



IMPLEMENTATION AND MAINTENANCE GUIDELINES

1.0 GENERAL

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. Planting shall not be carried out when the ground is waterlogged, frostbound or during periods of cold drying winds. All bare root stock shall be root dipped in an approved water-retaining polymer.

If the formation level is compacted it should be ripped through before topsoiling. Recommended topsoil depths are 450mm for shrubs and 150mm for grass.

All excavated areas to be backfilled with either topsoil from site or imported to be BS3862 - General purpose grade. All top soiled areas to be clear of rocks and rubble larger than 50mm diameter and any other debris that may interfere with the establishment of plants.

2.0 ORNAMENTAL SHRUBS AND TREES

All planting and associated operations shall comply with BS4043, BS4428 and BS5837.

2.1 Ground Preparation

Where necessary treat existing weeds with a glyphosate based herbicide and allow a suitable period as recommended by the manufacturer for this to take effect. A general purpose slow release fertiliser at the rate of 75g/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 cultivations. All extraneous matter such as plastic, wood, metal and stones greater than 50mm in any dimension shall be removed from site.

Tree pits to the specified size are to be excavated and the base broken up a further 150mm with the sides well scarified to prevent smearing. All trees up to and including selected standards are to be supported with single 75mm diameter stakes. All rootball, container grown and trees over heavy standard size shall be double staked. Pinus sylvestris are to be supported with an angled timber stake on the windward side. Stakes should be driven 500mm into undisturbed ground before planting the tree, taking care to avoid underground services and cables etc. Tree pits in soft landscape to be excavated to 500mm greater than the diameter of the rootball.

2.2 Planting

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

Trees are to be placed into the pits and backfilled with topsoil incorporating slow release fertilizer and Tree Planting and Mulching Compost as specified. Firm trees in well and secure with proprietary rubber tree ties and spacers. All trees to be planted within a 500mm diameter bark mulch area.

Water in all trees and shrubs at the end of each day of planting.

2.3 Maintenance

The landscape contractor shall maintain all areas of new planting for the period up to and for 12 months following practical completion under the terms of the S105 Agreement until handover to the adopting authority.

The site is to be visited monthly throughout the year to undertake the following operations.
Weed clearance: All planting areas are to be kept weed free by hand weeding or herbicide treatment.
Litter clearance: All litter is to be removed from planting beds.
Watering: Planting areas are to be brought up to field capacity at each visit and each tree is to receive 20 gallons.
Checking trees: 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.
Formative pruning: 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.

3.0 NATIVE SHRUB PLANTING

3.1. Ground Preparation

The extent of the planting area shall be set out using 38x38x1200mm timber stakes at each change in direction and at a maximum of 50m intervals.

Either : for notch planting

All herbaceous material within the proposed planting area shall be sprayed out using an approved herbicide at least two weeks before planting and the ground shall be cultivated to a depth of 150mm.

or : for pit planting

A 900mm diameter circle shall be sprayed out at each planting station using an approved herbicide at least two weeks before planting.

12 No. AUCJAR
4 No. BUDDAWHP
12 No. CORALS
12 No. CORSAMF
12 No. CORAV
12 No. PHOFRER
4 No. VINMINA

23 No. CORAV
141 No. CRAMON
14 No. ROSCA



Kickabout Area. 1. Football rebound wall, supplied by Playforce or similar approved. 3600 x 2035 x 195mm timber construction with goal markings. Footings to manufacturers design and specification.

The grass surface below the rebound wall must be mown with a hand mower initially and finished off with hand held shears in order to prevent it being damaged by ride-on mowers and strimmers.

KEY

Site boundary

Plot soft landscape proposals

Refer to drawings Bir.4372_01 & 02 for details.

Existing trees/vegetation to be retained

Existing trees/vegetation to be removed

Grass

Amenity grass seed mix to open space areas.

Litter bin

Ref: BX45 2596 'Derby Slimline' 90L perforated litter bin, coated in green as supplied by Broxap or similar approved.

Dog Waste Bin

Silurus post mounted dog bin supplied by Broxap or similar approved product

Easement

Indicative tree planting

Indicative tree planting to adjacent residential phase.

Areas of 'No Dig' to footpath

This section of footpath should be constructed in a 'No-Dig' fashion incorporating 'Cell-Web' protection to prevent any damage to the soil and roots of the existing trees. All works to be carried out in accordance with BS:5837:2012 'Trees in relation to design, demolition and construction.' Exact specification to be agreed by the site engineer before work commences.

PLANT SCHEDULE

TREES

REF	SPECIES	SUPPLY	SIZE(cm)	GIRTH(cm)	CTRS(m)
T1	Acer campestre	EHSId	425/600	14/16	as shown
T2	Carpinus betulus	EHSId	425/600	14/16	as shown
T3	Fagus sylvatica	EHSId	425/600	14/16	as shown
T4	Acer campestre	EHSId	350/425	12/14	as shown
T5	Prunus avium	EHSId	350/425	12/14	as shown
T6	Pinus sylvestris	10L	100/125	-	as shown
T7	Betula pendula	EHSId	350/425	12/14	as shown
T8	Alnus glutinosa	EHSId	350/425	12/14	as shown
T9	Liquidambar styraciflua	EHSId	450/625	16/18	as shown

For the installation of proposed trees please refer to drawing no. Bir.4372_10 for tree pit details. All trees to be planted in accordance with the implementation and maintenance guidelines. The tree planting schedule and landscape proposals must be referred to by the Structural Engineer during foundation design. No tree species, size or location should be altered without prior approval from the Landscape Architect.

SHRUBS MIX - to rear gardens walls

ABBR	SPECIES	SUPPLY	SIZE(cm)	HABIT	CTRS(m)
AUCJA	Aucuba japonica	5L	40/60	Bushy	0.75
CORALE	Cornus alba 'Elegantissima'	3L	80/100	Branched	0.75
ELAPUMA	Elaeagnus pungens 'Maculata'	5L	40/60	Bushy	0.75
FATJA	Fatsia japonica	5L	60/80	Bushy	0.75
PHOFRER	Photinia x fraseri 'Red Robin'	5L	60/80	Bushy	0.75
PRULU	Prunus lusitanica	5L	40/60	Bushy	0.75

SHRUBS MIX - to attenuation areas

ABBR	SPECIES	SUPPLY	SIZE(cm)	HABIT	CTRS(m)
CORALS	Cornus alba 'Sibirica'	3L	40/60	Branched	0.70
CORSA	Cornus alba 'Elegantissima'	3L	40/60	Bushy	0.70
CORSTF	Cornus stolonifera 'Flaviramea'	3L	40/60	Bushy	0.70
SAELL	Salix elaeagnos	3L	40/60	Bushy	0.70

SHRUB MIX - near play spaces

ABBR	SPECIES	SUPPLY	SIZE(cm)	HABIT	CTRS(m)
AUCJAR	Aucuba japonica 'Rozanne'	3L	60/80	Branched	1.00
BUDDAWHP	Buddleia 'White Profusion'	3L	40/60	Bushy	1.00
CORALS	Cornus alba 'Sibirica'	3L	40/60	Bushy	1.00
CORSAMF	Cornus sanguinea 'Midwinter Fire'	3L	40/60	Bushy	1.00
PHOFRER	Photinia x fraseri 'Red Robin'	3L	40/60	Bushy	1.00
VINMINA	Vinca minor	2L	20/30	Bushy	0.70

SHRUB MIX - low mix to headwalls

ABBR	SPECIES	SUPPLY	SIZE(cm)	HABIT	CTRS(m)
BERCAN	Berberis candidula	3L	40/60	Branched	0.60
CORSTK	Cornus stolonifera 'Kelsey'	3L	40/60	Bushy	0.60
LONPI	Lonicera pileata	3L	40/60	Bushy	0.60

All shrubs to be planted in accordance with the implementation and maintenance guidelines. No shrub species, size or location should be altered without prior approval from the Landscape Architect.

MEADOW MIXTURE FOR WETLANDS (EM8)

Wild flowers	(%)	Grasses	(%)
Achillea millefolium	Yarrow 0.5	Agrostis capillaris	Common Bent 12
Betonica officinalis	Betony 0.5	Alopecurus pratensis	Meadow Foxtail 4
Centaurea nigra	Common Knapweed 2	Anthoxanthum odoratum	Sweet Vernal-grass 2
Filipendula ulmaria	Meadowsweet 1.5	Cynosurus cristatus	Crested Dogtail 36
Galium verum	Lady's Bedstraw 1	Deschampsia cespitosa	Tufted Hair-grass 1
Leucanthemum vulgare	Orange Daisy 1.5	Festuca rubra ssp. juncea	Slender-creeping Red-Fescue 25
Lotus pedunculatus	Greater Bird-footed Trefoil 0.5		
Plantago lanceolata	Ribwort Plantain 1		
Primula veris	Cowslip 1		
Primula vulgaris	Selfheal 2		
Ranunculus acris	Meadow Buttercup 2.5		
Rhinanthus minor	Yellow Rattle 1.3		
Rumex acetosa	Common Sorrel 1		
Sanguisorba officinalis	Great Burnet 0.5		
Silene alba	Prayer Candle 1.5		
Silene flacca	Prayer Candle 0.2		
Succisa pratensis	Devil's-bit Scabious 0.5		
Vicia cracca	Tufted Vetch 1		

Sown at 4g/m²

GENERAL PURPOSE MEADOW MIXTURE (EM1)

Wild flowers	(%)	Grasses	(%)
Achillea millefolium	Yarrow 0.5	Agrostis capillaris	Common Bent 8
Centaurea nigra	Common Knapweed 2	Cynosurus cristatus	Crested Dogtail 40
Daucus carota	Wild Carrot 1	Festuca rubra ssp. juncea	Slender-creeping 28
Galium verum	Lady's Bedstraw 2	Red-fescue	
Leucanthemum vulgare	Oxeye Daisy 2	Phleum bertolonii	Smaller Cat's-tail 4
Plantago media	Hoary Plantain 2		
Prunella vulgaris	Selfheal 2		
Ranunculus acris	Meadow Buttercup 2		
Rumex acetosa	Common Sorrel 1		
Sanguisorba minor	Salad Burnet 3		
Silene dioica	Red campion 2.5		

Sown at 4g/m²

Grass seed mixtures to be sourced from certified local provenance seed stock. Ground surface will be cleared of weed growth either removed by hand or through the application of an approved Glyphosate based herbicide (all herbicides should only be handled by certified users and in accordance with the COSHH Regulations 2002). The ground will then be ploughed and raked to produce a medium tilth. Sowing operation will be carried out in Spring or late Autumn at a rate indicated. The grass will be allowed to establish over the first growing season with a single mowing operation in the Autumn to top out any weed growth. On-going mowing operations will be carried out either once annually in the Spring, or twice annually in Spring and Autumn if grass species become dominant. Grass will not be cut during late Spring and Summer months to allow flower and herb species to come to germinate.

BULBS

SPECIES	No./m ²
Crocus Dutch Collection (50% of area)	
'Queen of the Blues'	10
'Golden Yellow'	10
'Jeanne D' Arc'	10
Dwarf Daffodils (50% of area)	
'February Gold'	10
'Jet Fire'	10
'Canaliculatus'	10

All bulbs to be planted in accordance with the implementation and maintenance guidelines. No bulb species or location should be altered without prior approval from the Landscape Architect. Crocus and Daffodil bulbs to alternate every 2 linear metres.

NATIVE MIX HEDGEROW - to southern boundary

ABBR	SPECIES	SUPPLY	SIZE(cm)	Mix %	CTRS(m)
CORAV	Corylus avellana	60/80		12.5	0.30
CRAMON	Crataegus monogyna	T 1+1	60/80	80	0.30
ROSCA	Rosa canina	T 1+1	60/80	7.5	0.30

Hedgerow shrubs to be supplied as bareroot stock unless stated and to be planted in accordance with the implementation and maintenance guidelines. The landscape proposals must be referred to by the Structural Engineer during foundation design. No hedgerow shrub species, size or location should be altered without prior approval from the Landscape Architect. Hedgerow shrubs to be planted on at 300mm centres on a double staggered row, 250mm apart with no less than 6 per linear metre in accordance with implementation and maintenance guidelines.

