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.
Topsoil depths to be 450mm for shrub beds and 150mm for grass areas.

2.0 ORNAMENTAL SHRUBS AND TREES

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 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 cultivations. All extraneous matter such as plastic, wood, metal and stones greater than 50mm in any dimension shall be removed from site.

Tree pits 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. Any feature trees semi mature in size to be secured with a below ground anchoring system (such as a deadman anchor). Stakes should be driven 500mm into undisturbed ground before planting the tree, taking care to avoid underground services and cables etc.

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.

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

Spread ornamental pine bark mulch to a depth of 75mm across all new planting areas,ensuring groundcover plants are not buried

2.3 Maintenance
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 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.

3.2 Planting
All bare rooted stock is to be root dipped in water retaining polymer. Proposed planting is to be planted on an informal grid. To avoid straight lines each planting station can be moved by up to 300mm in any direction.

Either a for shelters or b for rabbit fence
a. All stock to be protected from rabbit damage using approved proprietory tree and shrub shelters, 900mm and 600mm high respectively, secured with stakes and ties as advised by the manufacturer.
b. All stock to be protected from rabbit damage by 900mm high rabbit fencing erected in accordance with the manufacturers recommendations.

3.3 Maintenance
Using approved herbicides a 900mm diameter circle centered on each planting station shall be kept weed free throughout the maintenance period.

Each Autumn after planting and until handover to the adopting authority, the contractor will prepare a list of all plants which are dead, dying or diseased and will replace these during the following planting season.

4.0 NATIVE HEDGE PLANTING

4.1 Setting Out
The hedge line shall be set out using 38x38x1200 stakes at maximum 50m intervals and all herbaceous material within 400mm of the centre line shall be sprayed out using an approved herbicide at least two weeks before planting.

4.2 Preparation
The 800mm wide hedge line shall be cultivated to 150mm incorporating Enmag or equal at 75gm/m2.

4.3 Planting
Plants shall be notch planted in two rows 250mm apart and staggered at 300mm centres.All plants are to be protected with a 600mm proprietary shelter secured with a stake(cane and ties as recommended by the manufacturer.

4.4 Maintenance
Using approved herbicides a 800mm wide swathe centred on the hedgeline shall be kept weed free throughout the maintenance period.

Each Autumn after planting and until handover to the adopting authority, the contractor will prepare a list of all plants which are dead, dying or diseased and will replace these plants during the following planting season.

5.0 GRASS

5.1 Preparation
The area 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 25mm diameter. The surface shall be raked to smooth flowing contours with a fine tilth, incorporating pre-seeding fertiliser at 70 g/m2.

5.2 Turf
Turfing operations shall be in accordance with BS 4428.

Whole turves shall be laid around the perimeter of the area to be turfed. The central area shall be laid in rows with staggered joints, well butted together, working from planks positioned on turves already laid. The turf shall be watered on completion. Any unevenness shall be made good by lifting the turf and adjusting the levels. Should shrinkage occur, fine topsoil shall be brushed into the joints.

5.3 Seeding
Grass seed shall be sown in April 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 35 g/m2. After sowing the contractor shall lightly rake the seed into intimate contact with the soil. All seed mixes to be specified in accordance with those set out in the approved management plan.

5.4 Initial cut
When newly seeded areas reach 50mm they should be cut back to a height of 30mm and then cut twice annually in early Spring and late Summer. All arisings shall be removed or spread evenly across grassland. Any bare patches shall be made good at this time.

6.0 TOPSOIL

6.1 Existing Topsoil
Pre-planting herbicide application:-
Apply by suitable spraying apparatus, an approved translocated systemic herbicide to the manufacturer's instructions and to 1997 Control of Pesticides Regulations and 2002 COSHH regulations on all beds, except those which are both weed free and are to receive agrotextile sheet mulch. Spray immediately if any weeds are present. If none are showing, but there may be a delay before planting, or the area is to be seeded, spray after one month following cultivation, to allow dormant seed to terminate. All spraying shall be carried out by skilled and qualified operatives, using protective clothing, in suitable weather (no wind) and any damage caused by spray drift, from incorrect usage or spillage, shall be rectified at the contractor's own cost. Repeat as necessary to ensure complete kill and rake off all dead material from site.

Carry out the following works to the existing topsoil on site to ensure it Conforms to BS 3882:2015, being free from rocks larger than 50mm diameter, concrete, all roots, wire, brick, and have less than 20% clay. Allow for pre-application of herbicide as above. Fertilize with 100g per metre square of Vitax "Nutricote 180" slow release fertilizer, in accordance with the manufacturer's instructions. For beds less than 5 metres in width, fork over thoroughly or machine rotavate soil to a depth of 300mm, ensuring that the subgrade and topsoil are completely broken up and free draining, relieving any compaction. For beds greater than 5 metres in width, break up the subgrade and topsoil using a tractor mounted subsoiler or ripper at 500mm centres to a depth of 500mm, except where there are services, or within 10 metres of tree stems or 3 metres of existing hedges. Do not rip areas where roots greater than 10mm diameter are encountered.

6.2 Imported Topsoil
Any imported topsoil for making up ground, shall conform to BS:3882:2015, and be free from rocks (over 50mm diameter), concrete, roots, wire and brick, and have less 20% clay.

7.0 WILDFLOWER AND GRASSLAND MIX

7.1 Preparation
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 with debris and stones over 25mm diameter reomved. The surface shall be raked to smooth flowing contours with a fine to medium tilth.

7.2 Seeding
Meadow and wildflower seed mixes shall be sown in either August -September or March -April 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 4 or 5 g/m2, according to supplier's recommendations. After sowing the contractor shall roll the seed into intimate contact with the soil with a ribbed Cambridge roller.

7.3 First year maintenance
All litter shall be removed from areas prior to mowing. The following procedures should not be undertaken in adverse weather conditions or if ground conditions prevent the use of machinery without damage to the ground surface. Mow regularly throughout the first year of establishment to encourage basal growth and reduce weed competition. All arisings shall be removed or deposited in an area designated by the Contracts Manager. Any bare patches shall be made good at this time.

7.4 Second and subsequent year maintenance
Management of subsequent years comprises a single Autumn cut in September or October to allow plants to set seed. Arisings shall be left for a minimum of 24 hours and a maximum of 7 days before being removed or relocated to an area identified by the Contracts Manager.

NOTES

All trees, feature shrubs, climbers, shrubs and hedgerows to be planted in accordance with the implementation and maintenance guidelines. All landscape proposals must be referred to by the Structural Engineer during foundation design. No tree, feature shrub, climber, shrub and hedgerow species, size or location should be altered without prior approval from the Landscape Architect.

- Individual shrub/herbaceous/grass species to be planted in groups of 3-7.
- Individual species within ornamental shrub mixes to be planted in groups of 5-9.
- Lower growing species within ornamental shrub mixes to be planted at the front of the shrub bed (as indicated).
- Individual bulbs species to alternate every 2 linear metres.
- Native hedgerow shrubs to be supplied as bareroot stock unless stated.
- Hedgerow shrubs to be planted within a 80cm wide bed and mulched.
- Any native hedgerow shrubs to be planted on a double staggered row, 250mm apart with no less than 6 per linear metre within a 50cm wide bed in accordance with implementation and maintenance guidelines. Any feathered stock is to have a upright central stem furnished with evenly spread and balanced lateral growth the full length of the stem. If feathered hedgerow stock is proposed, shrubs are to be attached to a double line support (one for feathered stock at 1m high and one for transplant stock at 60cm high) fence using an approved clip tie and cut back to 1.2m in height at time of planting.
- Pond marginal planting to be sourced from certified local provenance plant stock.
- Soiling operations to be carried out in accordance with the implementation and maintenance guidelines.
- All planting to be in accordance with the implementation and maintenance guidelines.
- No species, variety, size or position to be amended without the Landscape Architects prior approval.
- Before trees are planted, the Landscape Contractor shall ascertain the location of drains from the site manager, and shall if necessary make minor adjustments to tree positions to ensure that they are planted at least 1.5m from drains. They should however be planted no closer to houses/garages than is shown on the drawing, and if shown located in shrub beds, the shape of the latter should be adjusted if necessary to accommodate the revised tree position.
- All planting must be mulched in accordance with the implementation and maintenance guidelines.
- If planting is required outside the October-March season, bare root shrubs will be replaced by 3L pot grown plants, and trees will be replaced by a containerised equivalent to be approved by the project landscape architect.

PLANT SCHEDULE

PROPOSED TREES

ABBR	SPECIES	COMMON NAME	SUPPLY	HEIGHT (CM)	GIRTH	QTY (No.)
ACECAM	Acer campestre	Common Maple	EHStd	350–425cm	14–16cm	11 –
ACECAM	Acer campestre	Common Maple	HStd	300–400cm	12–14cm	18 –
ACEPLEQ	Acer platanoides 'Emerald Queen'	Emerald Queen Maple	EHStd	350–425cm	14–16cm	1 –
ALGL	Alnus glutinosa	Common alder	HStd	300–400cm	12–14cm	6 –
BEPE	Betula pendula	Common Silver Birch	EHStd	350–425cm	14–16cm	13 –
BETPE	Betula pendula	Common Silver Birch	HStd	300–400cm	12–14cm	11 –
PRUAV	Prunus avium	Gean or Wild Cherry	HStd	300–400cm	12–14cm	2 –
PRAV	Prunus avium	Gean or Wild Cherry	EHStd	350–425cm	14–16cm	2 –
PRPA	Prunus padus	Bird Cherry	HStd	300–400cm	12–14cm	7 –
QUEPE	Quercus petraea	Sessile Oak	EHStd	350–425cm	14–16cm	1 –
QUERO	Quercus robur	Common Oak	HStd	300–400cm	12–14cm	8 –
QUERO	Quercus robur	Common Oak	EHStd	350–425cm	14–16cm	6 –
SALFR	Salix fragilis	Crack Willow	HStd	300–400cm	12–14cm	4 –
SORAR	Sorbus aria	Whitebeam	HStd	300–400cm	12–14cm	6 –
SOAU	Sorbus aucuparia	European mountain ash	HStd	300–400cm	12–14cm	5 –
TICO	Tilia cordata	Littleleaf linden	HStd	300–400cm	12–14cm	8 –
TILEUR	Tilia europaea	Common Lime	HStd	300–400cm	12–14cm	3 –
					Total	:112 –

PROPOSED HEDGEROWS

ABBR	SPECIES	SUPPLY	HEIGHT (CM)	HABIT	CENTRES (M)	QTY (No.)
LIGVU	Ligustrum vulgare	5L	40–60cm	Bushy	0.5Ctr	435 –

PROPOSED NATIVE SHRUB MIXES

MIX NAME	ABBR	SPECIES	SUPPLY	HEIGHT (CM)	HABIT	CENTRES (M)	MIX %	QTY (No.)
NATIVE SHRUB MIX W	CORAV	Corylus avellana	T1+1	60–80cm	Transplant	2Ctr	20%	41 –
NATIVE SHRUB MIX W	CORSA	Cornus sanguinea	T1+1	60–80cm	Transplant	2Ctr	40%	78 –
NATIVE SHRUB MIX W	ILEAQ	Ilex aquifolium	2L	60–80cm	Bushy	2Ctr	12%	26 –
NATIVE SHRUB MIX W	LIGVU	Ligustrum vulgare	T1+1	60–80cm	Transplant	2Ctr	12%	26 –
NATIVE SHRUB MIX W	ROSCA	Rosa canina	T1+1	60–80cm	Transplant	2Ctr	8%	17 –
NATIVE SHRUB MIX W	VIBOP	Viburnum opulus	T1+1	60–80cm	Transplant	2Ctr	8%	17 –

PROPOSED NATIVE WOODLAND MIXES

MIX NAME	ABBR	SPECIES	SUPPLY	HEIGHT (CM)	HABIT	CENTRES (M)	MIX %	QTY (No.)
NATIVE WOODLAND MIX B	ACECAM	Acer campestre	T1+1	80–100cm	Transplant	2Ctr	10%	59 –
NATIVE WOODLAND MIX B	ALNGL	Alnus glutinosa	T1+1	80–100cm	Transplant	2Ctr	5%	31 –
NATIVE WOODLAND MIX B	CORAV	Corylus avellana	T1+1	80–100cm	Transplant	2Ctr	5%	31 –
NATIVE WOODLAND MIX B	CRAMON	Crataegus monogyna	T1+1	80–100cm	Transplant	2Ctr	5%	31 –
NATIVE WOODLAND MIX B	ILEAQ	Ilex aquifolium	2L	80–100cm	Bushy	2Ctr	15%	88 –
NATIVE WOODLAND MIX B	LIGVU	Ligustrum vulgare	T1+1	80–100cm	Transplant	2Ctr	5%	31 –
NATIVE WOODLAND MIX B	PRUAV	Prunus avium	T1+1	80–100cm	Transplant	2Ctr	5%	31 –
NATIVE WOODLAND MIX B	PRUSP	Prunus spinosa	T1+1	80–100cm	Transplant	2Ctr	5%	31 –
NATIVE WOODLAND MIX B	QUEILEA	Quercus ilex	T1+1	80–100cm	Transplant	2Ctr	10%	59 –
NATIVE WOODLAND MIX B	QUERO	Quercus robur	T1+1	80–100cm	Transplant	2Ctr	25%	144 –
NATIVE WOODLAND MIX B	TILCO	Tilia cordata	T1+1	80–100cm	Transplant	2Ctr	10%	59 –

PROPOSED SEMI-ORNAMENTAL MIXES

MIX NAME	ABBR	SPECIES	SUPPLY	HEIGHT (CM)	HABIT	CENTRES (M)	MIX %	QTY (No.)
SEMI ORN MIX B	BERDA	Berberis darwinii	5L	40–60cm	Bushy	0.7Ctr	15%	16 –
SEMI ORN MIX B	CORALE	Cornus alba 'Elegantissima'	3L	40–60cm	Branched	0.7Ctr	20%	21 –
SEMI ORN MIX B	CORSTF	Cornus stolonifera 'Flaviramea'	3L	60–80cm	Branched	0.7Ctr	20%	21 –
SEMI ORN MIX B	ELAEB	Elaeagnus ebbingei	5L	60–80cm	Bushy	0.7Ctr	10%	11 –
SEMI ORN MIX B	PHOFRRER	Photinia fraseri 'Red Robin'	5L	40–60cm	Bushy	0.7Ctr	10%	11 –
SEMI ORN MIX B	PYRCOLA	Pyracantha coccinea 'Red Column'	5L	30–40cm	Bushy	0.7Ctr	10%	11 –
SEMI ORN MIX B	VIBTI	Viburnum tinus	5L	40–60cm	Bushy	0.7Ctr	15%	16 –
WET MIX B	CORSA	Cornus sanguinea	3L	60–80cm	Branched	1Ctr	25%	25 –
WET MIX B	CORSTF	Cornus stolonifera 'Flaviramea'	3L	60–80cm	Branched	1Ctr	25%	25 –
WET MIX B	SALALVI	Salix alba vitellina	3L	40–60cm	Branched	1Ctr	25%	25 –
WET MIX B	SALCHEA	Salix alba 'Britzensis'	3L	40–60cm	Branched	1Ctr	25%	25 –

PROPOSED AMENITY SEED MIX (or similar approved)

MIX NAME	SEED MIX	SUPPLIER	AREA	DENSITY
A22 (Low Maintenance) Amenity	Germinal GB	Limited	4585.5687m²	50g/m²

PROPOSED WILDFLOWER MEADOW (or similar approved)

MIX NAME	SEED MIX	SUPPLIER	AREA	DENSITY
EM3 – Special Gen. Purpose Meadow	Emorsgate Seeds		6733.4671m²	4g/m²

PROPOSED WETLAND WILDFLOWER MEADOW (or similar approved)

MIX NAME	SEED MIX	SUPPLIER	AREA	DENSITY
EM8 – Meadow Mix for Wetlands	Emorsgate Seeds		299.3894m²	4g/m²

PROPOSED BASIC GENERAL PURPOSE MEADW MIX (or similar approved)

MIX NAME	SEED MIX	SUPPLIER	AREA	DENSITY
EM1– Basic Gen Purpose Meadow Mix	Emorsgate Seeds		1422.6494m²	4g/m²

KEY

Site boundary

Existing trees and vegetation to be retained

Existing trees and vegetation to be removed

Soft Landscape Proposals
Refer to plant schedule for details.

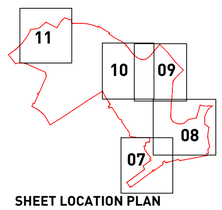
Litter bin
Ref: BX17 4030 'Okehampton Redwood' 120L timber litter bin, as supplied by Broxap or similar approved.

Bench seating
Ref: BX17 40001T 'Roslin Bench' steel framed timber slat version, as supplied by Broxap or similar approved. Bench to be installed with submerged fixing set in concrete footings to manufacturers specification.

Informal mown footpath
2.00m wide informal mown footpath through public open space.

Compacted gravel/hoggin footpath
2.00m wide 50mm rolled hoggin surface on 100mm type 1 sub base. To be timber edged and cambered on both sides to shed surface water. Fines are essential to ensure the surface compacts. Self binding gravel layer to be well compacted with vibratory roller.

Timber knee rail
400mm high timber knee rail fencing as supplied by Jacksons Fencing. Fence posts to be installed with submerged fixing set in concrete footings to manufacturers specification.



SHEET LOCATION PLAN
NTS

NORTH

Landscape Proposals to the Southern POS area based on Pegasus Phase 1 Tree and Native Shrub Planting Proposals (drawing ref: EMS-2383_15K)

E - (12/07/2022 JC) Updated to latest site layout.
D - (05/05/2021 EW) Updated to latest site layout.
C - (14/04/2021 EW) Updated to the latest phase 4 site layout and viewport scale amended to 1:250.
B - (07/09/2020 JZA) Updated to add woodland planting and remove mown footpath.
A - (01/09/2020 WM) Updated timber kneel rail and litter bin locations.
Revisions:

Broomy Farm (Phase 4)

Detailed POS Landscape Proposals (sheet 4 of 5)

Drawing Ref: **P19-2591_10E**
Client: **Bellway Homes East Mids**

Date : 28/08/2018
Drawn by : WM
Scale : 1 : 250@ A1

Pegasus Group

DESIGN ENVIRONMENT PLANNING ECONOMICS HERITAGE

Copyright Pegasus Planning Group Ltd. Crown copyright, All rights reserved. 2015 Emapsite Licence number 0100031673. Ordnance Survey Copyright Licence number 100042093. Promap Licence number 100020449 .
Pegasus accepts no liability for any use of this document other than for its original purpose, or by the original client, or following Pegasus Group express agreement to such use. T 01285641717 **www.pegasusgroup.co.uk**