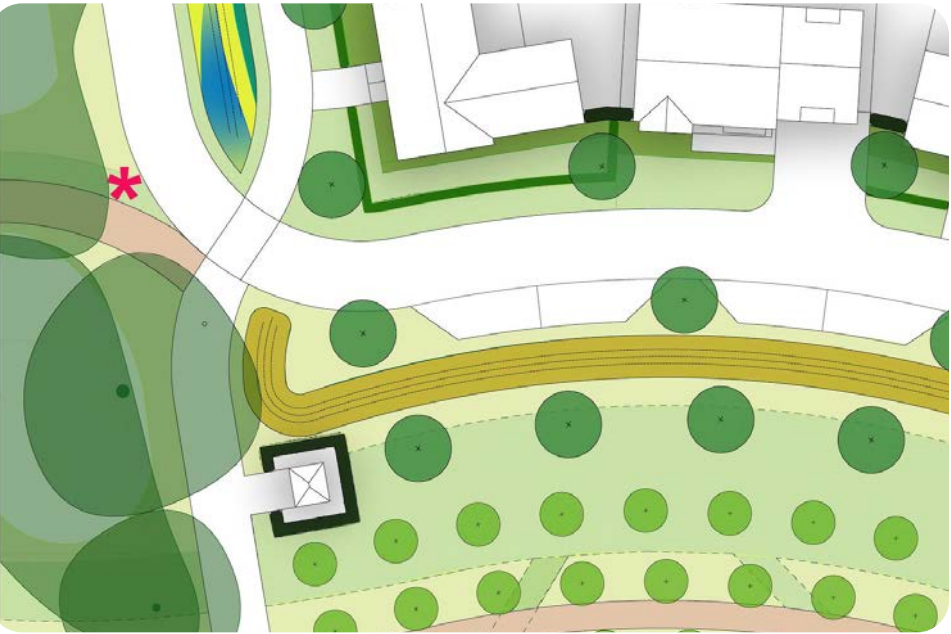
The master plan identifies two areas of ‘connective planting’.

Connective planting is in shallow linear depressions that are not part of the engineered drainage. The depressions are 30cm deep and with sides no steeper than 1:3. The shallow depressions will have relatively damp soil conditions and will be planted with suitable mix of native and ornamental plants including;

- Pendulous Sedge (*Carex pendula*)
- North American Wild Hydrangea (*Hydrangea arborescens*)
- Chinese astilbe (*Astilbe chinensis*)
- Lady fern (*Matteuccia struthiopteris*)
- Common rush (*Juncus effusus*)

in 5ltr pots @ 4 per m2.

Connective planting is intended to create a visual link between the swales within the development area and the water meadows.



Connective planting

Shallow scrapes for Wading Birds

Several narrow, shallow scrapes will be made in the water meadow grasslands within the flood area. These become temporarily inundated during flood and provide valuable habitat for wading birds. They will be seeded with native wet meadow.

Further details can be found in the ecologist’s reports.



Ecological scrapes



A lapwing wading in a shallow scrape

- Native meadow
- Native scrub planting
- Native Tree Planting
- Species rich amenity grass
- Native wet meadow in basin
- Native marginal & aquatic planting

Tree Canopy Cover

Twyford Neighbourhood Plan Tree Canopy Cover Policy

Policy TW8 of the Twyford Neighbourhood Plan states ‘Development proposals on sites of 0.5 ha or more outside the Village Centre as defined in Policy TW4 and on the Policies Map, should achieve a future canopy cover of 25% of the site area principally through the retention of existing trees and the planting of new trees. Where such an approach would be impracticable for viability, layout or design reasons, the use of other green infrastructure (such as green roofs and walls) should be used where they can offer similar benefits to trees.’

It also states that ‘the policy has been designed to be applied in a flexible way. In specific terms it acknowledges that issues such as commercial viability, site layouts and design may make the expectations of the policy impracticable on a site-by-site basis.’

Areas excluded from the canopy cover policy requirement

The canopy cover calculation methodology allows for the exclusion of ‘retained protected habitat’ and ‘other areas’. At the site, the areas excluded are;

- The Water Meadows where the emphasis is on conservation and enhancement of the existing grassland habitat and where a 25% tree canopy cover would be detrimental to its quality.
- The easement around the existing drainage route that runs through the Water Meadows and Orchard in which tree planting is prohibited.
- The main access to site including the remodelled Bath Road and the new roundabout at the site gateway. This is the subject of a separate application.

The project ecologist (Nicholsons) stated;

‘The new water meadow to be created should be excluded from the canopy cover requirement. This is to ensure that this habitat can be



Landscape Masterplan illustrating tree canopy cover at 25 years (according to Tree and Design Action Trust guidance), and the areas excluded from the calculations

established and maintained to meet its character as a grassland meadow and achieve Moderate condition, as per the BNGA. Increase of tree coverage in this habitat could result in failure of seed germination required to meet the habitat character, or encourage growth of undesired grassland/tree species mix impacting the habitat condition. The proximity to the River Loddon makes this area highly suitable for new wetland meadow creation and this should be prioritised over increase in canopy coverage in this particular area.’

Proposed tree planting and resulting canopy cover proposals

The landscape design retains the vast majority of the site’s existing trees and every effort has been made to create space to include a diverse range of new tree planting distributed throughout the development including along its streets and in green spaces. The tree planting is an integral part of the green and blue infrastructure that runs through the site.

The proposals retain nearly 8,000m2 of existing tree canopy and according to the prescribed methodology will add over 14,000m3 through new tree planting.

According to the methodology, this will result in a canopy cover of 25%.

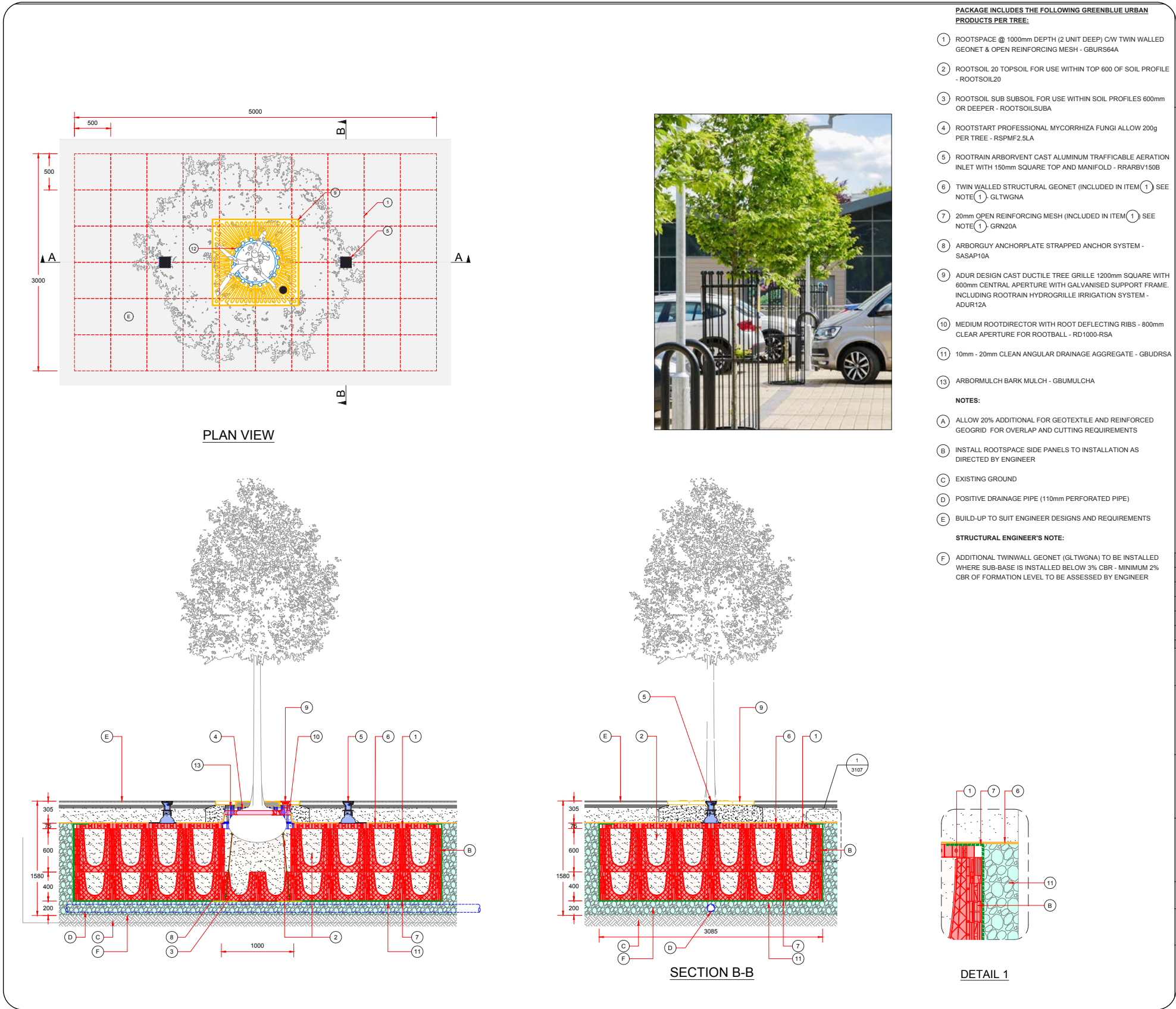
 Areas excluded from the calculations

Trees in areas with constrained ground conditions

The vast majority of trees are positioned in generous areas of soft landscape that provide an adequate volume of growing media for root growth.

Positioning trees in constrained areas with limited growing media is avoided.

Where necessary, root cells will be placed below hard landscape to provide the adequate amount of growing media, as illustrated in the plan opposite, by Green-Blue urban ltd.



Section 106 Open Space Provision

The Section 106 agreement requires the development to deliver a number of open space types of fixed amounts. These are;

-  Amenity Green Space 0.90 Ha
-  Natural and Semi-Natural Open Space 3.24 Ha
-  Parks and Gardens (incorporating 700m2 landscaped Civic Space) 1.02 Ha
-  Children's Play (including NEAP and MUGA) 0.13 Ha

Total Open Space 5.29 Ha

Whilst the amount of open space types to be delivered is fixed, the locations shown at outline stage are nominal.

The plan opposite shows that the locations of open space have been adjusted to fit the design progression expected at the Reserved Matters stage.

The types and quantity of open space shown for reserved matters is equal to that appended to the S106 agreement.

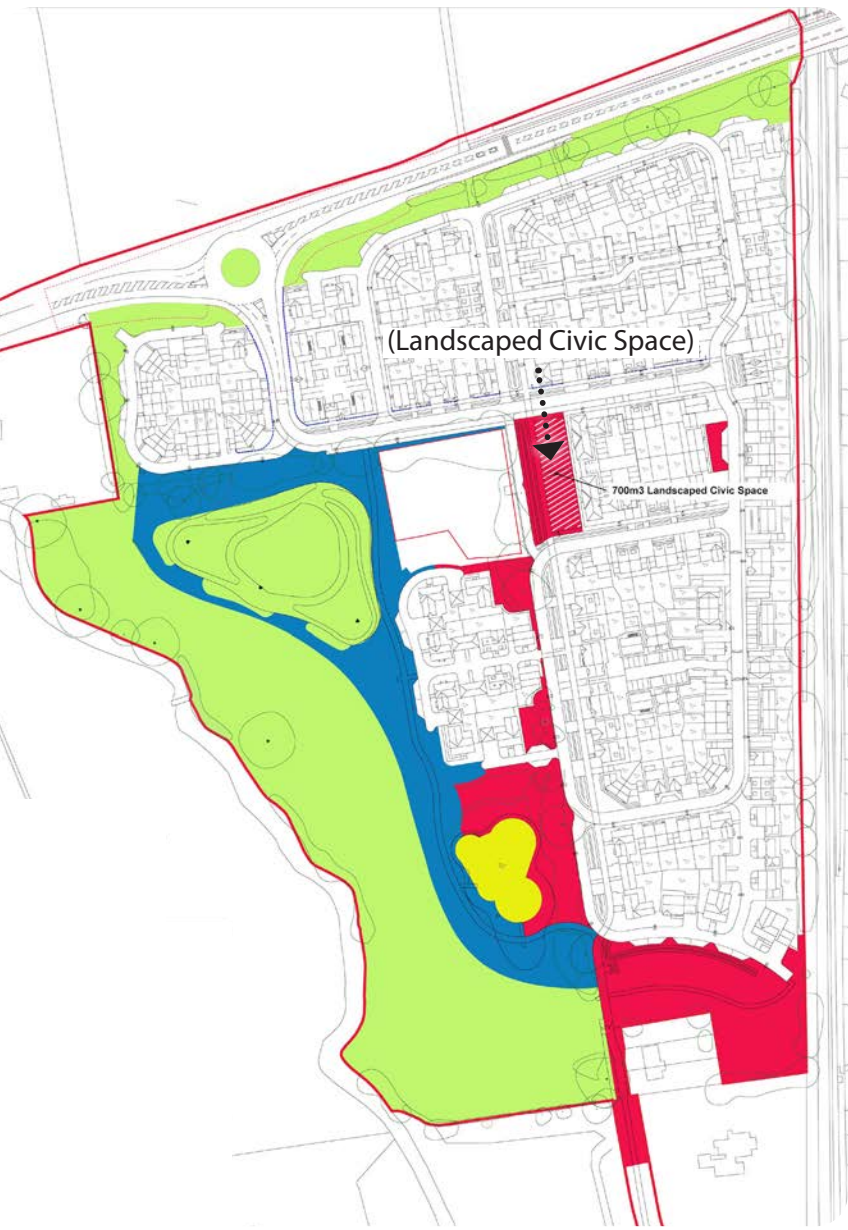
The following pages summarise the guidance for provision of the above open space types according to Wokingham's Open Space, Sports and Recreation Strategy and a subsequent clarification of expectations received from Wokingham. They demonstrate how the design complies.

Outline / S106



Extract from outline 'Open Space Typology Plan' (Paul Brown Architect), appended to the S106 agreement

Reserved Matters



Open Space Typology Plan adapted to the Reserved Matters Layout

S106 Open Space Provision

S106 Amenity Green Space

According to the guidance and clarification;
‘Should be easily accessible to the surrounding community, with well-connected footpaths and cycleways.’
A 3m wide path runs from north to south along the edge of the amenity space, providing an accessible connective route linking with the broader open space network and housing areas.

‘Must accommodate a range of informal recreational activities, including dog walking, relaxation, and social gatherings.’
The main body of the amenity space comprises a large swathe of short amenity grassland suitable for riverside relaxation and a range of recreational activities including informal ball games and gatherings. The short grassland connects with mown paths that run through the broader water meadows area providing a circular route suitable for exercise and dog walking.

‘Should integrate native planting, trees, and wildflower areas while ensuring a safe and welcoming environment.’
The majority of trees in the amenity space are native species set in short amenity grassland, or long native meadow grassland verges. Trees are clear stem ensuring sight-lines beneath their canopies. Most of the amenity space is overlooked by proposed housing.

‘Seating, shade, and opportunities for informal play should be strategically placed to cater to different age groups.’
The space includes bench seating as well as informal boulder seating around the attenuation basin. The landscape master plan indicates locations for potential informal play elements that could take the form of earth mounds / boulder clusters or sculptural elements to be explored through planning conditions.



S106 Amenity Green Space Area

S106 Natural and Semi-Natural Open Space

According to the guidance and clarification;

‘These spaces should prioritise native habitats, including woodlands, meadows, wetlands, and hedgerows, to enhance biodiversity and support local wildlife.’

- The majority of the natural and semi-natural open space comprises existing grasslands in the flood-plain that will be conserved and enhanced for biodiversity.
- The attenuation basin provides wetland habitat including marginal grasslands that are temporarily inundated as well as pools of permanent water with native aquatic planting. Shallow scrapes will be formed in long grassland for wading birds.
- The space includes areas of native scrub suited to the damp riverside conditions. Similarly the tree species proposed are native and riverine including Willows, Alder, Downy Birch and Black Poplar.

‘Maintain a naturalistic character with minimal formal infrastructure; paths should be permeable and constructed from natural materials where possible.’

The design will maintain a naturalistic character. Paths through the water meadow are mown grassland.

‘Ensure clear but subtle wayfinding, using sensitive signage that does not detract from the natural setting. Include interpretation boards, nature trails, and opportunities for community engagement (e.g., the bng project).’

The path through the meadows forms a nature trail that can be brought to life through potential creative interpretation and wayfinding signage / sculptural elements that provide directions and/ or narrate the biodiversity and climate change mitigation story of the riverside. These elements are to be explored through planning conditions.



S106 Children's Play; NEAP (Neighbourhood Equipped Area for Play) and MUGA (Multi Use Games Area)

‘Design must adhere to the Wokingham Play Space Design Guide to ensure high quality play provision.’

The design proposals for the Play area are set out on Pages 10 and 11 of this document and are to be developed in detail through conditions.



The existing grasslands will be conserved and enhanced for biodiversity. Mown paths will provide access to nature.

- Native meadow grasslands conserved and enhanced for biodiversity
- Native scrub planting
- Native Tree Planting
- Species rich amenity grass / mown paths
- Native wet meadow in swale / attenuation basin
- Potential creative interpretation and wayfinding signage / sculptural elements
- Ecological scrapes for wading birds

S106 Open Space Provision

S106 Parks and Gardens (incorporating 700m2 landscaped Civic Space)

According to the guidance and clarification;

‘These spaces should cater to diverse users, including areas for active recreation, quiet relaxation, community events and activities.’

Loddon Green provides a formal lawned space suitable for a range of community events and activities, whereas The Orchard provides an opportunity for the community to engage in growing. Parks and Gardens connect with the north-south Muddlers Lane and broader recreational routes through the water meadows.

‘Incorporate a mix of formal planting, lawns, and structured elements (e.g., sculptures) to create an attractive and engaging environment. Provide step-free access, clear sight-lines, varied seating options, and spaces designed for all age groups and abilities.’

Loddon Green includes formal ornamental shrub planting and lawns. The masterplan indicates locations for creative interpretation and wayfinding signage / sculptural elements to be explored through conditions. Access will be step free with paths no steeper than 1:21. The Orchard and Loddon Green provide bench seating. The Riverine Swale that passes along the western edge of Loddon Green includes informal boulder seating at its edge.

‘Ensure natural surveillance through well-planned sight-lines, appropriate lighting, and placement near active frontages. Including drought-resistant planting, SuDS, and tree canopy cover for shade.’

The tree planting proposals in Parks and Gardens are generous and will provide shade. Trees are specified as clear stem (except for orchard trees) allowing sight-lines beneath their canopies. Parks and Gardens are well overlooked by proposed housing. The Riverine swale provides an attractive SuDS element.



S106 Parks & Gardens Area

‘Loddon Green’ with formal lawns and ornamental planting



Orchard Trees

New woodland planting to enhance existing north-south tree corridor along Muddlers Lane in line with ecologist’s recommendations

-  Native meadow grasslands conserved and enhanced for biodiversity
-  Native Tree Planting
-  Orchard Tree Planting
-  Species rich amenity grass
-  Native woodland planting
-  Low native woodland shrub planting

 Potential creative interpretation and wayfinding signage / sculptural elements

Community Orchard

Biodiversity Net Gain and Landscape and Ecological Management

Nicholsons Ecology have produced

- Biodiversity Net Gain Assessment
- Biodiversity Enhancement Plans
- Landscape and Ecological Management Plan
- Ecological Permeability Report

The biodiversity net gain assessment found that the proposed development will result in **a net gain in habitat biodiversity of +19.14% (+6.53 habitat units), a net gain in hedgerow biodiversity of +151.92% (+6.52 hedgerow units), and a net gain in watercourse biodiversity of +15.60% (+1.07 watercourse units).**

The BNG report sets out requirements for habitat enhancement. Of particular note is the existing woodland strip (w1g) that runs down the centre of the site along the north-south 'Muddler's Lane'. Enhancement of this woodland strip will be achieved by removing any invasive or undesirable species to encourage the growth of a shrub layer, and the retention of deadwood features where safe to do so. Wood arising from tree removal (as detailed in the Arboricultural Impact Assessment) will be lain on the ground below the tree canopies.

Biodiversity enhancements include a range of bird, bat and insect boxes as well as 'hedgehog highways'. The native meadow in open space areas provides ample habitat for hedgehogs to form commuting routes. Hedgehog fencing will be specified in the development areas; i.e. with 130x130mm gaps to allow access to, from and between gardens.

Full details of habitat retention, enhancement and creation can be found in Nicholsons Ecology Reports and Plans listed above.



BNG Post Intervention Plan by Nicholsons Ecology.