

# Tree Pit Detail (for trees in proximity to hard landscaping)

1. 2x tanalised timber tree stakes 2m, 75mm Ø driven into backfilled pit to provide support to the tree.

2. ReRoot root barrier with root deflecting ribs installed between tree root ball and hard surfaces/services where there is a risk of root damage as the tree grows outward. As a general rule, root barriers should be installed in locations where hard surfaces and/or services are located within four metres of the tree stem. Install closer to the paving/service than the tree, to allow space for the tree roots to grow into the space available, with the ribs facing the tree. Note this may mean not placing the barrier within the tree pit, but further away within its own trench. Root barriers must extend a minimum of 2m lengthways beyond the expected canopy of the mature tree. The top of the root barrier should be set as close to the soil surface as possible without being visible.

3. Tubex Treegaurd Mesh Roll or similar approved. 12mm mesh roll cut to size and bent in circle 320mm Ø and tied to tree stake to protect tree from damage by people and animals. Bottom of mesh should be 300mm above ground level to allow strimmer guard to be fitted and prevent litter and grass/weeds building up around the base of the tree. Top of mesh should be below the first lateral branch.

4. Use 2x Tree Ties GLB25A with GLPFA spacer sleeves or similar to secure tree to support post.

5. 75mm deep bark mulch layer to be spread evenly over a circular area 1000mm Ø around the tree to prevent weed growth and retain moisture. Alternatively, a suitable mulch mat can be used covering the

6. Excavate tree pit to sufficient size to accommodate tree root ball. Loosen any compaction in base of excavated pit to aid drainage. The tree should be planted at a depth where the root flare is still visible, just breaching the soil surface, following backfilling.

7. Backfill tree pit with subsoil and topsoil excavated from pit if this is regarded as of sufficient quality to promote the healthy establishment of the tree. If either the top soil or sub soil excavated from the pit is of poor quality, then soil ameliorants may be used sparingly or imported topsoil compliant with BS3882 should be used.

8. Strimmer guard by Arbortech or similar to be fitted around base of tree to protect from damage by grass maintenance machinery primarily, but also to provide an additional layer of defense against animal browsing.

Immediately after planting, water the tree, saturating the tree pit to field capacity.

The notes above are intended as a basic guide only. For further guidance on tree planting refer to BS8545:2014 Section

Products suggested in italics above are available from Green Blue Urban (http://greenblueurban.com/) and Arbortech (www.arbortech.co.uk).

### GENERAL PLANTING SPECIFICATIONS:

- Proposals to be read in conjunction with Architect's and Engineers Drawings;
- All landscape operations to be in accordance with BS4428: 1989 & BS 3936: 1992 and all amendments to date;
- Plant material to conform to the National Plant Specification;
- Any plant material planted outside the recognised planting season (Nov-Feb), to be containerised stock and supplied at the sizes specified:
- Plant handling and planting operations to be in accordance with HTA "Handling and Establishing Landscape Plants parts I - III;
- All planting to be maintained and guaranteed for 12 months to include watering, weeding, pest & disease
- The landscape sub-contractor is to take all safety precautions to prevent any injury to any persons. The landscape sub-contractor shall comply with the requirements of the Health and Safety at Work Act 1974
- and current Construction, Design and Management Regulations. The landscape sub-contractor shall confirm the location of all underground services before commencement of planting and report where trees/ hedges are suggested within 2m of underground services and 5m of buildings.

## SOIL AND MULCH

- Existing topsoil (if present and suitable) to be stripped and stored on site in heaps not exceeding 2m in height and kept weed free:
- Any compacted subsoil to be broken up to allow free drainage and to enable topsoil to key into surface;
- Any imported topsoil to be to BS3882, medium texture, neutral PH value, reasonably stone free with no
- stones over 20mm in size;
- Soil for meadow grassland to be composed of prepared sub-soil (nutrient poor); Topsoil depths to be 300mm for shrubs, hedges, climbers and groundcover planting;
- Finished topsoil levels to be 25mm above adjacent paved surfaces, and 300mm wide hard surfaced mowing
- margin to be provided where lawn adjoins buildings;

Architect's direction or as indicated in the planting schedule;

All planting areas to be covered with a 75mm depth of medium grade bark mulch.

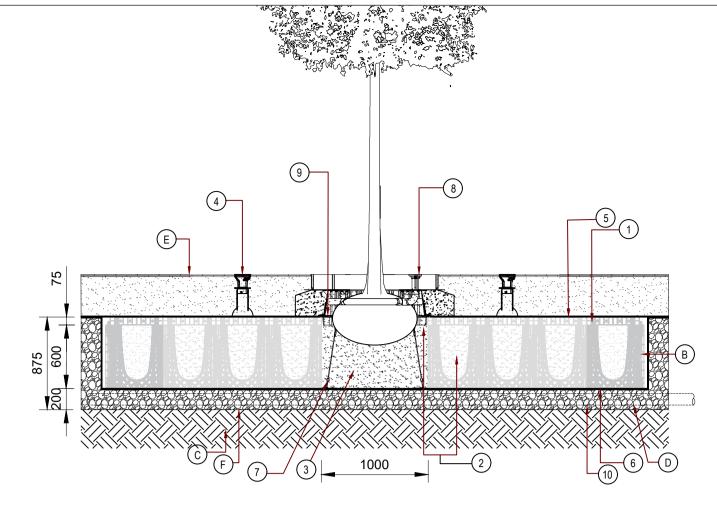
## PLANT MATERIAL TREATMENT

- All to be British grown stock and fully hardened off;
- Root Dip Proprietary Root Dip applied to all bare root stock at time of lifting at nursery and prior to
- Anti-Desiccant Proprietary anti-desiccant to be applied to foliage of all containerised/rootballed material in leaf, specimen confiders and evergreens etc. prior to transportation and during any delay in planting; Pruning - Allow for pruning of all deciduous trees and shrubs by 1/3<sup>rd</sup> /following planting at Landscape
- Tree Stakes and Ties Stakes to be pressure treated, round, smooth and peeled Larch or Chestnut, not less than 100mm in diameter. Advanced nursery stock – double staked with cross bar.

## **EXISTING TREES AND SHRUBS**

- Avoid damage to branches, trunks and roots of trees. All existing trees and hedges to be retained are subject to BS5837 (2005 and all amendments to date) 'Trees in relation to Construction – Recommendations', and should be fully fenced off, prior to the commencement of any works.
- Where existing trees and shrubs are to be retained they should be subject to a full Arboricultural inspection for safety:
- Any surgery required shall be in accordance with BS3998 (2010 and all amendments to date) 'Tree Work Recommendations', shall comply with any existing T.P.O requirements and shall require the prior approval of the Landscape Architect;
- No storage of materials, disposal of rubbish, site fires, spillage of oil and chemicals, ground compaction, excavation or changes in level shall be carried out within existing tree/hedge canopies.

- No trees to be planted within 3 metres of sewers or services or other easement recommended by the relevant statutory undertaker without the use of tree root barriers eg Greenleaf Reroot 600/100 placed between the tree and services;
- All trees shown to be planted ensuring that they are at least 5 metres away from buildings;
- Contractor to ascertain the location of all sewers and services prior to tree planting;
- Root barrier to be installed in planting pits in near proximity to underground services;



#### Tree pit detail (for trees in car parking areas)

- geonet & open reinforcing mesh gburs61a -
- (2) Ropsoil for use within top 600mm of soil profile
- (3) Subsoil for use within soil profiles 600mm or deeper

(1) Rootspace @600mm depth (1 unit deep) c/w twin walled

- (4) Rootrain arborvent cast aluminium trafficable aeration inlet with 150mm square top and manifold - rrarbv150b (or acceptable equivalent)
- (5) Twin walled structural geonet (or acceptable equivalent)
- (6) 20mm Open reinforcing mesh

allow 500mm soil around rootball with angled stakes;

supported by a single stub stake;

supported by a single stub stake;

SHRUBS (ORNAMENTAL AND SPECIMEN)

Areas to be uniformly firmed.

approved), sown at 50g/m;

approved), sown at 50g/m;

Remove and dispose of all arisings.

and ridges;

dimension;

SEEDING

50 -50 topsoil and shrub planting mix.

by manufacturer before final cultivation.

Mixture' (or similar approved), sown at 4g/m;

appropriate season and weather condition;

Dress turf with fine topsoil and brush in to fill joints;

Adjust levels by raking out of filling of fine soil under turfs;

Thoroughly water completed turf within 24 hours of laying;

- (7) Arborguy anchorplate strapped anchor system sasap06a (or acceptable equivalent)
- (8) Rootrain arborvent irrigation system castle12a (or acceptable equivalent)
- (9) Medium rootdirector with root deflecting ribs rd1000-rsa (or acceptable equivalent) set at edge of planting area

from 1 November to 31 March unless otherwise specified in the planting schedule;

Trees planted within grassed areas to be provided with appropriate conical strimmer guards;

Allow for the use of container grown stock during the periods 1 April to 31 October, and field grown stock

• Feathered trees (up to and including 14-16cm girth) to be planted in topsoil pits 900 diameter x 600mm deep,

• Multi-stem trees to be planted in topsoil pits 2000mm diameter x 750mm depth or larger as necessary to

• Standard trees (up to and including 10-12cm girth) to be planted in topsoil pits 900 diameter x 600mm deep,

• Heavy standard trees (12-14cm girth) to be planted in topsoil pits 1200 diameter x 900mm deep, supported by

irrigation "Root rain precinct" or similar approved; "Green leaf root director; Underground "Deadmen" guying

wider than rootball. Break up bottom of pits to a depth of 150mm. Compacted glazed sides of pits should be

• Tree pits of extra heavy standard trees to be underground guyed. Detailing of tree pit to include tree pit

system "Platipus" attached to 2 no concrete kerbs and pit backfilled with urban tree sand or similar

approved. Base of pit to be broken up to 150mm depth beneath 150mm clean coarse angular gravel. • Where necessary increase tree pit dimensions to ensure that tree pits are at least 75mm deeper and 150mm

• All specimen shrubs to be planted in pits twice the size of the pot in depth and width and backfilled with a

Grass seeding cultivation to be brought to a fine tilth and all stones over 25mm in all directions removed.

• Amenity Grass areas to be seeded with Germinal Amenity A19 All purpose landscaping Mixture (or similar

Other Meadow grassed areas to be seeded with Emorsgate EM1 'Basic General Purpose Meadow

Other Meadow grassed areas to be seeded with Emorsgate EM2 'Standard General Purpose Meadow

• Swale areas to be seeded with Emorsgate EG8 'MEadow Grass Mixture for Wetlandscape' sown at 5g/m2;

• When grass is between 40-75mm high remove stones and debris exceeding 50mm in any dimension. Cut grass to approximately 35mm high; Meadow grass to be cut twice a year in March and October.

• When topsoil is reasonably dry and workable, grade to smooth, flowing contours removing all minor hollows

• Apply approved herbicide to control perennial weeds and allow period of time to elapse as recommended

• Reduce top 25mm topsoil to a fine tilth by further cultivation. Remove stones exceeding 50mm in any

• Consolidate by lightly and evenly firming with wooded beaters as laying proceeds. Do not use rollers;

• When grass is 50mm high remove debris, litter and any stones, in dry conditions cut grass to between

• Lay turf with broken joints, well butted up, working from planks laid on previously laid turfs, during

• Grass seed to be sown at rates shown below and as per Emorsgate recommendations.

• Roll the seeded area with a ribbed crinkle or Cambridge roller upon completion;

Turf supplied to be according BS3969 standards from an approved source;

by manufacturer before final cultivation. Apply proprietary fertiliser;

Cultivate soil to full depth and break up any compacted topsoil;

• Apply approved herbicide to control perennial weeds and allow period of time to elapse as recommended

## (or acceptable equivalent)

Notes:

- (A) Allow 20% additional for geotextile and reinforced geogrid for ovelap and cutting requirements
- (B) Install rootspace side panels to installation as directed by engineer

(10) 10 - 20mm Clean angular drainage aggregate - gbudrsa

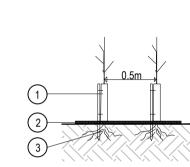
(c) Existing ground

Structural engineer's note:

- (D) Positive drainage pipe (110mm perforated pipe)
- (E) Build-up to suit engineer designs and requirements
- (F) Additional twinwall geonet (gltwgna) to be installed where sub-base is installed below 3% cbr - minimum 2%

cbr of formation level to be assessed by engineer

# Double Staggered Row $\oplus$ $\bigoplus$ $\bigoplus$



#### Tree Pit Detail (for trees in open space)

1. 2x tanalised timber tree stakes 2m, 75mm Ø and crossbar driven into backfilled pit to provide support to the tree.

2. Clear spiral guard to be fitted to trunk to protect against animal browsing.

3. Use 2x Tree Ties GLB25A with GLPFA spacer sleeves or similar to secure tree to support post.

4. 75mm deep bark mulch layer to be spread evenly over a circular area 1000mm Ø around the tree to prevent weed growth and retain moisture.

Alternatively, a suitable mulch mat can be used covering the same area.

5. Excavate tree pit to sufficient size to accommodate tree root ball. Loosen any compaction in base of excavated pit to aid drainage. The tree should be planted at a depth where the root flare is still visible, just breaching the soil surface, following backfilling.

6. Backfill tree pit with subsoil and topsoil excavated from pit if this is regarded as of sufficient quality to promote the healthy establishment of the tree. If either the top soil or sub soil excavated from the pit is of poor quality, then soil ameliorants may be used sparingly or imported topsoil compliant with BS3882 should be used.

Immediately after planting, water the tree, saturating the tree pit to field capacity.

The notes above are intended as a basic guide only. For further guidance on tree planting refer to BS 8545:2014 Section 10.

Products underlined above are available from Green Blue Urban (http://greenblueurban.com/).

#### Native Hedgerow Planting Detail

1. Tubex shrub shelter with supporting cane or stake.

2. 2m wide biodegradable weed mat roll pegged down with biodegradable pegs along line of hedgerow to prevent weed growth and retain moisture.

3. Whip to be notch planted following clearance of any existing vegetation.

Immediately after planting, water the whip, saturating the ground around its base to field capacity.

The notes above are intended as a basic guide only. For further general guidance on planting refer to BS8545:2014 Section 10 and BS4428:1989 Section 9.

(http://www.tubex.com/).

Products suggested in italics above are available from Tubex

18.03.22

09.03.22

Date



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b | Engineering Layout Update

a Layout Update

Rev Comment

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Cotswolds - Somerset - South Wales Client:

Albion Land

Project Title:

Catalyst Bicester

Drawing Title:

RM3 - Soft Landscape Proposals (Sheet 2 of 3)

Date: 19 February 2022 Drawing Number: LB291\_D02

Scale: 1:500 at A1

Drawn By: AL Checked by: DB Revision: b

25-30mm; Remove and dispose of all arisings.

All information outside red line boundary shown for contextual purpose only.

4. This drawing is to be read in conjunction with the following Laird Bailey Landscape Architects documentation:

 AND all relevant documentation from the design team 5. Any discrepancies in the design information are to be brought to the

design information: • Levels & Drainage design and infrastructure

Existing & proposed utilities

7. Plant quantities are to suit site areas in accordance with scheduled plant

8. Any proposed plant substitution shall be agreed with the landscape architect prior to ordering.

1. Do not scale from this plan

All hatch patterns are indicative only unless stated otherwise.

Refer to other consultants' drawings and specifications for the following

• LB291\_D02b (sheets 1 to 3)

attention of Laird Bailey Landscape Architects, in writing.

Lighting and ducting

Drawings are for planning purposes only.

#### Planting Schedule

Trees			
Botanical Name	Min Girth (cm)	Min Height (cm)	Specification
Medium (M)			
Acer campestre (M)	14-16	450-500	RB; 4x; Extra Heavy Standard; 2m Clear Stem; Double Staked
Betula pendula (M)	14-16	450-500	RB; 4x; Extra Heavy Standard; 2m Clear Stem; Double Staked
Quercus robur (M)	14-16	450-500	RB; 4x; Extra Heavy Standard; 2m Clear Stem; Double Staked
Sorbus aria (M)	14-16	450-500	RB; 4x; Extra Heavy Standard; 2m Clear Stem; Double Staked
Tilia cordata 'Greenspire' (M)	14-16	450-500	RB; 4x; Extra Heavy Standard; 2m Clear Stem; Double Staked
Small (S)	•	•	
Acer campestre (S)	8-10	250-300	RB; Select Standard; 1.8-2m Clear Stem; Single Stake
Fagus Sylvatica (S)	8-10	250-300	RB; Select Standard; 1.8-2m Clear Stem; Single Stake
Sorbus aucuparia (S)	8-10	250-300	RB; Select Standard; 1.8-2m Clear Stem; Single Stake

Native Woodland Planting Mix						
PLANTING NOTES:						
REFER TO PLANTING MATRIX						
Notch planted in a matrix pattern at 1500mm centres with rabbit protection.						
Plant in s	Plant in single species groups with 7-13no. plants by species.					
%	Code	Botanical Name	Min Height (cm)	Specification		
5	A*	Alnus glutinosa	150	BR; Feathered		
5	Ag	Alnus glutinosa	60-80	BR; 1+1		
5	Вр	Betula pendula	60-80	BR; 1+1		
5	Ca	Corylus avellana	150	BR; Feathered		
5	Pn	Populus nigra spp. betufolia	60-80	BR; 1+1		
5	Pt	Populus tremula	150	BR; Feathered		
10	Qr	Quercus robur	150	BR; Feathered		
5	Pa	Prunus avium	60-80	BR; 1+1		
5	Ac	Acer campestre	150	BR; Feathered		
5	Sc	Salix caprea	60-80	BR; 1+1		
5	Sf	Salix fragilis	60-80	BR; 1+1		
5	Ms	Malus sylvestris	150	BR; Feathered		
5	Ld	Larix decidua	60-80	BR; 1+1		
10	Pn	Pinus sylvestris	150	BR; Feathered		
5	Cs	Cornus sanguinea	60-80	bushy, 3 brks		
5	Cm	Crataegus monogyna	60-80	bushy, 3 brks		
5	la	Ilex aquifolium	60-80	bushy, 3 brks		
5	SI	Sorbus leyana	60-80	bushy, 3 brks		

Native S	Native Shrub Mix				
PLANTING	PLANTING NOTES:				
Planting	groups of 3-5, species select	ed randomly and plant	ed at 1m centres. All	specimens to be	
fitted wit	fitted with rabbit guard and caned.				
%	Botanical Name	Min Height (cm)	Specification	Planting density	
15	Cornus sanguinea	60-80	BR; 1+1	1/m2	
20	Viburnum opulus	60-80	BR; 1+1	1/m2	
20	Viburnum lantana	60-80	BR; 1+1	1/m2	
15	Euonymus europaeus	60-80	BR; 1+1	1/m2	
15	Crataegus monogyna	60-80	BR; 1+1	1/m2	
15	Salix purpurea	60-80	BR; 1+1	1/m2	

#### Amenity Shrub Planting PLANTING NOTES: REFER TO PLANTING MATRIX. Notch planted in a matrix pattern at 500mm centers. Plant in single species groups to establish diagonal swathes of planting Code Botanical Name Pot Size Specification Planting density Co Carex oshimensis 'Evergold' Full Pot 4/m<sup>2</sup> Cornus sanguinea 'Midwinter fire' Full Pot 4/m<sup>2</sup> Cotinus coggygria 'Purple Flame' Cc Full Pot As shown 51 Escallonia 'Apple Blossom' 3L Full Pot 4/m<sup>2</sup> Hebe 'Red Edge' 3L Full Pot 4/m² Hm Hebe 'Mrs Winder' 3L Full Pot 4/m² Photinia x fraserii 'Red Robin' 5L Full Pot 4/m<sup>2</sup> Po Prunus 'Otto Luvken' 3L Full Pot 4/m² Lonicera nitida 'Maigrun' 3L Full Pot 4/m<sup>2</sup> Miscanthus sinensis Full Pot 4/m<sup>2</sup> Ms 31

Nauv				
PLANT	ING NOTES:			
Plant i	n a double staggered row –50	00mm between rows o	and at 300mm centi	es at 5 plants per
linear	meter. All plants to be fitted v	vith rabbit guard and	caned.	
%	Botanical Name	Min Height (cm)	Specification	Planting density
20	Cornus sanguinea	80-100	BR: 1+1	5/LM
20	Corylus avellana	80-100	BR: 1+1	5/LM
20	Crataegus monogyna	80-100	BR: 1+1	5/LM
10	Euonymus europaeus	80-100	BR: 1+1	5/LM
20	Prunus spinosa	80-100	BR: 1+1	5/LM
10	Rosa canina	80-100	BR: 1+1	5/LM

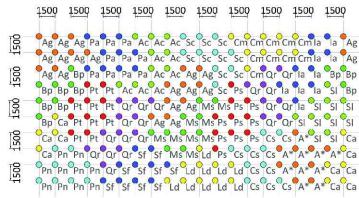
HEADV	VALL CLIMBERS			
PLANT	ING NOTES:			
Plant i	n same species groups of 3-	5 plants. To be caned.		
%	Botanical Name	Min Height (cm)	Specification	Planting density
20	Hedera helix	40-60	2L Pot; caned	1/LM
	'Buttercup'		or framed	
20	Hedera helix 'Glacier'	40-60	2L Pot; caned	1/LM
			or framed	
60	Hedera hibernica	40-60	2L Pot; caned	1/LM
			or framed	

Swale Meadow Grass Mix (Seasonally Wet)			
Mixture	Supplier	Sow Rate	
EG8 (Meadow grass mixture for wetlands)	Emorsgate Seeds	5g/m2 (50kgs/ha)	

Wildflower Meadow Mix			
Mixture	Supplier	Sow Rate	
EM2 – Standard General Purpose Meadow Mixture	Emorsgate Seeds	4g/m2 (30kg/ha)	

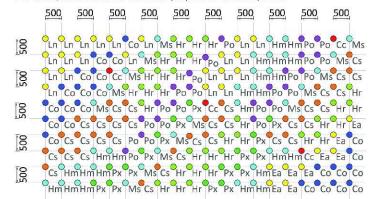
#### Native woodland planting matrix

For wider/narrower areas use same proportion of each species.



#### Amenity planting matrix

For wider/narrower areas use same proportion of each species.



Native Hedgerow

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- LB291 D02b (sheets 1 to 3)
- AND all relevant documentation from the design team
- Any discrepancies in the design information are to be brought to the attention of Laird Bailey Landscape Architects, in writing.
- 6. Refer to other consultants' drawings and specifications for the following design information:
- Levels & Drainage design and infrastructure
- Lighting and ducting
- Existing & proposed utilities
- Plant quantities are to suit site areas in accordance with scheduled plant
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a Layout Update



LAIRD BAILEY LANDSCAPE ARCHITECTS

www.lbla.co.uk

Albion Land

Project Title:

Catalyst Bicester

Drawing Title:

RM3 - Soft Landscape Proposals (Sheet 3 of 3)

Date: 19 February 2022 Drawing Number: LB291 D02 Scale: 1:500 at A1

Drawn By: AL Checked by: DB Revision: b