

LAND AT TILSTOCK ROAD, TILSTOCK - DETAILED POS HARD AND SOFT LANDSCAPE PROPOSALS
SHEET 1 of 4

N 0 10 25 m





LAND AT TILSTOCK ROAD, TILSTOCK – DETAILED POS HARD AND SOFT LANDSCAPE PROPOSALS
SHEET 2 of 4



subject to project engineer's final design.

matching 1.2m width self soft closing pedestrian gates (1.8m width maintenance access leafs shown red - drop bolts, lockable) - Anti Trap Bow Top Fencing and Gates by Jacksons Fencing or similar.

to engineer review and ROSPA SuDS design review)

equipment, boundary treatments, street furniture and surfacing specifications.

- See P24-1425\_EN\_010 Detailed Soft On-plot Landscape Proposals for planting to plot frontages.

Note: Root barriers may need to be installed where trees are proposed adjacent hard surfacing and underground utilities, and deeper building foundation design may be required in line with NHBC guidance -

- See P24-1425\_EN\_07 Detailed POS Hard and Soft Landscape Proposals Sheet 3 for further details of play

Proposed fencing to SUDS basin to be 1.2m high black metal bow-top fencing with double leaf maintenance access gates.

- Bow Top Fencing and Gates by Jacksons Fencing or similar (Specification to be subject

0 10 25 m





# PLAY EQUIPMENT & NATURAL PLAY FEATURES



Timber Boat. Ages 2+ E.g 'Forest Lake Boat, without floor' NRO520 in robinia by



Rocking Mule. Ages 3+ E.g 'Mule' NRO101 robinia rocker by Kompan



Seesaw. Ages 4+ by Kompan



Carousel with Seats. Ages 3+ E.g 'Mule' NRO106 robinia seesaw E.g 'Mule' NRO120 in robinia / galvanised steel by Kompan



Balance Beam. Ages 3+ E.g 'Triple Balance Beam' NRO804 in robinia by Kompan



Climbing Net. Ages 3+



Swinging Nest. Ages 2+ E.g 'Climbing Net' NRO813 in robinia E.g 'Bird Nest Swing' NRO906 in 3+ E.g 'Tower Slide 1.4m high' Rounded glacial bounders approx Branches cut back for a smooth / PA reinforced ropes by Kompan robinia / PA reinforced ropes by NRO306 in robinia / PA



steel by Kompan



Climbing tower and slide. Ages Feature Boulders. Ages 6-12. 600-900mm dia. Buried into the finish. E.g Playdale Tree Trunks reinforced ropes and stainless ground by 1/3, max 600mm above NATURAL1. ground. E.g Playdale Boulders NATURAL1.



Feature Tree Trunks. Ages 6-12.

# Proposed feature tree. (See sheets 1-2 for tree species) (See sheets 1-2 for tree species)

Application boundary.

Proposed native tree belt with native shrub

understorey.

Proposed native tree.

Proposed native hedgerow.

Proposed single-species hedgerow.

Proposed native shrub planting.

Proposed ornamental shrub, herbaceous and grass

Proposed hard-wearing amenity grass to play areas (Emorsgate EG22 'Strong Lawn Grass Mixture' or similar approved).

Proposed bulb planting.

Proposed hoggin footpath with timber edging -Breedon golden amber buff gravel or similar approved.

Proposed tarmacadam footpath with pcc. edging.

Proposed wet pour impact attenuating play surfacing - Tiger Mulch in Earth Tone or similar approved. (Depths to manufacturer recommendations / play equipment requirements)

Proposed bins

- Litter bins to be Winchester Canopied Litter Bin by Broxap or similar approved. - Dog waste bin to be Derby Ruddington Dog Waste Bin by Broxap or similar approved.

Proposed timber picnic benches and seating - Benches to be Cheshunt 4 person seat by Furnitubes or similar approved.

- Picnic Benches to be Chestnut 3 person seat and table by Furnitubes or similar approved.

Proposed play equipment with impact attenuating play surfacing to fall zone (dashed line) - to accord with

manufacturers recommendations / equipment requirements. Black metal bow top railings to enclose play areas; with

matching 1.2m width self soft closing pedestrian gates (1.8m width maintenance access leafs shown red drop bolts, lockable) - Anti Trap Bow Top Fencing and Gates by Jacksons Fencing or similar approved.

Proposed earth mounding - gradient to be max 1:3 with smooth flowing contours.

Note: Root barriers may need to be installed where trees are proposed adjacent hard surfacing and underground utilities, and deeper building foundation design may be required in line with NHBC guidance - subject to project engineer's final design.

# **FURNITURE & BOUNDARY TREATMENTS**



Seat - timber seat, simple and Picnic Bench - timber seats and robust in character. E.g Cheshunt 4 person seat by Furnitubes



table, simple and robust in character. E.g Cheshunt 3 person seat and table by Furnitubes



Litter Bin - round timber bin, simple and robust in character. Litter Bin by Broxap



Dog Waste Bin - surface mounted steel bin, simple and robust in character. Waste Bin by Broxap



Fencing to Play Areas - Black metal bow top railings to enclose play areas, with matching 1.2m E.g Winchester Canopied E.g Derby Ruddington Dog width self closing pedestrian gates (1.8m width maintenance access leafs shown in red - drop bolts, lockable) E.g Anti Trap Bow Top Fencing

and Gates by Jacksons Fencing





Native Woodland Mix				_		
Native Woodland Mix Qty Latin Name 8 Acer campestre 6-8cm 15 Carpinus betulus	Common Name Field Maple	Height at Purchase 250-300cm	Root Condition RB	Form Feathered	Rate/sqm 0.06 Plants/sq m	
15 Carpinus betulus	Common Hornbeam	250-300cm	RB	Standard	0.06 Plants/sq m	
250 Cornus sanguinea	Common Dogwood	60-80cm	BR	Whip	1 Plants/sq m	
250 Corylus avellana	Hazel	60-80cm	BR	Transplant	1 Plants/sq m	
250 Crataegus monogyna	Common Hawthorn	60-80cm	BR	Transplant	1 Plants/sq m	
8 Fagus sylvatica	Common Beech	250-300cm	RB	Standard	0.06 Plants/sq m	
126 Ilex aquifolium 15 Malus 'Evereste'	Common Holly Crab Apple 'Evereste'	60-80cm 300-350cm	C RB	Select Standard	1 Plants/sq m 0.06 Plants/sq m	
15 Prunus avium	Wild Cherry	250-300cm	RB	Feathered	0.06 Plants/sq m	
250 Prunus spinosa	Blackthorn	60-80cm	BR	Transplant	1 Plants/sq m	
15 Quercus robur	Common Oak	250-300cm	RB	Light Standard	0.06 Plants/sq m	
126 Sambucus nigra	Common Elder	80-100cm	BR	Transplant	1 Plants/sq m	
In dividual Tues Diserting						
Individual Tree Planting  Qty Latin Name	Common Name	Height at Purchase	Root Condition	Girth	Form	Min Clear Stem
1 Acer campestre	Field Maple	350-425cm	RB	14-16cm	Extra Heavy Standard	Min 200cm
5 Acer campestre 'Streetwise'	Field Maple 'Streetwise'	400-450cm	RB	14-16cm	Extra Heavy Standard	Min 200cm
4 Alnus glutinosa	Alder	400-450cm	RB	14-16cm	Extra Heavy Standard	Min 200cm
7 Amelanchier arborea 'Robin Hill' 3 Betula pendula	Snowy Mespilus 'Robin Hill' Silver Birch	350-425cm 350-425cm	RB RB	12–14cm 14–16cm	Heavy Standard Extra Heavy Standard	175-200cm
13 Betula pendula - MS	Silver Birch	300-350cm	С	14-100111	Multistem	WIII 200CIII
9 Betula pubescens	Downy Birch	350-425cm	RB	14-16cm	Extra Heavy Standard	Min 200cm
5 Betula utilis 'Jaquemontii'	Himalayan Birch	400-450cm	RB	14-16cm	Extra Heavy Standard	175-200cm
3 Carpinus betulus	Common Hornbeam	400-450cm	RB	14-16cm	Extra Heavy Standard	
5 Corylus avellana	Common Hazel	200-250cm 350-425cm	C RB	n/a 14-16cm	Multistem	n/a Min 200cm
3 Magnolia 'Galaxy' 6 Malus sylvestris	Magnolia 'Galaxy' Crab Apple	400-450cm	RB	14-16cm	Extra Heavy Standard Extra Heavy Standard	Min 200cm
7 Pinus sylvestris	Scots pine	350-425cm	RB	14-16cm	Extra Heavy Standard	Min 200cm
1 Prunus avium	Wild Cherry	400-450cm	RB	14-16cm	Extra Heavy Standard	Min 200cm
11 Pyrus calleryana 'Redspire'	Flowering Pear 'Redspire'	350-400cm	RB	14-16cm	Extra Heavy Standard	min 200cm
5 Sorbus aria	Common Whitebeam	400-450cm	RB BB	14-16cm	Extra Heavy Standard	Min 200cm
7 Sorbus aucuparia 1 Tilia cordata	Mountain ash or Rowan Small-leaved lime	400-450cm 400-450cm	RB RB	14-16cm 14-16cm	Extra Heavy Standard Extra Heavy Standard	Min 200cm
2 Tilia cordata 'Greenspire'	Small-leaved lime 'Greenspire'	400-450cm	RB	14-16cm	Extra Heavy Standard	
Jordata di Joriopii G	5.10[0] 0				a . loavy otalidald	200011
Orchard Tree Planting						
Qty Latin Name	Common Name	Height at Purchase	Root Condition	Root Stock	Form	Min Clear Stem
O Malter When a thing I and do Financia	Apple 'Shropshire Lady's	175 000	0.10, 151	NAN 4100	Lief Oten dend	
<ul><li>2 Malus 'Shropshire Lady's Finger'</li><li>2 Malus 'James Grieve'</li></ul>	Finger' Apple 'James Grieve'	175-200cm 175-200cm	C 10-15L C 10-15L	MM106 MM106	Half Standard Half Standard	
2 Pyrus communis 'Concorde'	Pear 'Concorde'	150-175cm	C 10-13L C 10-12L	Quince A	Bush	
1 Pyrus communis 'Conference'	Pear 'Conference'	150-175cm	C 10-12L	Quince A	Bush	
3 Prunus 'Shropshire prune'	Shropshire prune	150-175cm	C 10-15L	St Julien A	Bush	
_						
Mixed Native Hedgerows (Plant		•		_		
Qty Latin Name 133 Acer campestre	Common Name Field Maple	Height at Purchase 60-80cm	Root Condition BR	Form Whip		
134 Corylus avellana	Hazel	60-80cm	BR	Transplant		
470 Crataegus monogyna	Common Hawthorn	60-80cm	BR	Transplant		
66 llex aquifolium	Common Holly	60-80cm	С			
266 Prunus spinosa	Blackthorn	60-80cm	BR	Transplant		
134 Rosa canina 134 Viburnum opulus	Dog rose Guelder Rose	60-80cm 60-80cm	BR BR	Whip Whip		
194 Vibarriam opaias	duelder Rose	00-000111	BK	vviiip		
Single Species Hedgerows (Plar	nted in a single row, 5 p	ants lin/m)				
Qty Latin Name	Common Name	Height at Purchase	<b>Root Condition</b>	Form		
61 Carpinus betulus	Common Hornbeam	80-100cm	BR	Transplant		
641 Fagus sylvatica	Common Beech	80-100cm	BR	Transplant		
Native Shrub Mix (2 plants / sq	m)					
Qty Latin Name	Common Name	Height at Purchase	Root Condition			
291 Acer campestre	Field Maple	60-80cm	BR			
579 Cornus sanguinea	Common Dogwood	60-80cm	BR			
291 Corylus avellana	Hazel	60-80cm	BR			
1015 Crataegus monogyna	Common Hawthorn Blackthorn	60-80cm	BR BR			
291 Prunus spinosa 291 Rosa canina	Blackthorn Dog rose	60-80cm 60-80cm	BR BR			
25. Nood odrinid	200 1000	30 000m				
Ornamental Shrub Planting						
Qty Latin Name	Common Name	Height at Purchase	Scheduled Size			
43 Brachyglottis 'Sunshine'	Shrub Ragwort 'Sunshine'	40-60cm	5L			
30 Choisya ternata 'Sundance' 107 Cornus alba 'Sibirica'	Mexican orange blossom Red barked dogwood	40-60cm 40-60cm	5L 3L			
81 Cornus stolonifera 'Kelseyi'	Red Osier Dogwood 'Kelsey		5L			
106 Hebe 'Red Edge'	Hebe 'Red Edge'		5L			
161 Lavandula angustifolia 'Hidcote'	English lavender 'Hidcote'	40-60cm	5L			
30 Lavandula x intermedia 'Alba'	Lavender 'Alba'	20-30cm	5L			
52 Salvia officinalis 'purpurea'	Purple Sage Sweet Box	20-30cm 30-40cm	2L 5L			
116 Sarananana annfirm	. WEEL DITY	JU-40CIII				
116 Sarcococca confusa 142 Skimmia japonica 'Rubella'		30-40cm	3L			
116 Sarcococca confusa 142 Skimmia japonica 'Rubella' 34 Stachys byzantina	Japanese Skimmia 'Rubella' Lamb's Ear	30-40cm 20-30cm	3L 3L			
142 Skimmia japonica 'Rubella'	Japanese Skimmia 'Rubella'					
142 Skimmia japonica 'Rubella' 34 Stachys byzantina 32 Stipa tenuissima	Japanese Skimmia 'Rubella' Lamb's Ear Mexican feather grass	20-30cm	3L			
142 Skimmia japonica 'Rubella' 34 Stachys byzantina 32 Stipa tenuissima  Marginal / Aquatic Planting to B	Japanese Skimmia 'Rubella' Lamb's Ear Mexican feather grass Basin	20-30cm 40-60cm	3L 3L	~		
142 Skimmia japonica 'Rubella' 34 Stachys byzantina 32 Stipa tenuissima  Marginal / Aquatic Planting to B  Qty Latin Name	Japanese Skimmia 'Rubella' Lamb's Ear Mexican feather grass Gasin Common Name	20-30cm 40-60cm Height at Purchase	3L 3L Rate/sqm	%	10	
142 Skimmia japonica 'Rubella' 34 Stachys byzantina 32 Stipa tenuissima  Marginal / Aquatic Planting to B  Qty Latin Name 34 Caltha palustris	Japanese Skimmia 'Rubella' Lamb's Ear Mexican feather grass Basin Common Name Marsh Marigold	20-30cm 40-60cm Height at Purchase 0.5L	3L 3L Rate/sqm 3 Plants/sq m		10 10	
142 Skimmia japonica 'Rubella' 34 Stachys byzantina 32 Stipa tenuissima  Marginal / Aquatic Planting to B  Qty Latin Name	Japanese Skimmia 'Rubella' Lamb's Ear Mexican feather grass Gasin Common Name	20-30cm 40-60cm Height at Purchase	3L 3L Rate/sqm			
142 Skimmia japonica 'Rubella' 34 Stachys byzantina 32 Stipa tenuissima  Marginal / Aquatic Planting to B  Qty Latin Name 34 Caltha palustris 34 Eleocharis palustris 68 Iris pseudacorus 50 Lythrum salicaria	Japanese Skimmia 'Rubella' Lamb's Ear Mexican feather grass Fasin Common Name Marsh Marigold Common Spike-rush	20-30cm 40-60cm Height at Purchase 0.5L 0.5L 0.5L	3L 3L Rate/sqm 3 Plants/sq m 3 Plants/sq m 3 Plants/sq m 3 Plants/sq m		10	
142 Skimmia japonica 'Rubella' 34 Stachys byzantina 32 Stipa tenuissima  Marginal / Aquatic Planting to B  Qty Latin Name 34 Caltha palustris 34 Eleocharis palustris 68 Iris pseudacorus 50 Lythrum salicaria 34 Mentha aquatica	Japanese Skimmia 'Rubella' Lamb's Ear Mexican feather grass  Sasin Common Name Marsh Marigold Common Spike-rush Yellow Flag Iris Purple Loosestrife Water Mint	20-30cm 40-60cm Height at Purchase 0.5L 0.5L 0.5L 0.5L	3L 3L Rate/sqm 3 Plants/sq m	2	10 10 15 10	
142 Skimmia japonica 'Rubella' 34 Stachys byzantina 32 Stipa tenuissima  Marginal / Aquatic Planting to B  Qty Latin Name 34 Caltha palustris 34 Eleocharis palustris 68 Iris pseudacorus 50 Lythrum salicaria 34 Mentha aquatica 50 Myosotis scorpioides	Japanese Skimmia 'Rubella' Lamb's Ear Mexican feather grass  Fasin Common Name Marsh Marigold Common Spike-rush Yellow Flag Iris Purple Loosestrife Water Mint Water Forget-me-not	20-30cm 40-60cm Height at Purchase 0.5L 0.5L 0.5L 0.5L 0.5L	3L 3L Rate/sqm 3 Plants/sq m	2	10 10 15 10 15	
142 Skimmia japonica 'Rubella' 34 Stachys byzantina 32 Stipa tenuissima  Marginal / Aquatic Planting to B  Qty Latin Name 34 Caltha palustris 34 Eleocharis palustris 68 Iris pseudacorus 50 Lythrum salicaria 34 Mentha aquatica 50 Myosotis scorpioides 44 Juncus effusus	Japanese Skimmia 'Rubella' Lamb's Ear Mexican feather grass  Sasin Common Name Marsh Marigold Common Spike-rush Yellow Flag Iris Purple Loosestrife Water Mint	20-30cm 40-60cm Height at Purchase 0.5L 0.5L 0.5L 0.5L 0.5L 0.5L	Rate/sqm 3 Plants/sq m 4 Plants/sq m	2	10 10 15 10	
142 Skimmia japonica 'Rubella' 34 Stachys byzantina 32 Stipa tenuissima  Marginal / Aquatic Planting to B  Qty Latin Name 34 Caltha palustris 34 Eleocharis palustris 68 Iris pseudacorus 50 Lythrum salicaria 34 Mentha aquatica 50 Myosotis scorpioides	Japanese Skimmia 'Rubella' Lamb's Ear Mexican feather grass  Sasin Common Name Marsh Marigold Common Spike-rush Yellow Flag Iris Purple Loosestrife Water Mint Water Forget-me-not Common Rush	20-30cm 40-60cm Height at Purchase 0.5L 0.5L 0.5L 0.5L 0.5L	3L 3L Rate/sqm 3 Plants/sq m	2	10 10 15 10 15	
142 Skimmia japonica 'Rubella' 34 Stachys byzantina 32 Stipa tenuissima  Marginal / Aquatic Planting to B  Qty Latin Name 34 Caltha palustris 34 Eleocharis palustris 68 Iris pseudacorus 50 Lythrum salicaria 34 Mentha aquatica 50 Myosotis scorpioides 44 Juncus effusus	Japanese Skimmia 'Rubella' Lamb's Ear Mexican feather grass  Sasin Common Name Marsh Marigold Common Spike-rush Yellow Flag Iris Purple Loosestrife Water Mint Water Forget-me-not Common Rush	20-30cm 40-60cm Height at Purchase 0.5L 0.5L 0.5L 0.5L 0.5L 0.5L	Rate/sqm 3 Plants/sq m 4 Plants/sq m	2	10 10 15 10 15	
142 Skimmia japonica 'Rubella' 34 Stachys byzantina 32 Stipa tenuissima  Marginal / Aquatic Planting to B  Qty Latin Name 34 Caltha palustris 34 Eleocharis palustris 68 Iris pseudacorus 50 Lythrum salicaria 34 Mentha aquatica 50 Myosotis scorpioides 44 Juncus effusus 79 Alisma plantago aquatica  Bulb Planting  Qty Latin Name	Japanese Skimmia 'Rubella' Lamb's Ear Mexican feather grass  Sasin Common Name Marsh Marigold Common Spike-rush Yellow Flag Iris Purple Loosestrife Water Mint Water Forget-me-not Common Rush	20-30cm 40-60cm Height at Purchase 0.5L 0.5L 0.5L 0.5L 0.5L 0.5L 0.5L	Rate/sqm 3 Plants/sq m 4 Plants/sq m	2	10 10 15 10 15	
142 Skimmia japonica 'Rubella' 34 Stachys byzantina 32 Stipa tenuissima  Marginal / Aquatic Planting to B Qty Latin Name 34 Caltha palustris 34 Eleocharis palustris 68 Iris pseudacorus 50 Lythrum salicaria 34 Mentha aquatica 50 Myosotis scorpioides 44 Juncus effusus 79 Alisma plantago aquatica  Bulb Planting Qty Latin Name 614 Galanthus nivalis	Japanese Skimmia 'Rubella' Lamb's Ear Mexican feather grass  Sasin Common Name Marsh Marigold Common Spike-rush Yellow Flag Iris Purple Loosestrife Water Mint Water Forget-me-not Common Rush Water Plantain  Common Name Snowdrop	20-30cm 40-60cm Height at Purchase 0.5L 0.5L 0.5L 0.5L 0.5L 0.5L 0.5L 0.5L	3L 3L Rate/sqm 3 Plants/sq m 4 Plants/sq m 7 Plants/sq m Rate/sqm 20 Plants/sq m	2	10 10 15 10 15	
142 Skimmia japonica 'Rubella' 34 Stachys byzantina 32 Stipa tenuissima  Marginal / Aquatic Planting to B  Qty Latin Name 34 Caltha palustris 34 Eleocharis palustris 68 Iris pseudacorus 50 Lythrum salicaria 34 Mentha aquatica 50 Myosotis scorpioides 44 Juncus effusus 79 Alisma plantago aquatica  Bulb Planting  Qty Latin Name 614 Galanthus nivalis 614 Hyacincthoides non-scripta	Japanese Skimmia 'Rubella' Lamb's Ear Mexican feather grass  Sasin Common Name Marsh Marigold Common Spike-rush Yellow Flag Iris Purple Loosestrife Water Mint Water Forget-me-not Common Rush Water Plantain  Common Name Snowdrop English Bluebell	20-30cm 40-60cm Height at Purchase 0.5L 0.5L 0.5L 0.5L 0.5L 0.5L 0.5L 0.5L	3L 3L 3L Rate/sqm 3 Plants/sq m 4 Plants/sq m 7 Plants/sq m Co Plants/sq m 20 Plants/sq m	2	10 10 15 10 15	
142 Skimmia japonica 'Rubella' 34 Stachys byzantina 32 Stipa tenuissima  Marginal / Aquatic Planting to B Qty Latin Name 34 Caltha palustris 34 Eleocharis palustris 68 Iris pseudacorus 50 Lythrum salicaria 34 Mentha aquatica 50 Myosotis scorpioides 44 Juncus effusus 79 Alisma plantago aquatica  Bulb Planting Qty Latin Name 614 Galanthus nivalis	Japanese Skimmia 'Rubella' Lamb's Ear Mexican feather grass  Sasin Common Name Marsh Marigold Common Spike-rush Yellow Flag Iris Purple Loosestrife Water Mint Water Forget-me-not Common Rush Water Plantain  Common Name Snowdrop	20-30cm 40-60cm Height at Purchase 0.5L 0.5L 0.5L 0.5L 0.5L 0.5L 0.5L 0.5L	3L 3L Rate/sqm 3 Plants/sq m 4 Plants/sq m 7 Plants/sq m Rate/sqm 20 Plants/sq m	2	10 10 15 10 15	

### PLANTING SPECIFICATION - POS LANDSCAPE PROPOSALS

These implementation and maintenance guidelines are for planning purposes only to indicate the level of workmanship to be specified and do not constitute a detailed specification.

#### GENERAL

1.1. All landscape operatives will be appropriately trained, certified and qualified to undertake the tasks required. When required, the relevant certificates will be made available for inspection. All work is to be carried out in accordance with the relevant British Standards, Codes of Practice and Legislation.

1.2. All plants shall conform to BS 3936 and be in accordance with the National Plant Specification. Supplying nurseries shall be registered under the HTA Nursery Certification Scheme. All plants shall be packed and transported in accordance with the Code of Practice for Plant Handling as produced by CPSE. 1.3. Prior to planting soil percolation tests will be undertaken to ensure the soil is free draining and that planting will not become waterlogged. If soil is not free draining the landscape architect should be informed and advice should be sought from a soil scientist, following which remediation/drainage solutions undertaken to ensure planting will thrive.

1.4. Planting shall not be carried out when the ground is waterlogged, frost bound or during periods of cold drying winds. All bareroot planting stock will be kept covered until actually planted in order to minimise water-loss and prevent the roots from drying out. Tree handling, storage and planting shall be in accordance with BS 8545 Chapters 9 to 10 and Annexes E to F.

1.5. The landscape contractor shall maintain all areas of new planting for a period of 12 months following practical completion. All stock deemed to be dead, dying or diseased within the defects period shall be replaced by the contractor at his own cost.

1.6. A minimum intervention approach will be used in terms of weed control. In areas of transplant tree/shrub or ornamental shrub planting this is to be achieved by using mulch mats and hand-weeding. Weed killer and other chemicals will be used as little as possible on site. Spot removal of weeds will be carried out by hand removal as necessary.

#### 2. TREE PLANTING

Ground Preparation and Tree Pit Excavation

2.1. Where necessary remove existing weeds by hand. Chemical removal using a glyphosate-based herbicide will be avoided unless large areas need clearing following which allow a suitable period to elapse, as recommended by the manufacturer, for the herbicide to take effect.

2.2. Tree pits of at least 75mm diameter greater than the root system and no deeper than the rootball / container depth are to be excavated and the sides well scarified to prevent smearing. All extraneous matter such as plastic, wood, metal and stones greater than 50mm in any dimension shall be removed from site. 2.3. During excavation of the pit, the soil dug should be placed to one side separating topsoil and subsoil as far as is practical.

2.4. Drainage: prior to tree planting a review of the soil type should be undertaken to ensure that the tree pit base will allow water to percolate, and the pit will not become waterlogged. If free vertical drainage will not occur through the base of the tree pit, then a drainage system must be put in place, such as connection to a land drain or additional excavation to reach the gravel seam. Professional advice should be sought from a soil scientist and, if required, a drainage engineer.

2.5. Trees shall be planted as per the planting arrangement as set out on the planting plan and plant

2.6. The typical rooting depth for trees is 900mm. The first 300mm shall be made up of topsoil; it shall be ensured that a suitable subsoil provides the remainder of the minimum rooting depth.

2.7. The root system of the tree should be wetted prior to planting. The tree should be planted at the correct depth considering the position of the root flare and the finished level - the rootball or root stem transition should be level with the existing host soil or surface. The base of the rootball should typically sit on subsoil, for larger root balls the subsoil will sit around the lower portion of the rootball.

2.8. Tree pits should be backfilled with the excavated topsoil, if the original topsoil is not available or deemed unsuitable, a multi-purpose topsoil should be used. Any subsoil excavated should be discarded and the subsoil depth (beyond 300mm deep) backfilled with a high sand content subsoil. Backfill should be added gradually, in layers of 150mm to 230mm depth, ensuring the tree is held upright At each stage the fill should be firmed in to eliminate all air pockets under and around the root system, but with care being taken not to excessively compact the soil. The final layer should not be consolidated.

2.9. General-purpose slow-release fertiliser (at the rate of 75gm/m2) and Tree Planting and Mulching Compost at the rate of (20litres/m2) are to be incorporated into the top 150mm of topsoil during final

2.10. All multi-stem trees are to be staked with a single diagonal stake, driven at 45 to the lead stem. 2.11. Standard trees are to be single staked with 75mm dia stakes. All extra heavy standard size trees are

to be double staked with 75mm dia stakes. Stakes should be driven at least 300mm into undisturbed ground before planting the tree, taking care to avoid underground services and cables etc. and should typically be one third the height of the tree stem above ground.

2.12. Staked trees shall be secured to stakes with suitable proprietary hessian or jute tree ties with approx. 50mm depth. A spacer is to be formed using the natural tree tie itself.

2.13. Immediately after planting, but before applying the below bark mulch, all trees should be saturated to

2.14. Ornamental composted bark mulch will be spread to a depth of 75mm across a 0.8m dia circle around individual trees, ensuring that the root flare and base of the stem, along with any ground cover plants, are not buried.

# 3. NATIVE HEDGEROW PLANTING

<u>Ground Preparation</u>

3.1. Where necessary existing weeds will be treated with a glyphosate-based herbicide and a suitable period allowed to elapse, as recommended by the manufacturer, for the herbicide to take effect.

3.2. All extraneous matter such as plastic, wood, metal and stones greater than 50mm diameter will be removed from site to a registered waste disposal facility. <u>Planting</u>

3.3. The planting arrangement shall be as set out in the plant schedule on the relevant planting plan.

3.4. Bare-root hedge plants shall be notch planted in a triple staggered row at the rate of 5 plants per linear metre (using L- shaped notches) using spades of a design suitable for this purpose. The notches must be vertical and deep enough for the roots to hang freely, with the transplant being planted so that the root collar is exactly level with the ground surface. The notch must then be closed, and the soil will be well firmed round the roots in line with the guidelines as set out in BS 4428 (1989).

3.5. Container-grown hedge plants will be planted into a pit dug 1.5x the diameter of the root mass, with the bottom and sides of the planting pit broken up to aid root expansion. The plants will be planted so that the root collar is exactly level with the ground surface.

3.6. All bare-root hedge planting stock will be protected from rabbit damage using approved proprietary 600mm plastic-free shrub guards (e.g. Greentech Bio-Earth Biodegradable Plastic-Free Shelter), supported with 0.9m 12/14lb canes as advised by the manufacturer.

3.7. All container-grown shrubs will be protected from rabbit damage using approved proprietary 600mm plastic-free shrub guards (e.g. Greentech Bio-Earth Biodegradable Plastic-Free Shelter), supported with 0.9m x 32 mm x 32mm softwood stakes as advised by the manufacturer.

Maintenance during first growing season 3.8. All dead, dying or diseased hedge plants will be replaced with plants of similar size and species. If the failure of the plant is due to disease and the disease is considered likely to re-occur, then an alternative

species may be used as replacement if agreed with the LPA. 3.9. The planting area will be kept weed free throughout the maintenance period using approved herbicides in April, June and August

## 4. NATIVE WOODLAND MIX PLANTING

<u>Ground Preparation</u>

<u>Planting</u>

4.1. Cut existing rough grass and weeds to between 20mm and 30mm and remove 300x300mm squares of turf.

4.2. The minimum overall recommended rooting depth for shrubs is 600mm and for trees is 900mm. The first 300mm shall be made up of multi-purpose topsoil; it shall be ensured that a suitable subsoil provides the remainder of the minimum rooting depth. Before receiving topsoil, subsoils should be loosened using ripping equipment; this shall be done when the subsoil is dry to encourage soil shattering All stones and other objects larger than 50 mm shall be removed from the prepared surface. 4.3. Shrub / tree planting is to be as per the planting pattern as set out on the planting plan and planting schedule, with shrubs / trees planted at even spaces into the prepared soil at the specified number per centre, with minimal disturbance to the rootball, and well firmed in. Planting should avoid man-made grids and lines, and should group species together in groups of 5-7 plants. Spread ornamental pine bark mulch to a depth of 75mm to a 900mm diameter around each planting station. 4.4. All bare-root planting stock will be protected from rabbit damage using approved proprietary 0.6m (for shrub species) or 1.2m (for tree species) plastic-free shrub/tree guards (e.g. Greentech Bio-Earth Biodegradable Plastic-Free Shelter), supported with 0.9m (or 1.35m for trees) x 32mm x 32mm softwood stakes as advised by the manufacturer.

4.5. All container-grown planting stock will be protected from rabbit damage using approved proprietary 600mm plastic-free shrub/tree guards (e.g. Greentech Bio-Earth Biodegradable Plastic-Free Shelter),, supported with 0.9m x 32mm x 32mm softwood stakes as advised by the manufacturer.

4.6. Using approved herbicides, a 900mm diameter circle centred on each planting station shall be kept weed free throughout the maintenance period. In the autumn following planting the CA will prepare a list of all plants which are dead, dying or diseased and are to be replaced during the following planting

4.7. Within the day of planting climber plants should be saturated to field capacity, this shall be done before applying the below bark mulch.

### 5. NATIVE SHRUB PLANTING

Ground Preparation

5.1. Cut existing rough grass and weeds to between 20mm and 30mm and remove 300x300mm squares of turf at 1/m<sup>2</sup>.

<u>Planting</u> 5.2. The minimum overall recommended rooting depth for shrubs is 600mm and for trees is 900mm. The first 300mm shall be made up of multi-purpose topsoil; it shall be ensured that a suitable subsoil provides the remainder of the minimum rooting depth. Before receiving topsoil, subsoils should be loosened using ripping equipment; this shall be done when the subsoil is dry to encourage soil shattering. All stones and other objects larger than 50 mm shall be removed from the prepared surface.

5.3. Shrub / tree planting is to be as per the planting pattern as set out on the planting plan and planting schedule, with shrubs / trees planted at even spaces into the prepared soil at the specified number per centre, with minimal disturbance to the rootball, and well firmed in. Planting should avoid man-made grids and lines and should group species together in groups of 5-7 plants. Spread ornamental pine bark mulch to a depth of 75mm to a 900mm diameter around each planting station. 5.4. All bare-root planting stock will be protected from rabbit damage using approved proprietary 0.6m (for shrub species) or 1.2m (for tree species) plastic-free shrub guards (e.g. Greentech Bio-Earth Biodegradable Plastic-Free Shelter), supported with 0.9m (or 1.35m for trees) x 32mm x 32mm softwood

5.5. All container-grown planting stock will be protected from rabbit damage using approved proprietary 600mm plastic-free shrub guards (e.g. Greentech Bio-Earth Biodegradable Plastic-Free Shelter),, supported with 0.9m x 32mm x 32mm softwood stakes as advised by the manufacturer.

5.6. Using approved herbicides, a 900mm diameter circle centred on each planting station shall be kept weed free throughout the maintenance period. In the autumn following planting the CA will prepare a list of all plants which are dead, dying or diseased and are to be replaced during the following planting

# SHRUB/ HERBACEOUS

stakes as advised by the manufacturer.

Shrubs/herbaceous plants are to be set out as shown on the drawing and pit planted into the prepared soil at the specified densities with minimal disturbance to the rootball and well firmed in.

6.2. Recommended rooting depths are 600mm for shrubs/herbaceous plants. Multi-purpose topsoil depths shall be 300mm for shrubs/herbaceous, ensuring that a suitable subsoil shall provide the remainder of the minimum rooting depth. Before receiving topsoil, subsoils should be loosened using ripping equipment, this shall be done when the subsoil is dry to encourage soil shattering. All stones and other objects larger than 50 mm shall be removed from the prepared surface

6.3. Within the day of planting shrub/herbaceous plants should be saturated to field capacity, this shall be done before applying the below bark mulch.

6.4. Spread ornamental pine bark mulch to a depth of 75mm across all new planted areas, taking care not to bury groundcover plants.

# MARGINAL / AQUATIC PLANTING

Marginal plants are to be set out as shown on the drawing and pit planted into the prepared soil at the specified densities with minimal disturbance to the rootball and well firmed in.

<u>Planting</u> Emergent plants plant into V' shaped trench at water's edge.

7.3. Submerged plants - replant container grown plants into hessian aquatic baskets prior to planting within the attenuation basin. Aquatic baskets should be part filled with aquatic compost with the plant planted to the same depth as the original container. Weights eg. rocks and stones to be added to the bottom of the basket for stability if required. Firm plants in well prior to installation into the ground.

## 8. AMENITY GRASS

8.1. Areas to be turfed or seeded shall be sprayed out with a glyphosate herbicide and cultivated to a depth of 100mm removing all weeds, debris and stones over 25mm diameter. The surface shall be raked to smooth flowing contours with a fine tilth. Amenity grass areas will receive pre-seeding fertiliser at 70 g/m2. Meadow grass areas will not be fertilised.

8.2. The minimum overall recommended rooting depth for grass is 450mm, the first 150mm shall be made up of a multi-purpose topsoil, it shall be ensured that a suitable subsoil shall provide the remainder of the minimum rooting depth. Before receiving topsoil, subsoils should be loosened using ripping equipment; this shall be done when the subsoil is dry to encourage soil shattering. All stones and other objects larger than 50 mm shall be removed from the prepared surface

8.3. Grass finish levels will be 25mm above surrounding kerbs, paving and plant bed edges.

8.4. Emorsgate EG22 Grass seed shall be sown either in April/May or September/October during calm weather and not when the ground is frost bound or waterlogged. Seed shall be sown in two equal sowings in transverse directions at 25 g/m2 for amenity grass. After sowing the contractor shall lightly rake the seed into intimate contact with the soil, and roll.

8.5. When newly seeded amenity grass areas reach 50mm they should be lightly rolled and cut to a height of 25mm. All arisings shall be removed. Any bare patches shall be made good at this time. Amenity grass shall be regularly maintained between 25 and 50mm during the first season after sowing. Long mown grass will be maintained between 50 and 75mm during the first season after sowing.

### 9. WILDFLOWER MEADOWS GRASSLAND

<u>Initial Cut</u>

9.1. Areas of wildflower meadow to be seeded shall be sprayed out with a glyphosate herbicide and cultivated to a depth of 100mm removing all weeds debris and stones over 75mm diameter. The surface shall be raked to smooth flowing contours with a fine tilth.

9.2. Seeds shall be sown either in April/May or September/October during calm weather and not when the ground is frost bound or waterlogged.

9.3. To achieve an even sowing, bulk with an inert carrier, such as sand. Seed shall be sown in two equal sowings in transverse directions at e.g. 4g/m<sup>2</sup> for Emorsgate: EM8, EL1, EM3 and EP1 After sowing the contractor shall roll in the seed to guarantee intimate contact with the soil, ensuring not to rake or cover the seed with soil.

<u>Initial Cut</u> 9.4. During first 12 months sward to be regularly cut to minimise competition and weed seed production. Cutting should be frequent enough to disperse the cuttings, or if less frequent remove the cuttings. Cutting to be suspended between April and July to allow flowering of the cornfield annuals. Most of the sown meadow species are perennial and are slow to establish. There will often be a flush of annual weeds from the soil in the first growing season.

9.5. Long-mown grass meadow (EM3) - Controlled weed growth by topping or mowing. Mow all plant growth (sown grasses and weeds) regularly to 40-60mm throughout the first growing season to prevent weeds smothering the slower growing grasses. Remove cuttings if dense, more frequent and regular topping will minimise the amount of toppings produced each time so they can be left to disperse. 9.6. Flowering lawn (EL1) - Mow newly sown flowering lawns regularly (every 7 -10 days during growing

season) throughout the first year of establishment. Cut to a height of 40-60mm, removing cuttings if dense. This will gradually develop a good sward structure, help maintain balance between faster growing grasses and slower developing wildflowers, and control annual weeds. Dig out any residual perennial

9.7. Wildflower meadow for seasonally wet soils (EM8) - Retain the flush of annual weeds, which offer shelter to the sown seedlings and habitat for insects. Do not cut the annual weeds until early August, then cut to a maximum of 40mm, remove and compost the cuttings. This will reveal the young meadow which can be kept short by mowing until the end of March the following year.

9.8. Pond edge (EP1) - In the first year, annual weed growth may be cut back to encourage the development of a good perennial ground cover. Establishment on sites prone to flooding may be patchy and may take several years to fully colonise.

9.9. Bulb planting is to be naturalistic in character and should not be planted in manmade grids or lines. Random planting can be achieved by evenly scattering the bulbs/corms over the marked out bulb planting area and planting where they fall.

9.10. Bulbs are to be planted at a depth suitable for each species with the base in contact with the bottom of the hole. The removed soil backfilled and firmed on top and, where relevant, the removed plug of turf neatly replaced after planting.

# 10. GENERAL MAINTENANCE

10.1. The Landscape contractor shall maintain all areas of new planting for a period of 12 months following practical completion. All stock deemed to be dead, dying or diseased within the defects period shall be replaced by the contractor at his own cost. The site is to be visited monthly throughout the year to undertake the Following operations:

Weed clearance: All planting areas to be kept weed free by hand weeding or herbicide treatment. Litter clearance: All litter is to be removed from planting beds.

Watering: All planted areas are to be watered for the first two years from May to September

following any dry periods of 7 days.

10.2. All trees are to be watered weekly from May to the end of September unless unnecessary due to heavy rain; to receive 20 gallons of water. All shrubs are to be watered for the first two years from May to September following any dry periods of 7 days. All tree ties and stakes are to be checked and adjusted if too loose, too tight or if chaffing is occurring. Any broken stakes are to be replaced. Any damaged shoots/branches are to be pruned back to healthy wood. Plants are to be pruned in accordance with good horticultural practice to maintain healthy, well-shaped specimens. Native shrubs - Using approved herbicides a 1m diameter circle centred on each planting station shall be kept weed free throughout the maintenance period. Stakes may be removed from Year 2 if plant is fully established and if shelter is suppressing further growth.

10.3. Hedge lines shall be kept mulched until established. At the end of the Defects Liability Period / First Year's Maintenance the CA will prepare a list of all plants which are dead, dying or diseased and are to be replaced during the following planting season at the contractor's expense.

10.4. See Landscape and Ecological Management Plan for further information.