PLOT 5000, HATFIELD BUSINESS PARK
LANDSCAPE DESIGN AND ACCESS STATEMENT

Rev. A JULY 2017

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1.1 LANDSCAPE SUMMARY

Plot 5000 site has been scheduled for development under the Masterplan for the Hatfield Business Park since 1999. There are no special protections or designations within the site in the Local Planning Framework. Proposals involve development of the south west half of the Plot 5000 site for a warehouse with associated service yard, car park and landscape.

1.2 SITE CONTEXT

Plot 5000 site lies at the junction between two development models - warehouses / distribution centres and residential development, which both have different characters but share a common landscape framework which has been implemented as part of the Masterplan. The development of the site as a distribution facility is therefore in character with the local surroundings.

1.3 LOCATION

Plot 5000 site lies in a central position in Hatfield Business Park, contained within distribution centres to the north, Mosquito Way and office developments to the south and Howe Dell Primary School to the west. Surrounded by infrastructure roads and development, Plot 5000 is an isolated remnant of undeveloped open land.

1.4 HISTORY

The Hatfield Business Park site, originally farmland, was incorporated into the aerodrome after its development from 1930 onwards. Following the closure of the aircraft factory, the land was unused, surrounded by the new infrastructure roads and planting of the Business Park, which was implemented about 15 years ago.

1.5 LANDSCAPE DESIGN PRINCIPLES

The landscape proposals for the site have three objectives:

- To assimilate the development into its surroundings and to screen more sensitive areas e.g. delivery service yard through the use of planting
- To create a landscape that continues the style and quality of finish and maintenance that characterises the rest of Hatfield Business Park
- To increase the biodiversity of the Site through the provision of areas of planting using native and wildlife friendly species

INTRODUCTION

2SITE CONTEXT

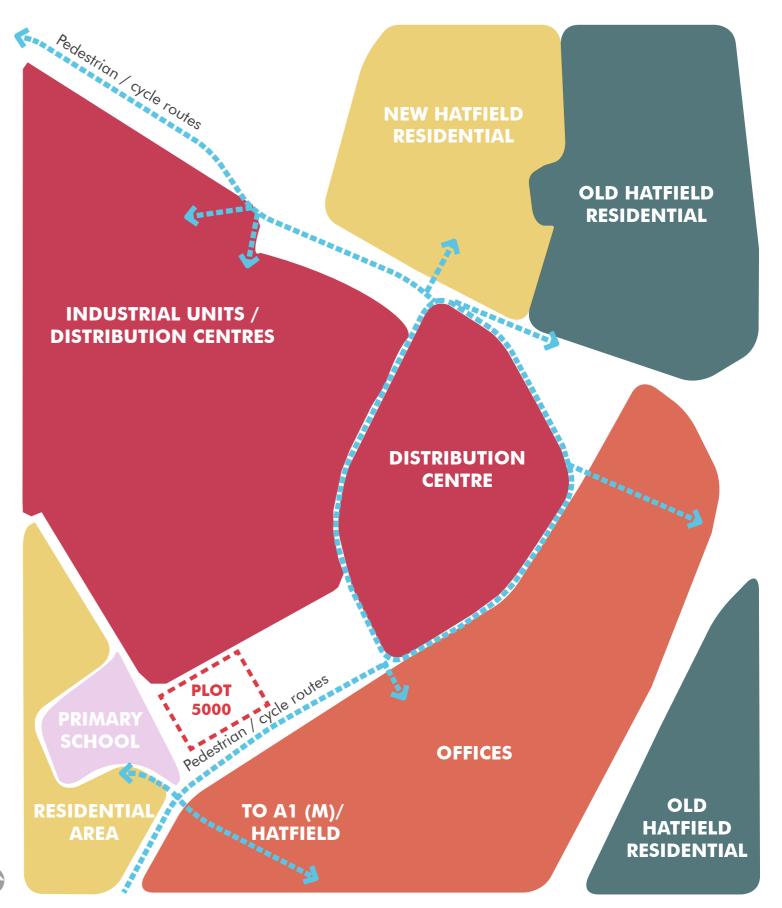
2.1 SITE LOCATION





2.2 URBAN DEVELOPMENT CONTEXT

- 2.2.1 Plot 5000 is surrounded almost completely by new infrastructure roads, landscape and development, leaving it as an isolated remnant of undeveloped open space together with neighbouring Plot 4100.
- 2.2.2 The adjacent infrastructure consists of Mosquito Way to the south of the plot, and nearby traffic roundabouts connecting with adjacent roads. The road corridors incorporate footpaths and cycle routes which connect to adjacent new residential and employment zones and to the older parts of the town: distribution centres to the northeast and Hatfield town centre across the A1 (M) to the east.
- 2.2.3 The planting around Hatfield Business Park has established well and is characterised by a theme of mixed pine and deciduous trees, which have been used throughout the Park. The Park's signature landscape has been developed in keeping with the Goodman Business Park 'brand', which includes over 27 UK locations, and has been characterised by a commitment to high quality landscape environmental implementation and long-term management. The scale and quality of adjacent landscape schemes, typified by those at T-Mobile and Computacenter, is indicative of their approach, and of what can be achieved within a decade.
- 2.2.4 The remainder of Plot 5000 is currently un-developed. It will form a significant green buffer following completion of the works.

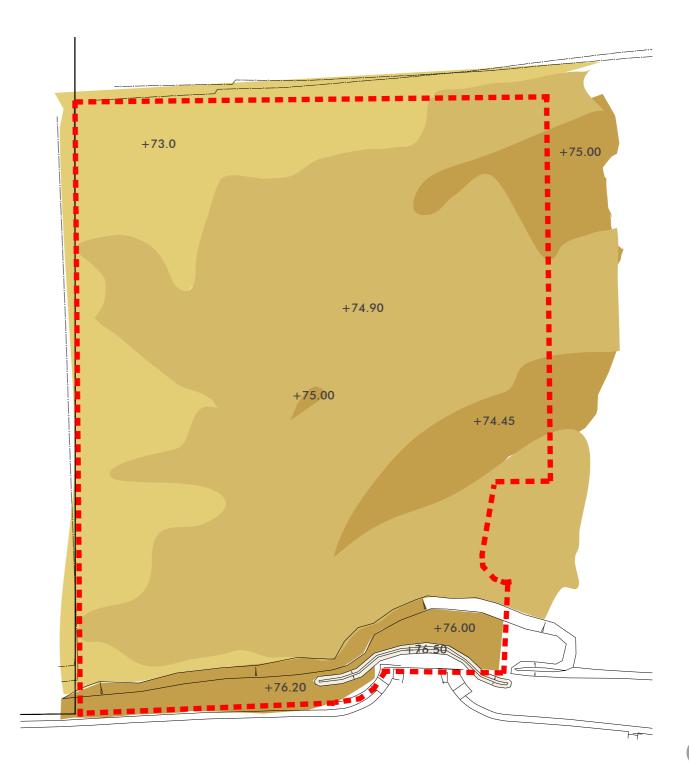




2site context

2.3 TOPOGRAPHY

- 2.3.1 The majority of the Plot 5000 site is virtually flat at a surveyed level of between c. 75.00m and 76.00m AOD. The main site area is generally lower than the adjacent embanked Mosquito Way by 1000mm.
- 2.3.2 Surrounding land use areas are similarly level so that there are no areas of overlooking terrain, with the result that views of the site are localised to users of and property along Mosquito Way.

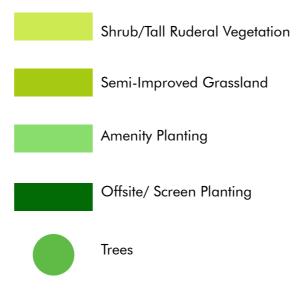


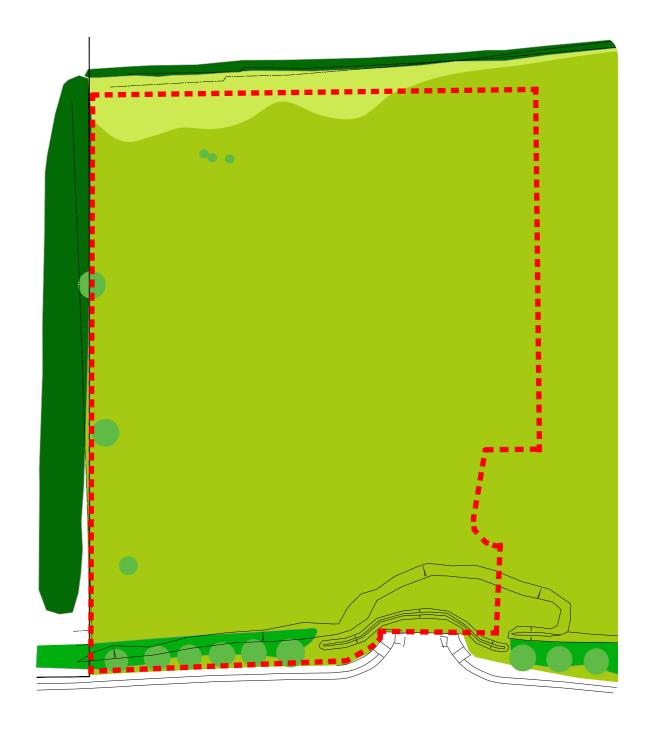




2.4 EXISTING VEGETATION AND LANDCOVER

- 2.4.1 Plot 5000 is characterised by predominantly semi-improved grassland, with some areas of scrub and tall vegetation to the Northern boundary and parkland, trees and amenity planting to the south.
- 2.4.2 There are eleven existing trees within the application site, six of which are located close to the southern boundary bordering Mosquito Way. These trees, together with the ornamental shrubs and lawn in the area, form part of the wider parkland landscape which borders Mosquito Way, and the trees will be retained and incorporated in to the proposed landscape scheme for the development. The shrubs in this area of parkland landscape include swathes of Cornus (dogwood), Cytisus (Broom) and Prunus (laurel) which are becoming over-mature.
 - Five trees on the application site are proposed for removal. These are all self-seeded, young or semi -mature trees which have grown in close proximity to existing HV cables, and as a result, these trees are proposed for removal
- 2.4.3 There is a band of overgrown ornamental shrub planting, including species such as *Cornus sanguinea*, *Cytisus scoparius* and *Prunus laurocerasus*, along the edge of the site adjacent to Mosquito Way. This group of shrubs are approximately between 600mm 2000mm height and obscure most views into the site from the road.
- 2.4.4 The site is immediately delineated at the southern edge by a cycleway/footpath with a mown grass verge between the path and the vehicular roadway.







2 SITE CONTEXT

2.5 EXISTING LANDSCAPE CHARACTER

Since the closure of the BAE plant in 1993, re-development of Hatfield Business Park and its adjacent land has taken place under the auspices of the Masterplan, approved as SPG in 1999. In terms of landscape, this has resulted in the development of a business park designed to the Goodman standard approach with tree-lined avenues, buildings set within a strongly planted framework, and high standards of maintenance.

Plant species have been drawn from a wide range, but the species mix has a relatively high proportion of evergreen species including pines. The successful establishment regime combined with the use of large planted stock has resulted in a maturity of effect that is significant given the relatively young age of the Park.



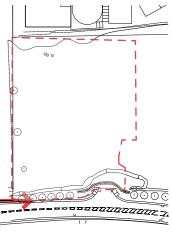


2.6 EXISTING LANDSCAPE CHARACTER

2.6.1 EXISTING BOUNDARY CONDITIONS

Semi-mature trees/forming part of attractive, high quality character to the business park road.



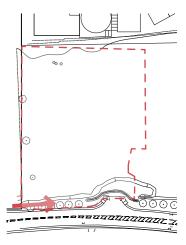


2SITE CONTEXT

2.6.2 EXISTING BOUNDARY CONDITIONS

Southern site boundary: Row of six trees forming the wider road landscape character of Mosquito Avenue.



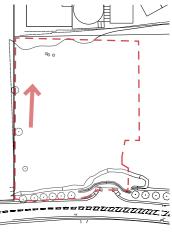




2.6.3 EXISTING BOUNDARY CONDITIONS

West site boundary: Semi-improved grassland along the fence bordering the western part of the site.



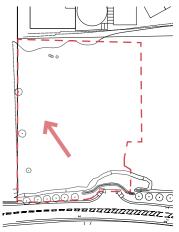




2.6.4 EXISTING BOUNDARY CONDITIONS

North-west boundary: View towards north-west of the semi-improved grassland to the west, and scrub/tall vegetation to the north, screening the fence that delineates the north and west side of the plot.



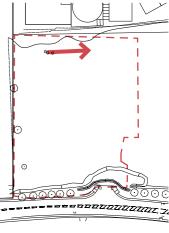




2.6.5 EXISTING BOUNDARY CONDITIONS

North boundary: View onwards north showing the scrub/tall ruderal vegetation to the edge of the site and the distribution centres behind



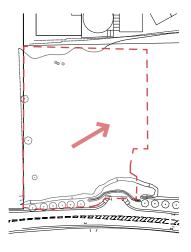


2SITE CONTEXT

2.6.6 EXISTING BOUNDARY CONDITIONS

Eastern site boundary: View towards centre east of the plot, showing mostly semi-improved grassland and tall vegetation screening the edge of the site on the north boundary.





3.1 LANDSCAPE STRATEGY AIMS

The traditional Goodman approach to the landscape planning of business parks involves a balance of screening and setting, with open views allowing glimpses to building facades where desirable, and screening and green enclosure where required, for example to car park and delivery areas. The development of Plot 5000 will be designed on similar lines.

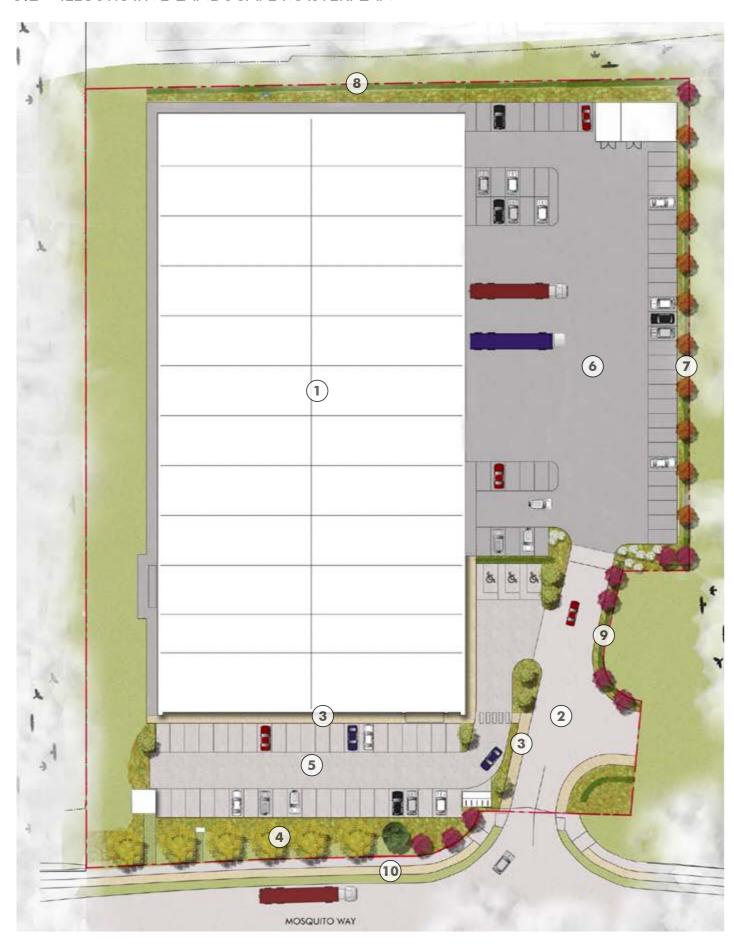
The development will consist of a simple warehouse building with offices at first and second floor level in the west part of the site, and open car parking in the south and service yard in the northeast part of the site. The only site entrance will be on the southern boundary of the site.

The landscape objective for the boundaries is to reduce the scale of the building and views into the parking and service yard areas with extensive tree and shrub planting. This relates in particular to the southern boundary on Mosquito Way, where the landscape character will build upon the character already existing of the wider roadscape, using similar species to those found in the surrounding areas, with views between tree canopies to the development. For example, as with the distribution centres located to the north, dense planting will be used to soften the northern boundary with native hedgerows and a strip of ornamental shrubs, and to screen the vehicle and distribution parts of the development. A more ornamental character will extend into the main site entrance, which is emphasised by groups of multi-stem Birches and flowering Cherries, sitting within swales of ornamental shrubs.

Six existing trees on the south boundary are retained and shrub planting is proposed to tie in with the character of the road and provide a wide landscape frontage to the development. The eastern boundary will have similar treatment, with a border of ornamental shrubs, hedge and tree planting. Due to the services on the western boundary, planting options are restricted, but the back of the building is landscaped with a wildflower meadow, with part of the existing grassland retained over the easement.

LANDSCAPE PROPOSALS

3.2 ILLUSTRATIVE LANDSCAPE MASTERPLAN



KEY

- Proposed building
 Refer to Architect's drawings
- Proposed vehicular access
- 3 Proposed pedestrian access
- Proposed ornamental shrub planting and lawn in association with existing semi-mature trees along Mosquito Way
- 5 Proposed car parking and pedestrian walkway located close to entrance
- 6 Proposed delivery vehicle turning area
- Proposed hedge and tree line of Alders and Cherries, with shrub planting in front to soften the delivery area, forming a soft boundary in the eastern part of the site
- Proposed native hedgerow fronted by shrub planting, providing a softened boundary treatment to the north
- Site entrance marked with evergreen hedge, ornamental Cherries and colourful shrub planting, providing a clear and attractive gateway to the development
- Existing footpath/cycleway and mown lawn verge

3.3 PLANTING PROPOSALS

3.3.1 MOSQUITO WAY - SOUTHERN BOUNDARY

The approximately six metre wide structural landscape zone will be planted with ornamental shrubs to match existing character of the wider road landscape. The existing retained trees and the new shrub planting and lawns allow broken views into the site in between the tree canopies. Shrub species have been selected to blend and tie-in with species found in adjacent parts of the business park. Species include those with flowers and berries attractive to wildlife (Rosa; Hebe), with a high proportion of taller evergreen species to provide year-round cover and a screening and softening effect.

3.3.2 EASTERN BOUNDARY

Hedge and shrub planting borders the site entrance and delivery area entrance. The delivery area is softened along the eastern boundary by a hornbeam hedge and evergreen shrub planting, with a row of clear-stemmed Alders and flowering Cherries.

The site entrance is marked with multi-stem Birches and the entrance to the delivery turning area is marked by Cherries, both signature species in the business park landscape at Hatfield; placed with generous strips of ornamental shrubs like flowering Amelanchier, grasses and blossoming groundcover roses, providing seasonal colour, and an attractive and softening effect to this boundary.

3.3.3 NORTHERN BOUNDARY

Beyond the northern site boundary a swathe of existing small trees is proposed for retention, forming an effective screen to the neighbouring development IO, to the north.

The proposed landscape scheme for the application site includes a native species hedge along the northern boundary, fronted by more colourful, ornamental species which will effectively supplement the existing retained tree planting off-site and form an attractive and softened boundary treatment to the service yard.

The proposed native hedge extends to the rear of the building on this northern boundary, fronted by shade-loving woodland understorey species.

3.3.4 WESTERN BOUNDARY

An area of the existing semi-improved grass is proposed to be sown with a wildflower meadow, a mix to suit soil type and attract and encourage wildlife.

Three trees are lost in this area, as existing HV cables and other proposed utilities conflict with the future growth of these trees. The overall tree planting across the site increased and more than compensates for this loss. Species include native birch, alder and cherry, in semi mature sizes to provide instant maturity to the landscape.

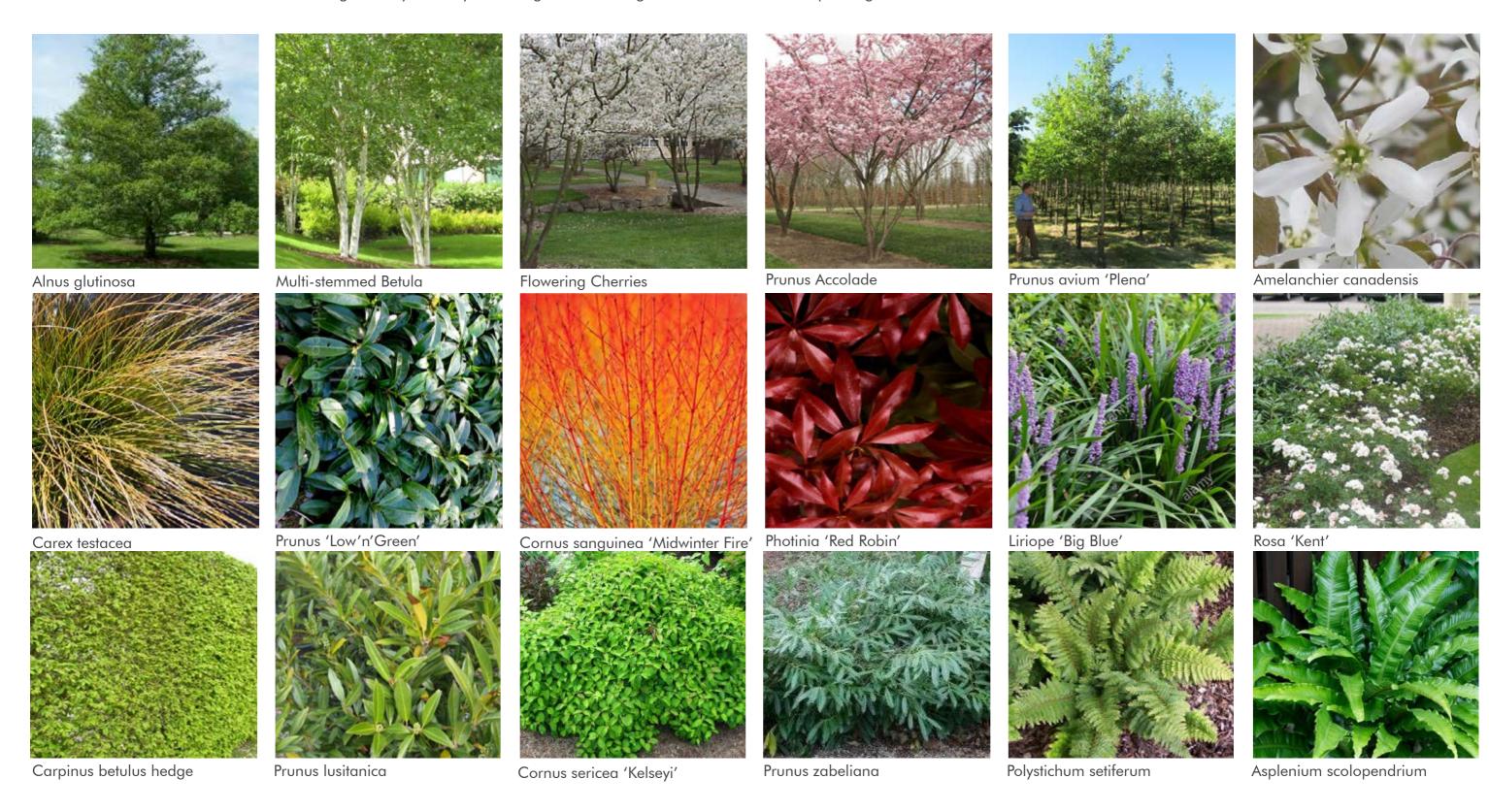
3.3.5 INTERNAL LANDSCAPE TO CAR PARK AREAS

The internal planted beds associated with the car parking and nearby areas are planted with ornamental multi-stemmed trees set within groundcovers, including *Liriope, Crocosmia, Sedum* and *Carex*. Tree species have been selected to provide seasonal colour and interest, and include *Prunus avium 'Plena'* (Cherry) and native birches.



3.3 PLANTING PROPOSALS

- 3.3.6 The planting palette has been developed to:
 - Assimilate the proposals into their surroundings at Hatfield Business Park through the use of complementary species and planting styles
 - Create a landscape that continues the style and quality of finish and maintenance that characterises the rest of Hatfield Business Park
 - Increase the biodiversity of the site through the provision of meaningful areas of planting using native and wildlife friendly species
 - To screen more sensitive areas e.g. delivery service yard through the use of significant semi-mature tree planting.



nigra with proposed footpath with Mosquito Way

road side

multi-stemm *Prunus* grass verge to

accolade behind,

forming a structural landscape of approximately 6m wide

3.4 PROPOSED LANDSCAPE SECTIONS



block paving to

building apron

bays, permeable concrete

block paviours

3.4 EXISTING/PROPOSED SECTIONS



4.1 OUTLINE PLANT SCHEDULES

Plot 5000 Hatfield Business Park Soft Schedules - Trees

Variety	Code	Overall Height/Girth cm	English Description	Clear Stem (C/S) Feathered (F)	Notes
Alnus glutinosa	4x	20-25cm	Semi mature	C/S	Rootballled
Betula pendula	3x	3.0-3.5m height	Multi stemmed	M/S	Containerised
Prunus 'Accolade'	4x	3.0-3.5m height	Multi stemmed	MS	Rootballled
Prunus avium 'Plena'	5x	25-30cm	Semi mature	C/S	Rootballled

LANDSCAPE OUTLINE SPECIFICATION

4.1 OUTLINE PLANT SCHEDULES

Plot 5000 Hatfield Business Park Soft Schedules - Hedges

Ornamental Hedging Species								
Variety	Size	Height/ Spread cm	Habit	Minimum no. of breaks in lower third	Planting density per linear metre	Notes		
Carpinus betulus	10L pot	0.9-1.2m height	Branched	10	5 / linear metre in a double staggered row	Well feathered to base		
Prunus Iusitanica	10L pot	0.9-1.2m height	Branched	10	5 / linear metre in a double staggered row	Well feathered to base		

4.1 OUTLINE PLANT SCHEDULES

Plot 5000 Hatfield Business Park Soft Schedules - Hedges

Native Hedging Species							
Variety	Size	Height/ Spread cm	Habit	Minimum no. of breaks in lower third	Planting density per linear metre	Notes	
Crataegus monogyna	3L pot	45-60cm	Bushy	8	4.5 no. per linear metre		
Cornus stolonifera	3L pot	45-60cm	Bushy	8	4.5 no. per linear metre		
Corylus avellana	3L pot	45-60cm	Bushy	8	4.5 no. per linear metre		
llex aquifolium	3L pot	30-45cm	Bushy	8	4.5 no. per linear metre		
Prunus spinosa	3L pot	45-60cm	Bushy	8	4.5 no. per linear metre		
Rosa canina	3L pot	45-60cm	Bushy	8	4.5 no. per linear metre		
Sambucus nigra	3L pot	45-60cm	Bushy	8	4.5 no. per linear metre		
Viburnum opulus	3L pot	45-60cm	Bushy	8	4.5 no. per linear metre		

LANDSCAPE OUTLINE SPECIFICATION

4.1 OUTLINE PLANT SCHEDULES

Plot 5000 Hatfield Business Park Soft Schedules - Shrubs

Container Grown Shrubs, Grasses and Herbacious Perennials Specification List						
Variety	Pot Size	Height/ Spread	Habit	Min no of breaks in lower third	Planting Density per m ²	Notes
Amelanchier canadensis	25L	1.0-1.2m	Bushy	15	as shown	
Asplenium scolopendrium	2L	-	Bushy	-	8	Full Pot, fully rooted, healthy clump
Carex testacea	3L	30-45cm	Bushy		4	Well rooted clump
Cornus sericea 'Kelseyi'	3L	30-45cm	Bushy		4	
Cornus alba ' Westonbirt'	3L	30-45cm	Bushy		3	
Cornus 'Mid Winter Fire'	5L	45-60cm	Branched	8	3	
Crocosmia ' Carmine Brilliant'	3L				7	
Hebe 'Pluto of Golden Esk'	3L	30/45cm			5	
Liriope 'Big Blue'	3L	15-30cm			6	Well rooted clump
Luzula sylvatica	3L	30-45cm			8	Well rooted clump
Photinia 'Red Robin'	3L	60-90cm	Branched	8	2.5	
Polystichum setiferum	3L	20-30cm			4	
Prunus 'Low 'n' Green'	3L	30-45cm	Branched	8	3	
Prunus Iusitanica	3L	30-45cm	Branched	8	2.5	
Prunus zabeliana	3L	30-45cm	Branched	8	3	
Rosa 'Kent'	3L	45/60cm	Branched	8	3.5	



4.1 OUTLINE PLANT SCHEDULES

Plot 5000 Hatfield Business Park Soft Schedules - Shrubs

Container Grown Shrubs, Grasses and Herbacious Perennials Specification List						
Salvia 'May Night'	3L	20-30cm			6	Well rooted clump
Sesleria autumnalis	3L	20-30cm			5	Well rooted clump

LANDSCAPE OUTLINE SPECIFICATION

4.2 OUTLINE SOFT LANDSCAPE SPECIFICATION

1.0 SITE PREPARATION AND EARTHWORKS

- 1.1 All existing trees / vegetation to be retained shall be protected from damage by a well braced vertical and horizontal framework of scaffolding, supporting weldmesh panels 2.3 metres height, in accordance with BS 5837: 2012 'Trees in Relation to Construction'. Immediately upon commencement of the works on site, this protective fencing shall be erected around the perimeter of all trees and vegetation to be retained, thus creating a Root Protection Area (RPA) within the protective fencing. Protective fencing is to be located one metre beyond the canopy spread of individual trees or tree groups to be retained and the contained area is to remain completely undisturbed for the duration of the contract.
- 1.2 All trees and shrubs shown to be removed shall be removed outside the bird nesting season (ie. outside the period of beginning March to end of August inclusive). All tree stumps of trees to be removed are to be ground out, with the root stock entirely removed, and all arising removed from site.
- 1.3 Generally, all earthworks shall be executed in accordance with BS4428 'General Landscape Operations'. Ground profiles to be left with smoothly flowing contours, free from localised depressions, high spots and abrupt angles.
- 1.4 Testing and analysis of existing site soils shall be undertaken to determine their suitability for reuse within the landscape scheme, and where possible, existing subsoil and topsoil shall be used. Should existing soils not be suitable for re-use, subsoil and/or topsoil shall be imported, and shall comply with physical and chemical parameters set out in a separate, detailed specification.
- 1.5 A minimum depth of 1.0 metre of viable rooting depth is required for trees and ornamental shrubs / grasses within all planting areas.

Within this, the depths of subsoil and topsoil layers should be as follows:

Type of Planting / Lawn	Topsoil Depth	Subsoil Depth	Depth of deep ripping
			of subsoil (if in-situ soil)
Combined Tree and Shrub Plantin	g 600mm	400mm	400mm
Ornamental Shrub Planting Only	450mm	550mm	550mm
Grass Areas	150mm	850mm	850mm

1.6 Cultivate topsoil to produce an even surface free from lumps and clods.

Cultivation shall be to a minimum depth of:

Planted areas: 450mm Grass areas: 150mm

1.7 The need for ameliorants and fertilisers shall be reviewed by appropriate soil testing, prior to soil spreading or import.

2.0 PLANTING

- 2.1 Handling and transportation of all plants shall be carried out in accordance with Horticultural Trade Association's 'Plant Handling' recommendation (1987).
- 2.2 All planting operations shall be carried out in accordance with BS5326:1975; BS4043:1966, and BS4428:1968. Advanced nursery stock to BS5236:1975.
- 2.3 Trees: All trees shall be supplied in accordance with the plant schedules by named nurseries.
- 2.3.1 Tree pits: shall be backfilled as follows:

The lower half of the tree pit (below the rootball) shall be backfilled with:

300mm depth washed, medium /coarse sand RH37, overlying:

300mm depth 5-7mm diameter pea gravel

The upper half of the tree pit (around the rootball) shall be backfilled with 450mm topsoil, ameliorated with compost and fertiliser as specified.

2.3.2 Tree planting backfill shall contain:

80% by volume : Topsoil

20% by volume : Mushroom Compost 3 kg/m³ : Enmag Fertilizer

1kg/m³ : Water Retaining Polymer Gel

- 2.3.3 Underground Guying: All semi-mature and multi stemmed trees (over 2.5 metres in height) are to be anchored using "Duckbill" anchoring kit. Watering tubes shall be supplied for all semi mature and extra heavy standard stock. To be 50mm diameter, black land flex perforated land drainage pipe with suitable rubber/plastic bung.
- 2.3.4 Tree pits: Tree pits should be excavated to the following dimensions:

Semi mature trees 20-25cm girth : 1400mm square x 1000mm deep Extra heavy trees 14-20cm girth : 1300mm square x 800mm deep

2.4 Shrubs, ornamental grasses and herbaceous perennials: All shrubs shall be supplied in accordance with the plant schedules by named nurseries. Planting pits to be excavated to allow a 75mm clearance around the edges of the root system. Sides and bottom of pits shall be loosened to relieve any compaction. Backfill for each plant to include 50g of SA1 Enmag.

Bark mulch shall consist of matured British conifer bark with an even particle size distribution between 5-35mm. The mulch to be Melcourt 'Ornamental Grade Bark Mulch' or similar approved, and a representative sample of the mulch shall be supplied for approval prior to delivery to site

Turfing: Turf to be Tillers "Arena", supplied to BS3969. Pre-turfing fertiliser to be Fisons 'PS5' applied at a rate of 70g/m². The turves will be laid with half lapped joints and well butted up.

LANDSCAPE OUTLINE SPECIFICATION

- 2.6 Hedgerows:
- 2.6.1 Carpinus and native species hedgerows: Following erection of a post and wire fence, plant hedgerow plants in staggered rows as specified.
- 2.6.2 Prunus lusitanica hedges: Plant in a double staggered rows as specified.
- 2.7 Wildflower Meadow

EM4 Emorsgate Seeds Meadow mixture for clay soil sown at a rate of 4g/m².

3.0 WATERING

All tree pits and shrub beds shall be thoroughly watered prior to application of mulch and subsequent maintained in a moist condition. Watering rates shall be as follows:

Advanced nursery stock trees : 50 litres/tree Shrub areas : 30 litres/m²

4.0 MAINTENANCE

- 4.1 All shrub / ornamental grasses / herbaceous perennials and lawn areas to be maintained under installing contract for 12 months post Practical Completion, and all semi mature trees to be maintained under installing contract for 24 months post Practical Completion, to provide optimum conditions for plant and grass growth and to present a clean and tidy appearance. All deaths and failures are to be replaced at the first horticulturally sound opportunity.
- 4.2. Maintenance of meadow areas:

Year 1: Newly sown meadow to be mown regularly throughout the first year of establishment to a height of 40-60mm, removing cuttings if dense. This will control annual weeds and help maintain balance between faster growing grasses and slower developing wild flowers. Carefully dig out or spot treat any residual perennial weeds such as docks.

Management once established: In the second and subsequent years the aim is not to cut from spring through to late July/August to give the sown species an opportunity to flower. After flowering in July / August cut back to 50mm height, leaving the 'hay' to dry and shed seed for 1-7 days then remove from site. Mow the re-growth through to late autumn/winter to 50mm height and again in spring if needed.