



PROTECTION OF EXISTING VEGETATION

Existing vegetation to be retained on site shall be protected where necessary during works by a tree protective barrier, secured to a scaffold tubing frame with fluorescent tape to the top rail. Protective fencing shall be erected on the canopy dip line wherever possible. Laminated, waterproof A4 signs shall be fixed to the fence posts at 10m intervals bearing the words 'PROTECTED TREE ZONE - NO STORAGE OR OPERATIONS WITHIN FENCED AREA'.

Tracking of machinery, storage of chemicals and building materials shall not be permitted within the protected area. Leaks or spills should be removed immediately and the contaminated soil replaced. No bonfires shall be lit within 5m of the canopy spread. Any excavation work beneath the canopy spread shall be carried out by hand.

All works affecting trees within the development shall be subject to BS 5837:2012.

For all proposed trees centred in a location within 3.0m of the prospectively adoptable highway, root barrier membranes are to be installed on the tree side along the back edge of the highway boundary and are to extend a minimum of 3.0m in each direction from a point at its intersection with a perpendicular line drawn from the highway boundary to the tree trunk. Where a root barrier on the highway boundary strikes a driveway, footpath or other area of hardstanding, within a plot/POS then the remaining length of root barrier should extend back along the edge of the hardstanding into the plot/POS. Root barriers are to extend to a depth of 1000mm.

TREE PLANTING

A hierarchy of tree sizes will be used across the site. Semi-mature trees will be used at key focal points at the road junctions and as the centre feature of the seating area within the central POS. Extra heavy standards will be planted within the grass verges along the central boulevard. The avenue style tree planting will provide instant structure to the scheme. Plot frontages in key locations will be planted with heavy standard trees, whilst selected standards will be planted to all other plot frontages and within rear gardens at key focal point locations. Light standards will be planted along the lengths of new hedgerow planting and within rear gardens in order to extend the wildlife corridor through the site. Foundation design of new buildings shall accommodate proposed tree planting in accordance with MIBC guidelines.

Suggested tree species:

- Acer campestre (Ac)
- Acer campestre 'Streetwise' (AcS)
- Acer platanoides (Ap)
- Acer platanoides 'Autumnale' (PaA)
- Acer saccharinum (As)
- Aesculus hippocastanum (Ah)
- Ameiandier lamarkii (Al)
- Betula pendula (Bp)
- Betula utilis var. jacquemontii (Buj)
- Carpinus betulus (Cb)
- Carpinus betulus 'Frans Fontaine' (CbFF)
- Malus tschonoskii (M)
- Prunus avium 'Plena' (PaP)
- Prunus padus (Pp)
- Prunus subhirtella 'Autumnale' (PaA)
- Pyrus calleryana 'Chanticleer' (PcC)
- Quercus robur (Qr)
- Sorbus aria (Sa)
- Sorbus aria 'Latescens' (SaL)
- Sorbus aucuparia (Sa)
- Sorbus 'Golden Wonder' (SJR)
- Tilia cordata 'Green Spire' (TCGS)

SHRUB PLANTING

A combination of evergreen and deciduous shrubs with areas or herbaceous plants will be planted across the site. The plant species will be grouped to create distinct areas within the development. A mixture of shrub sizes will be used to emphasize key focal points and to create structure within individual beds.

Species to be selected from:

- (1) density/m2
- Berberis trifoliata 'Amsteher' (S)
- Berberis thunbergii 'Atropurpurea Nana' (S)
- Bergenia cordifolia 'Silberlicht' (S)
- Buddleia davidii 'Tachinich' (S)
- Ceanothus thyrsiflorus repens (S)
- Chaenomeles superba 'Jai Trail' (S)
- Cornus alba 'Spaethii' (S)
- Cornus stolonifera 'Flaviramea' (S)
- Conocanther conspicuus 'Decorus' (S)
- Conocanther laticus (S)
- Cytisus 'Algidol' (S)
- Elaeagnus pungens 'Maculata' (S)
- Escallonia 'Apple Blossom' (S)
- Eucymia fortunei 'Emerald Gaiety' (S)
- Festuca sp (S)
- Geranium 'Johnson's Blue' (S)
- Hebe alberti 'Red Edge' (S)
- Hebe 'Autumn Glory' (S)
- Hypericum x moerhousii (S)
- Juniperus sabina 'Tamariscifolia' (S)
- Lavandula 'Hidcot' (S)
- Lonicera 'Maygreen' (S)
- Lonicera 'Silver Beauty' (S)
- Nepeta 'fasciculata' (S)
- Perovskia 'Blue Spire' (S)
- Phlox paniculata 'Red Edge' (S)
- Prunus laurocerasus 'Zabelliana' (S)
- Pyracantha 'Orange Charm' (S)
- Rubus x Betty Ashburner (S)
- Spiraea 'Gold Flame' (S)
- Spiraea 'Shirobana' (S)
- Viburnum tinus 'Eve Price' (S)

HEDGE PLANTING

A mix of Beech Escallonia and Box hedging will be used throughout the site to create structure and definition to the site. The western POS will be provided on site. The western POS will provide an informal recreation area, with a mixture of native shrub planting and native hedgerow enclosing extensive wildflower meadow. The combination of different planting types will create an important series of interlinking wildlife habitats on site. The Central POS will be a more formal recreation area with a central seating area, LEAP and ornamental shrub and tree planting. The southern POS contains the attenuation basin for the site. The area will be planted with native shrubs, trees and hedgerows to the boundaries and the basin itself will be sown with a wildflower mix suitable for wet/damp conditions.

PUBLIC OPEN SPACE

Three Public Open Spaces (POS) will be provided on site. The western POS will provide an informal recreation area, with a mixture of native shrub planting and native hedgerow enclosing extensive wildflower meadow. The combination of different planting types will create an important series of interlinking wildlife habitats on site. The Central POS will be a more formal recreation area with a central seating area, LEAP and ornamental shrub and tree planting. The southern POS contains the attenuation basin for the site. The area will be planted with native shrubs, trees and hedgerows to the boundaries and the basin itself will be sown with a wildflower mix suitable for wet/damp conditions.

Occasional hedgerow tree specimens of native species planted at intervals through the length of the hedge.

SITE BOUNDARIES

The existing boundary vegetation will be retained and cut back to form manageable hedgerows. Additional hedgerow planting will take place along all boundaries outside of private gardens. In addition to the hedgerows, standard trees and where space permits, areas of native shrubs will be planted. The boundary planting will create a robust green boundary to the site which will provide an attractive edge to the development and important wildlife habitats and food sources.

Native hedge will be composed of the following species mix:

Acer campestre	5%
Corylus avellana	10%
Crataegus monogyna	40%
Hex aquileum	5%
Quercus percinervis	5%
Prunus spinosa	20%
Rosa canina	10%
Viburnum opulus	5%

Occasional hedgerow tree specimens of native species planted at intervals through the length of the hedge.

ECOLOGICAL ENHANCEMENTS

The proposed landscape scheme includes the following measures in order to comply with the recommendations in the Extended Phase 1 Habitat Survey Report by SLR (Ref: 424-03696-00024) September 2014:

- To retain the value of the site for nesting and foraging birds landscape planting comprises a mix of native and semi native shrubs and trees that provide cover and berries and fruits using species such as Hawthorn, Blackthorn, Crab Apple and Rowan and nectar bearing and wildlife attracting ornamental and herbaceous species.
- Existing hedgerows around the perimeter of the site are to be retained and gapped up as necessary in order to retain and strengthen the existing wildlife corridor. 20 integral bat boxes are to be incorporated into the construction of selected properties (where shown on the plan).
- Wildflower meadows are to be incorporated into the 2 perimeter POS areas to enhance the foraging territory for bats.
- Enhancement of grass snake breeding areas will be incorporated into the POS area. Piles of cut grass will be left in the areas marked on the plan. See Landscape Management Document for detailed actions.

Rev.H: Amended to Technical Layout 2017-083-01 REV AC (MN)

Rev.G: Amended to Technical Layout 2017-083-01 REV Q (EW)

Rev.F: Amended to Technical Layout 2017-083-01 REV N (EW)

Rev.E: Amended to Technical Layout 2017-083-01 REV C (EW)

Rev.D: Amended to Technical Layout 2017-083-01 REV B (EW)

Rev.C: Amended to incorporate Ecological recommendations

Rev.B: Re-plan in line with YW-04-03 AA Proposed Site Layout, (EW)

Rev.A: Minor amendments to POS

Sue Farmer BA MA MA Landscape Architect

Westleigh Hall
Dorset Dale
Huddersfield HD6 2DZ
Telephone 01484 866161
Fax 01484 866166
Email info@fdalandscape.co.uk
www.fdalandscape.co.uk

client
Barratt Homes

project
**Residential Development
CARRS LANE,
CUDWORTH**

drawing title
LANDSCAPE MASTERPLAN

scale 1:500 @A0	date Oct 15	drawn by EW	checking no R/1789/1H
-----------------------	----------------	----------------	--------------------------

KEY

- Existing tree to be retained and protected
- Existing tree to be removed
- Proposed Extra heavy standard (14-16cm girth) tree
- Proposed heavy standard (12-14cm girth) tree
- Proposed selected standard (10-12cm girth) tree
- Proposed light standard (6-8cm girth) tree
- Proposed Beech hedging
- Proposed evergreen flowering hedge (Escallonia)
- Proposed instant box hedging
- Proposed native hedge
- Proposed low native shrub mix
- Proposed native tree and shrub mix
- Proposed ornamental shrub planting
- Proposed turf
- Rear gardens
- Proposed short mown amenity grass
- Proposed infrequently mown amenity grass
- Proposed wildflower meadow
- Proposed hedgerow edge wildflower seed
- Decorative gravel over geotextile membrane
- 1800mm High Close Board Timber Fence (F1)
- 1800mm Screen Wall + Fence (W1)
- 450mm High Timber Knee Rail (F2)
- Ball top metal railings (Detailed by others)
- 1.5m post and rail stockproof fence (F3) (Detailed by others)
- Retaining walls (Detailed by others)
- 450mm high raised tree planter to POS
- Proposed Bat box - Istock Enclosed Box C finished in a material to match the house
- Proposed Reptile habitat - mounds of cut grass for reptile egg incubation - see detail sheets, Biodiversity and Ecological Management Plan and Landscape Management Document