



Redrow Homes Ltd.

Land off Jacksons Lane, Etwall

LANDSCAPE AND ECOLOGICAL MANAGEMENT PLAN

February 2022

FPCR Environment and Design Ltd

Registered Office: Lockington Hall, Lockington, Derby DE74 2RH

Company No. 07128076. [T] 01509 672772 [F] 01509 674565 [E] mail@fpcr.co.uk [W] www.fpcr.co.uk

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1.0 INTRODUCTION

- 1.1 The following Landscape and Ecological Management Plan (LEMP) has been prepared by FPCR Environment and Design Ltd. on behalf of Redrow Homes Ltd. in response to Condition 10 of the Reserved Matters planning consent (DMPA-2021-0164), for development at land off Jacksons Lane, Etwall, which states:

- 1.2 Condition 10:

- 1.3 *The Landscape and Ecological Management Plan as per condition 21 attached to the Outline permission for the site shall follow on from the details provided within the Ecological Design Strategy November 2020 by FPCR as received by the Local Planning Authority on 25 January 2021 which supports this application, with the enhancements and design initiatives shown on the plan within this document updated accordingly to reflect the latest site and landscape layout.*

- 1.4 Condition 21 of the Outline Permission (Application No: 9/2017/1191 South Derbyshire District Council dated 14/11/2017) states:

Prior to the construction of a dwelling a Landscape and Ecological Management Plan (LEMP) shall be submitted to and approved in writing by the Local Planning Authority.

The content of the LEMP shall include the following:

- a) a description and evaluation of features to be created and managed, which shall include the incorporation of bat roost and bird box features;*
- b) ecological trends and constraints on site that might influence management;*
- c) aims and objectives of management;*
- d) appropriate management options for achieving aims and objectives;*
- e) prescriptions for management actions;*
- f) preparation of a work schedule (including an annual work plan capable of being rolled forward over a ten-year period);*
- g) details of the body or organisation responsible for implementation of the plan, along with funding mechanism(s) for that body or organisation; and*
- h) ongoing monitoring and remedial measures, including where monitoring shows that conservation aims and objectives of the LEMP are not being met.*

Where biodiversity enhancement measures are incorporated into dwellings or private gardens to those dwellings, the submitted LEMP shall also include a method of communicating the purpose of such biodiversity enhancement measures to occupiers of those dwelling(s). The approved scheme shall be implemented so that any physical measures are incorporated before the first occupation of each respective dwelling, or use of the garden or open space concerned, and thereafter retained and maintained.

Reason: In order to safeguard and enhance habitat on or adjacent to the site in order to secure an overall biodiversity gain.

- 1.5 This document should be read in conjunction with the detailed Landscaping plans for the site (drawing numbers GL1451 03D, GL1451 04D, GL1451 05C and GL1251 06D, golby + luck landscape architects) and the Site Layout Plan included at Appendix A.

Site Location and Context

- 1.6 The site located to the south west of Etwall, Derbyshire (central grid ref: SK 27131 30977). Approximately 8.7 hectares in size, the site comprises three arable fields with rough grassland margins, bound and divided by species poor hedgerows and a single species rich hedgerow to the north west. A thin strip of mixed plantation woodland runs the length of the southern boundary, adjacent to Jacksons Lane and along part of the boundary to the east. Residential gardens and allotments are present immediately to the north-west of the site, with the remaining wider area encompassing arable fields and improved and semi-improved grassland.

Development Proposals

- 1.7 Proposals include the development of 50 residential dwellings, associated public green space and sustainable urban drainage (SUDs) features.

Responsibility for Implementation

- 1.8 Responsibility for implementation of the LEMP will fall into two parts:
- Management required during the construction stage, which will be the responsibility of the developer Redrow Homes; and
 - Post-development, management will be the responsibility of an appointed management company, with funding derived via the mechanism contained within the signed Section 106 Agreement.

Legislation & Policy

- 1.9 All relevant EU and UK nature conservation law will be adhered to in relation to the protection of ecological features and ecological enhancement/management. This includes the protection afforded to great crested newts (GCN) under the Conservation of Habitats and Species Regulations 2017 (as amended), and the protection afforded to reptiles and nesting birds under the Wildlife and Countryside Act 1981 (as amended).
- 1.10 The presence of Habitats of Principal Importance under Natural Environment and Rural Communities Act (NERC) 2006, Local Biodiversity Action Plan habitats, and non-statutory designated Local Wildlife Sites (LWS) should also be considered (including hedgerows, wet ditches and the adjacent woodland).

Health and Safety

- 1.11 Redrow Homes Ltd. and their appointed contractors will assume all responsibility with regards to health and safety when implementing the management plan.

2.0 DESIGN AND MANAGEMENT OBJECTIVES

Key Objective

- 2.1 The principal conservation objective for the development is to enhance the nature conservation value of the retained and newly created habitats.

- 2.2 To ensure this objective is achieved, monitoring will form an integral part of the LEMP, as detailed within section 5.

Overall Aims

- 2.3 The landscape and ecological design/ management aims are as follows:
- To safeguard and enhance the biological and physical integrity of retained habitats along the field boundaries and the boundaries of the site;
 - To provide high quality habitats within the green infrastructure and open spaces of the site of visual, recreational and nature conservation value;
 - To provide habitats of value to a range of faunal species/groups, maintaining and enhancing populations of protected/notable species identified within the site and in the local area;
 - To enhance public awareness and appreciation of the habitats and associated flora and fauna of the site;
 - To comply with legal obligations and constraints.
- 2.4 The LEMP will provide a framework to balance the use of the site as a residential area with the wildlife interests within and adjacent the site; this will be crucial to prevent any conflict of interest between its conservation and its amenity value.

3.0 LANDSCAPE AND ECOLOGICAL SPECIFICATION

- 3.1 Existing habitats will be retained where feasible within the development and will be protected throughout the enabling and construction phases.
- 3.2 The Plan will create a matrix of new and existing habitats and corridors through the site to encourage the establishment and movement of wildlife.
- 3.3 The following section outlines the aims and objectives of the habitat creation proposed, with specifications and prescriptions to implement these, with **Section 4** outlining the management regime and works programme to achieve this.

General

- 3.4 Shrub, tree and hedgerow planting are to be delivered and planted in accordance with HTA Standard 'Handling and establishing landscape plants' (obtainable from the Horticultural Trades Association) Part III, paragraphs 6.2 to 6.6 and should also accord with the planting plans. All plants should be stored only when necessary in accordance with the HTA's 'Handling and establishing landscape plants' (obtainable from the Horticultural Trades Association) Part I, Part II and Part III, paragraphs 1.3.3 to 1.3.6, 3.0, and 4.0.
- 3.5 Planting is to remain materially undamaged, sturdy, healthy and vigorous, planted upright or well balanced with best side to front. Trees and shrubs are to be of good shape and without elongated shoots, grown in a suitable environment and hardened off before being delivered to the site. All planting is to be true to name, of UK provenance and free from pests, diseases, discoloration, weeds, fungus and physiological disorders.

- 3.6 All trees should take into consideration the recommended minimum distances to foundations as set out in Chapter 4.2 of the NHBC Standards. Planting should accord with these standards unless checked and verified by the project engineer. For further species calculations refer to Chapter 4.2 of the NHBC Standards, and for species not included use a mature height of 2/3 the specified height in A. Mitchell's 'Trees of Britain and Northern Europe'.
- 3.7 All works are to be undertaken with due diligence being sure to leave the works in a clean and tidy condition at completion and after any maintenance operations. Protect areas affected by planting operations using boards/ tarpaulins and do not place excavated or imported material directly on adjacent grassed areas.
- 3.8 Bare root deciduous planting shall be carried out from late October to late March; conifers and evergreens either September/October or April/May, herbaceous plants [including aquatic and marginal] September/October or March/April. Container grown plants at any time of year if ground and weather conditions are favourable. Bare root deciduous planting to be carried out only during suitable ground and weather conditions. Planting shall not be carried out in waterlogged or frozen ground.

Native Shrub and Hedgerow Planting

- 3.9 Hedgerows are identified as a Habitat of Principal Importance (HPI) as listed within Section 41 of the Natural Environment and Rural Communities (NERC) Act 2006.
- 3.10 Hedgerow planting will include the creation of a new hedgerow adjacent to H4, while existing hedgerows will be gapped up and enhanced, improving connectivity around the site. Hedgerows H3 and H6 will also be reinforced with boundary planting of native shrubs.
- 3.11 Native shrub planting will provide screening and integration into the wider area at the development boundaries and between the development and areas of open green space, mitigating for the loss of hedgerow habitat as a result of the proposed access route.
- 3.12 New hedgerows will be planted during the planting season (October to March inclusive) and will comprise mixed, native species, planted at 0.4m double staggered rows (DSR) or 0.3m triple staggered rows (TSR), as per the detailed Landscaping Plans.
- 3.13 Native shrub planting should also take place between October and March, with plants set in holes at the same depth at which they were previously growing. Planting holes should be excavated approximately 150mm larger than the root balls and backfilled with a mixture of topsoil. Plants to be a minimum of 300mm from any adjacent hard surface. All stock to be well watered when planted with 20L of water per m².
- 3.14 Following planting and watering operations, all new hedgerow planting/ beds are to be mulched with 75mm of mulch (5-75mm particle size, British origin, FSC certified)
- 3.15 Individual spiral guards and bamboo canes will be required to prevent damage to saplings by browsing rabbits.

Species	Stock	Height (cm)
<i>Corylus avellana</i>	1+1	60-80
<i>Crataegus monogyna</i>	1+1	60-80/125-150
<i>Ilex aquifolium</i>	3L	60-80
<i>Prunus spinosa</i>	1+1	60-80

<i>Viburnum opulus</i>	1+1	60-80
<i>Rosa canina</i>	1+1	60-80
<i>Cornus sanguinea</i>	1+1	60-80
<i>Lonicera periclymenum</i>	2L	60-80
<i>Ligustrum vulgare</i>	2L	60-80

Tree Planting

- 3.16 Specimen tree planting will be undertaken across the site in order to provide structural diversity and to enhance connectivity across the green infrastructure. Standard trees will also be planted either side of the access breaches created within hedgerows H4 and H5, to form a 'hop-overs' for foraging and commuting bats.
- 3.17 Planting will equate to an area equivalent to or higher than the hedgerow lost for access.
- 3.18 New trees should be planted between October and March, avoiding periods of inundation or prolonged ground frost. This will accord with BS 8545:2014. Trees are to be mulched using wood chippings or bark to establish a 1m diameter around the tree stem.
- 3.19 Four types of specimen tree planting are proposed, as detailed within the following table:

Planting zone	Species	Girth (cm)	Height (cm)
Feature Trees	<i>Acer campestre</i> 'Elsrijk'	20-25	600+
	<i>Liquidambar styraciflua</i> 'Worplesdon'	20-25	600+
	<i>Fagus sylvatica</i> 'Purpurea'	20-25	600+
Street/On plot	<i>Magnolia kobus</i>	14-16	425-600
	<i>Amelanchier arborea</i> 'Robin Hill'	16-18	425-600
	<i>Acer campestre</i> 'Elsrijk'	18-20	450-625
	<i>Acer platanoides</i> 'Emerald Queen'	18-20	450-625
	<i>Prunus avium</i> 'Plena'	18-20	450-625
	<i>Betula pendula</i>	18-20	450-625
	<i>Sorbus aucuparia</i> 'Cardinal Royal'	18-20	450-625
	<i>Malus triobata</i>	18-20	450-625
	<i>Pyrus calleryana</i> 'Chanticleer'	18-20	450-625
	<i>Alnus glutinosa</i>	10-12	300-350
Public open space	<i>Betula pendula</i>	10-12	300-350
	<i>Acer campestre</i>	12-14	350-425
	<i>Carpinus betulus</i>	12-14	350-425
	<i>Malus sylvestris</i>	12-14	350-425
	<i>Prunus avium</i>	12-14	350-425
	<i>Quercus robur</i>	12-14	350-425
	<i>Sorbus aucuparia</i>	12-14	350-425
	<i>Sorbus torminalis</i>	12-14	350-425

Planting zone	Species	Girth (cm)	Height (cm)
Rear Garden Trees	<i>Tilia cordata</i>	12-14	350-425
	<i>Betula pendula</i>	8-10	250-300
	<i>Malus 'Golden Hornet'</i>	8-10	250-300
	<i>Pyrus communis 'Beech Hill'</i>	8-10	250-300
	<i>Sorbus aria</i>	8-10	250-300

Ornamental Hedgerow Planting

- 3.20 Plants must be set in the holes at the same depth at which they have previously been growing with planting holes excavated approximately 150mm larger than the root balls and backfilled with a mixture of topsoil.
- 3.21 Plants to be a minimum of 300mm from any adjacent hard surface. All stock to be well watered when planted with 20L of water per m². Following planting and watering operations, all beds are to be mulched with 75mm of mulch (5-75mm particle size, British origin, FSC certified)
- 3.22 Ornamental hedgerow will comprise the following species:

Species	Height (cm)	Form
<i>Elaeagnus x ebbingei</i>	60-80	10L
<i>Ligustrum ovalifolium</i>	60-80	5L
<i>Viburnum tinus 'Eve Price'</i>	60-80	10L

Shrub Planting

- 3.23 Ornamental and specimen shrub planting will include small to medium sized evergreen and deciduous plants, with the specimen shrubs adding height and structure. Species will be selected to maximise food and nectar opportunities for birds, small mammals and invertebrates.
- 3.24 Plants must be set in the holes at the same depth at which they have previously been growing with planting holes excavated approximately 150mm larger than the root balls and backfilled with a mixture of topsoil.
- 3.25 Plants to be a minimum of 300mm from any adjacent hard surface. All stock to be well watered when planted with 20L of water per m². Following planting and watering operations, all beds are to be mulched with 75mm of mulch (5-75mm particle size, British origin, FSC certified).

Type	Species	Height (cm)	Form
Specimen	<i>Phormium 'Dazzler'</i>	100-125	25L
	<i>Phormium 'Jester'</i>	100-125	25L
	<i>Phormium 'Yellow Wave'</i>	100-125	25L
On Plot (Area A)	<i>Alchemilla mollis</i>	-	5L
	<i>Berberis thunbergii 'Atropurpurea Nana'</i>	30-40	10L
	<i>Brachyglottis 'Sunshine'</i>	40-60	10L
	<i>Ceanothus thyrsiflorus repens</i>	60-80	10L
	<i>Choisya 'Aztec Pearl'</i>	40-60	10L
	<i>Euonymus fortunei 'Emerald 'n' Gold'</i>	30-40	10L

Type	Species	Height (cm)	Form
On Plot (Area B)	<i>Hebe 'Purple Queen'</i>	40-60	10L
	<i>Hypericum androsaemum 'Autumn Blaze'</i>	30-40	10L
	<i>Lavandula angustifolia 'Hidcote'</i>	30-40	10L
	<i>Prunus laurocerasus 'Otto Luyken'</i>	60-80	10L
	<i>Salvia officinalis 'Purpurascens'</i>	30-40	5L
	<i>Skimmia x confusa 'Kew Green'</i>	40-60	10L
	<i>Aucuba japonica 'Rozannie'</i>	40-60	10L
	<i>Berberis candidula</i>	30-40	10L
	<i>Choisya x dewitteana 'White Dazzler'</i>	40-60	10L
	<i>Euonymus fortunei 'Emerald Gaiety'</i>	30-40	10L
	<i>Hebe 'Mrs Winder'</i>	40-60	10L
	<i>Hebe rakaiensis</i>	40-60	10L
	<i>Heuchera micrantha 'Palace Purple'</i>	-	5L
	<i>Lavandula angustifolia 'Munstead'</i>	30-40	10L
	<i>Pachysandra terminalis 'Variegata'</i>	30-40	5L
	<i>Prunus laurocerasus 'Otto Luyken'</i>	60-80	10L
	<i>Santolina chamaecyparissus</i>	40-60	10L
	<i>Skimmia japonica 'Perosa'</i>	40-60	10L
	<i>Stachys byzantina 'Silver Carpet'</i>	-	5L
	<i>Tiarella cordifolia</i>	-	5L
On Plot (Area C)	<i>Viburnum davidii</i>	40-60	10L
	<i>Choisya ternata 'Sundance'</i>	40-60	10L
	<i>Cistus corbariensis</i>	30-40	10L
	<i>Geranium macrorrhizum</i>	-	5L
	<i>Hebe 'Marjorie'</i>	40-60	10L
	<i>Hebe albicans 'Red Edge'</i>	30-40	10L
	<i>Lavandula angustifolia 'Hidcote'</i>	30-40	10L
	<i>Lonicera nitida 'Baggesen's Gold'</i>	40-60	10L
	<i>Potentilla fruticosa 'Abbotswood'</i>	40-60	10L
	<i>Prunus laurocerasus 'Zabeliana'</i>	60-80	10L
	<i>Rosmarinus officinalis</i>	40-60	10L
	<i>Sarcococca hookerana humilis</i>	30-40	10L
	<i>Skimmia japonica 'Rubella'</i>	40-60	10L
Screen Mix	<i>Aucuba japonica 'Crotonifolia'</i>	60-80	10L
	<i>Cornus alba 'Elegantissima'</i>	60-80	3L
	<i>Elaeagnus pungens 'Maculata'</i>	60-80	10L
	<i>Fatsia japonica</i>	60-80	10L
	<i>Photinia x fraseri 'Red Robin'</i>	80-100	10L
	<i>Prunus lusitanica</i>	80-100	10L

Woodland Buffer Planting

- 3.26 New woodland planting will include a range of fruit/flower/ seed bearing species to provide foraging opportunities for a wide range of vertebrate and invertebrate wildlife. New trees should be planted between October and March, avoiding periods of inundation or prolonged ground frost. Woodland planting should be well heeled, protected by rabbit proof guards with a cane support.
- 3.27 New native woodland planting will comprise the following species:

Species	Height (cm)	Form
<i>Acer campestre</i>	125-150	Whip :3/5 brks :BR
<i>Corylus avellana</i>	60-80	1+1 :3/5 brks :BR
<i>Crataegus monogyna</i>	60-80	1+1 :3/5 brks :BR
<i>Ilex aquifolium</i>	40-60	Bushy
<i>Lonicera periclymenum</i>	60-80	1+1 :3 brks :BR
<i>Malus sylvestris</i>	125-150	Whip :3/5 brks :BR
<i>Prunus avium</i>	125-150	Whip :3/5 brks :BR
<i>Prunus spinosa</i>	60-80	1+1 :3 brks :BR
<i>Quercus robur</i>	125-150	Whip :3/5 brks :BR
<i>Rosa canina</i>	60-80	1+1 :3 brks :BR
<i>Rubus fruticosus</i>	60-80	1+1 :3 brks :BR
<i>Salix caprea</i>	125-150	Whip :3/5 brks :BR
<i>Sorbus aucuparia</i>	125-150	Whip :3/5 brks :BR
<i>Tilia cordata</i>	125-150	Whip :3/5 brks :BR
<i>Viburnum opulus</i>	60-80	1+1 :3 brks :BR

Amenity Meadow

- 3.28 New areas of meadow grassland will be seeded with **Emorsgate EM1-General Purpose Meadow Mix**.
- 3.29 Areas to be sown will be first rotovated and raked or harrowed to produce a medium fine, firm tilth. Fertiliser will not be applied at any point as this will lead to dominance of nutrient loving species such as broad-leaved grasses, nettles and docks. The seed mix will be sown at 4g/m² as per the general manufacturer's recommendation to allow space for each species to establish and to produce good ground cover.
- 3.30 Seed will be sown in the autumn or spring, selecting a time when the soil is moist and can be worked. Seeding will be sown by hand broadcasting, seed fiddle, spinner, hydroseeding or grass seed drill on the surface and will not be raked or harrowed in. The seed will be firmed in with a roll or by treading to give good soil/seed contact.

Species		% Composition
<i>Centaurea nigra</i>	Common Knapweed	2.5
<i>Daucus carota</i>	Wild Carrot	0.5
<i>Leucanthemum vulgare</i>	Oxeye Daisy	1
<i>Plantago lanceolata</i>	Ribwort Plantain	2.5
<i>Prunella vulgaris</i>	Selfheal	0.5
<i>Ranunculus acris</i>	Meadow Buttercup	1

<i>Vicia cracca</i>	Tufted Vetch	2
<i>Agrostis capillaris</i>	Common Bent	9
<i>Cynosurus cristatus</i>	Crested Dogstail	36
<i>Festuca rubra</i>	Red Fescue	27
<i>Poa pratensis</i>	Smooth-stalked Meadow-grass	18

Amenity grassland

- 3.31 Formal areas of public open space will incorporate short sward amenity grassland, seeded with **Emorsgate EL1 Flowering Lawn Mix**, or a similar approved species. Such mixes withstand regular short mowing, whilst still providing biodiversity benefit. Mowing can be relaxed over the summer where appropriate.
- 3.32 Areas to be sown will be first rotovated and raked or harrowed to produce a medium fine, firm tilth. Seed will be sown in the autumn or spring, selecting a time when the soil is moist and can be worked. The seed mix will be sown at 4g/m² as per the general manufacturer's recommendation to allow space for each species to establish and to produce good ground cover.
- 3.33 The above seed mix includes many perennial species that can be slow to germinate and grow. Ground cover will therefore likely take longer to develop than conventional lawn sowings and may take 12-18 months to knit together as turf. Newly seeded areas will therefore be protected from seedling destruction by pedestrians, where appropriate. There may be a flush of annual weeds during the first growing season, which can be controlled with repeated mowing.

Type	Species		% Composition
Wildflowers	<i>Galium verum</i>	Lady's Bedstraw	4
	<i>Leontodon hispidus</i>	Rough Hawkbit	0.5
	<i>Leucanthemum vulgare</i>	Oxeye Daisy - (Moon Daisy)	1
	<i>Lotus corniculatus</i>	Birdsfoot Trefoil	3.7
	<i>Primula veris</i>	Cowslip	3
	<i>Prunella vulgaris</i>	Selfheal	4
	<i>Ranunculus acris</i>	Meadow Buttercup	3.5
	<i>Trifolium pratense</i>	Wild Red Clover	0.3
Grasses	<i>Agrostis capillaris</i>	Common Bent	8
	<i>Cynosurus cristatus</i>	Crested Dogstail	40
	<i>Festuca rubra</i>	Slender-creeping Red-fescue	28
	<i>Phleum bertolonii</i>	Smaller Cat's-tail	4

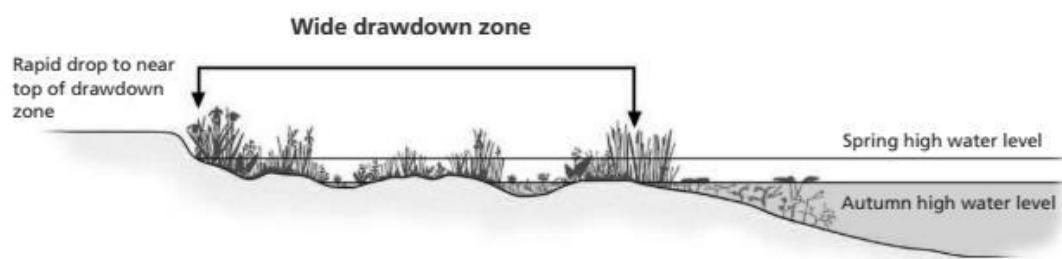
Attenuation Basin/ Swales

SUDs

- 3.34 The SUDs should incorporate gently sloping sides, maximising the drawdown zone and focusing on edge habitats. If necessary, the outer edge can be dug steeply to reach the desired depth, with a broad, flat drawdown zone then created at the water's edge. This will create differing conditions of light and temperature and will thus maximise and encourage a diversification in the flora and associated fauna. The shallowest areas could grade into an expanse of seasonally wet mud that

may attract a further variety of invertebrates and plants, which will, in turn, attract other fauna including birds and other mammals. The drawdown zone should be contoured and gently undulated to increase diversity within the wetland zones. Margins should be shallow to maximise productivity and the potential for wildlife, and have shelves of low gradients, gently shelving to the detention basin base.

Figure 1: Wide drawdown zones are beneficial to wildlife (© Million Ponds Project)



Swales

- 3.35 Where it does not compromise flow and infiltration requirements, swales should incorporate undulating depressions to allow the development of temporary pools.

Seeding

- 3.36 SUDs basins and swales will be seeded with **EM8 Meadow Mixture for Wetland**, with species able to accommodate periodically wet conditions.
- 3.37 Wet grassland seed will be sown at 4g/m² as per the general manufacturer's recommendation to allow space for each species to establish, and to produce good ground cover. Areas to be sown will be first rotovated and raked or harrowed to produce a medium fine, firm tilth. Fertiliser will not be applied at any point as this will lead to dominance of nutrient loving species such as broadleaved grasses, nettles and docks. The Contractor will protect newly seeded areas to prevent seedling destruction by pedestrians.
- 3.38 Seed will be sown at a time when the soil is moist and can be worked, in the autumn (October) or early spring (March), and not during the summer months. Seeding will be sown by hand broadcasting, seed fiddle, spinner or grass seed drill on the surface and will not be raked or harrowed in. A Cambridge (ribbed) roll is recommended to be used for one or two passes to firm and level the surface and create good seed soil contact. During initial establishment the grassland should be mown when it reaches 100mm in length for the first year.

EM8 – Meadow Mixture for Wetlands

Type	Species		% Composition
Wildflowers	<i>Achillea millefolium</i>	Yarrow	0.2
	<i>Centaurea nigra</i>	Common Knapweed	2
	<i>Filipendula ulmaria</i>	Meadowsweet	2
	<i>Galium verum</i>	Lady's Bedstraw	1.5

	<i>Geum rivale</i>	Water Avens	0.5
	<i>Iris pseudacorus</i>	Yellow Iris	0.2
	<i>Leucanthemum vulgare</i>	Oxeye Daisy - (Moon Daisy)	1.5
	<i>Lotus corniculatus</i>	Birdsfoot Trefoil	1
	<i>Lotus pedunculatus</i>	Greater Birdsfoot Trefoil	0.04
	<i>Plantago lanceolata</i>	Ribwort Plantain	1
	<i>Primula veris</i>	Cowslip	0.4
	<i>Prunella vulgaris</i>	Selfheal	2
	<i>Pulicaria dysenterica</i>	Common Fleabane	0.5
	<i>Ranunculus acris</i>	Meadow Buttercup	0.46
	<i>Rhinanthus minor</i>	Yellow Rattle	1
	<i>Rumex acetosa</i>	Common Sorrel	1
	<i>Sanguisorba officinalis</i>	Great Burnet	1.5
	<i>Silene silaus</i>	Pepper Saxifrage	1
	<i>Taraxacum officinale</i>	Dandelion	1
	<i>Thalictrum flavum</i>	Common Meadow-rue	0.2
	<i>Vicia cracca</i>	Tufted Vetch	1
Grasses	<i>Agrostis capillaris</i>	Common Bent	10
	<i>Alopecurus pratensis</i>	Meadow Foxtail (w)	3
	<i>Anthoxanthum odoratum</i>	Sweet Vernal-grass (w)	3
	<i>Briza media</i>	Quaking Grass (w)	3
	<i>Cynosurus cristatus</i>	Crested Dogstail	24
	<i>Deschampsia cespitosa</i>	Tufted Hair-grass (w)	2
	<i>Festuca rubra</i>	Slender-creeping Red-fescue	32
	<i>Hordeum secalinum</i>	Meadow Barley (w)	3

Marginal planting

- 3.39 While new ponds often show a rapid rate of natural colonisation, planting the SUDs with marginal vegetation will speed up this process and help to provide immediate habitat for wildlife.
- 3.40 Marginal vegetation should not exceed 20% of the open water. Plugs will be planted out in April or May when frosts have passed. Plants should be planted at a density of 4 plants per m², firmly heeled in to prevent plants being dislodged/floating away.

Species	Supply/ Pot Size
<i>Butomus umbellatus</i>	Plug: Well Rooted/ 195cc min
<i>Carex acuta</i>	Plug: Well Rooted/ 195cc min
<i>Carex pendula</i>	Plug: Well Rooted/ 195cc min
<i>Eleocharis palustris</i>	Plug: Well Rooted/ 195cc min
<i>Glyceria maxima</i>	Plug: Well Rooted/ 195cc min
<i>Iris pseudacorus</i>	Plug: Well Rooted/ 195cc min
<i>Juncus effusus</i>	Plug: Well Rooted/ 195cc min

Juncus inflexus

Plug: Well Rooted/ 195cc min

Lythrum salicaria

Plug: Well Rooted/ 195cc min

Sagittaria sagittifolia

Plug: Well Rooted/ 195cc min

Insect Hotels

- 3.41 Insect hotels will be installed to increase the diversity of invertebrates on site.
- 3.42 This should include either:
- A large habitat i.e. Corsica Insect Lodge/Wildlife World Minibeast HQ
 - Several smaller insect towers/hotels i.e. CJ Wildlife Insect tower/ Woodstone Insect block/ Schwegler Clay and reed Insect nest
- 3.43 Alternatively, habitats could be created using materials from site by repurposing wooden pallets, bricks, pipe cut offs, branches (with holes drilled in) and old pieces of timber. Natural resources including lengths of bamboo cane, leaves, pinecones and hay/straw can be used to furnish the insect hotel. The habitat should be waterproof (i.e. slate/roofing felt used to cover the roof).
- 3.44 Insect hotels should be located in a warm sunny spot, facing south east or south, with some shelter. Smaller habitats attached to trees or existing features should be securely fixed approximately 1.5m off the ground on south facing features in sunlight or light shade.

Figure 2: Example Habitat created by repurposing materials from site (© National Trust)

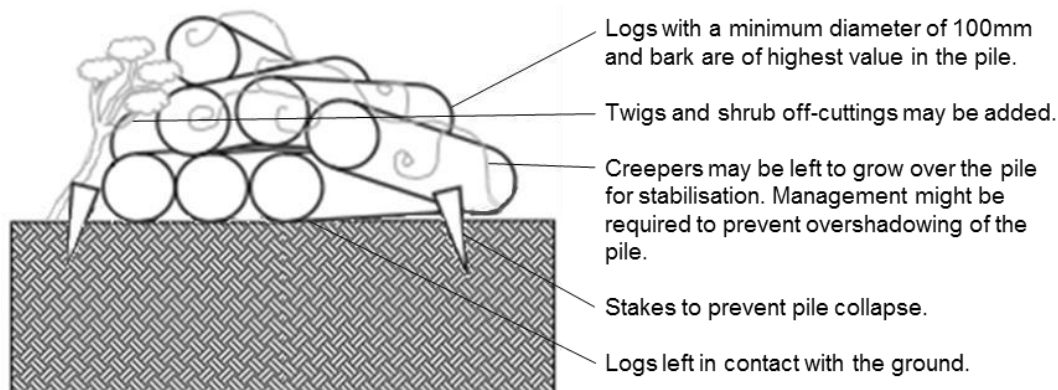


Log Piles

- 3.45 Log piles will ideally be created from tree work arisings from site and placed at the interface between hedgerow and informal grassland habitats, avoiding north facing areas. The logs should be left in contact with the ground in dappled shade and built into a compact pile to maintain humidity. Stakes should be driven into the ground either side of the log pile to prevent the pile from collapsing.
- 3.46 Larger diameter logs (at least 100mm thick) with bark are of most value, particularly hard wood like ash, oak and beech, whereas freshly cut willow and poplar may re-sprout. Twigs, stems and shrub

off-cuttings may also be added. Climbers may be allowed to grow thinly over the dead wood pile for stabilisation and moisture. Full sun will dry and heat the wood, supporting little life, whereas dense shade will promote the growth of fungi but may be too cool for insects.

Figure 3: Log Pile Detail



Bat and Bird Boxes

- 3.47 Bat and bird boxes will be installed across the development to provide additional roosting and nesting sites. Indicative locations can be found on Figure 1.
- 3.48 Bat boxes will be installed within the new development and onto suitably sized retained trees at the site boundary. Boxes should either be incorporated into the building fabric; built into the houses or garages, or installed as high as possible, at a minimum of 4m above ground i.e. at the buildings gable end. Boxes installed on trees should be sited between 3- 6m high. Boxes should be positioned so that the entrances are facing south-west to south-east, free of obstacles (such that there is a clean and clear flight path into them) and situated away from artificial light sources.
- 3.49 The following will be installed across the site:
- 10 x Bat boxes suitable for common and soprano pipistrelle *Pipistrellus pipistrellus*/ *Pipistrellus pygmaeus*; either in the form of integrated bat boxes such as the build-in WoodStone® bat box or wall mounted boxes such as the Eco Kent bat box.
- 3.50 Fifteen bird boxes will be installed in accordance with best practice, situated 1-5m above the ground, with care taken to avoid siting boxes above windows or on southern aspects. Entrances to the boxes should be free of obstacles such that there is a clean and clear flight path to the new potential nesting sites. Using a variety of nest box types will provide new suitable nesting opportunities for a range of birds and potentially encourage new bird species into the site.
- 3.51 The following boxes will be installed across the site on the sides of houses/garages / on mature retained trees:
- 5 x House Sparrow nest boxes i.e. Vivara Pro WoodStone House Sparrow Box (built in)/ House Sparrow Terrace FSC Nest Box
 - 5 x open fronted boxes suitable for robins, wrens, song thrush and blackbirds i.e Vivara Pro Barcelona WoodStone Open nest Box
 - 5x 32mm suitable for tit species, tree sparrows, nuthatches and pied flycatchers i.e Vivara Pro Seville 32mm WoodStone nest Box

- 3.52 Where boxes are installed on private dwellings, information will be provided within the sales literature to purchasers, explaining the importance of maintaining and increasing potential roosting and nesting sites for bats and birds. This should include information on the maintenance of boxes and state that any works required to bat boxes should be conducted by a licenced bat worker.

4.0 LANDSCAPE & ECOLOGICAL MANAGEMENT

- 4.1 The following section outlines the works programme and management regime for retained and newly created habitats present on site.

Table 1: Ten Year Management Works Programme

Prescriptions	Years with Priority									
	1	2	3	4	5	6	7	8	9	10+
Existing Retained Trees and Hedgerows										
Trees will be assessed by an experienced arboriculturalist or tree surgeon prior to works including tree removal necessary to permit creation of access paths and structures / bridges. Tree works will follow best practice procedures as set out in BS 3998:2010. No removal of woody vegetation will take place during the bird nesting season unless checked by a qualified Ecologist. Existing retained trees will be left unmanaged unless otherwise dictated for reasons of public safety.	✓									
Retained trees will be protected from damage and from soil compaction during construction using fenced Root Protection Areas (RPAs) where construction works are to be undertaken in the vicinity, in accordance with guidance in British Standard 5837:2012 – Trees in Relation to Design, Demolition and Construction – Recommendations.	✓									
Arisings from any woodland management activity will, where possible will be used to provide opportunities for invertebrates and bryophytes by forming micro-habitats from piles of dead wood or recumbent dead logs away from publicly accessible areas. Woodpiles will be created at the woodland edge and within the woodland interior. Where practical, piles will be situated in partial sunlight with some shade.	As required									
Side trimming of hedgerows in an 'A' profile to promote healthy hedgerow base. Hedgerows will be cut along one side annually, alternating between the two sides of the hedgerow each year.	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
In the long term, hedgerows will be taken through a Hedgerow Management Cycle (HMC) ¹ . The ten steps of the HMC are shown below. The cycle shows a healthy green core and two unhealthy red offshoots. The aim	As required									

¹ The Hedge Management Cycle (HMC). Art work by Will Field. Management Cycle concept developed by Nigel Adams. Hedgelink UK

Prescriptions	Years with Priority									
	1	2	3	4	5	6	7	8	9	10+
should be to keep the hedge in the green part (steps 3 to 8), periodically laying or coppicing it, with trimming at appropriate intervals in between. If the hedge is not permitted to go through this cycle, it will either, if cut too often, become short and gappy (steps 1 – 3) or, if neglected, develop into a line of trees (steps 8 to 10).										
Tree Planting										
A weed-free mulched 1m diameter circle around the tree stem to a minimum depth of 75mm. When trees have reached independence, the sward can be allowed to grow up to the trunk, although tall weeds, bramble and ivy will be removed from around the trees. Care will be taken when using strimmers or mowers to avoid damaging trees. Weeds and grass within 100mm of the trunks will be removed by hand.	✓	✓	✓	✓	✓					
Examine all tree stakes and ties, replace or adjust as appropriate. If the tree has yet to establish, replace or adjust ties, spacers and tree tubes as appropriate. If the tree has established well, then remove all stakes, ties, spacers, tubes etc. and make good surfaces disturbed – filling any holes with suitable topsoil.	✓	✓	✓	✓	✓					

Prescriptions	Years with Priority									
	1	2	3	4	5	6	7	8	9	10+
Replace failed specimens on a like-for-like basis. Top up mulch to a depth of 75mm where necessary.	✓	✓	✓	✓	✓					
Where periods of extreme drought occur, trees that have not yet established (not healthy, not in full leaf, suppressed growth) need to be watered where their tolerance to drought is deemed to be insufficient.	✓	✓	✓	✓	✓					
Native Shrub/ Hedgerow Planting										
Following planting, water hedgerows in periods of extreme drought (2 or more weeks without substantial rainfall) (new and translocated hedgerow planting).	✓	✓	✓	✓	✓					
Replace failed specimens on a like-for-like basis.	✓	✓	✓	✓	✓					
Examine all guards and replace or adjust as appropriate. Remove guards once hedgerows established	✓	✓	✓	✓	✓					
Spraying or strimming of weeds to reduce competition and aid establishment. Not required if weed suppression matting used.	✓	✓	✓	✓	✓					
Side trimming of hedgerows in an 'A' profile to promote healthy hedgerow base. Starting in year 4 after planting new hedgerows will be cut along one side annually, alternating between the two sides of the hedgerow each year. Top up mulch as required.				✓	✓	✓	✓	✓	✓	✓
Prune any diseased or rotten wood back to sound wood. Remove all cut material from site.				As required						
In the long term, hedgerows will be taken through a Hedgerow Management Cycle (HMC) ² . As above.				As required						
Ornamental Shrub Planting										
Following planting, water shrubs in periods of extreme drought (2 or more weeks without substantial rainfall).	✓	✓	✓	✓	✓					
Replace failed specimens on a like-for-like basis.	✓	✓	✓	✓	✓					
Remove weed growth by hand and top up mulch levels as necessary. Dead-head after flowering.	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Neatly prune back shrubs (no more than one third of woody growth) during October to March. Trim shrubs back from paths.			✓	✓	✓	✓	✓	✓	✓	✓
Neatly prune back and remove the spent stems and dead leaves of grasses during March - April. Care should be taken not damage the crown or emerging new growth.			✓	✓	✓	✓	✓	✓	✓	✓
Woodland Planting										
Replace failed specimens on a like-for-like basis	✓	✓	✓	✓	✓					
Examine all tree stakes and ties, replace or adjust as appropriate. If the tree has yet to establish, replace or adjust	✓	✓	✓	✓	✓					

² The Hedge Management Cycle (HMC). Art work by Will Field. Management Cycle concept developed by Nigel Adams. Hedgelink UK

Prescriptions	Years with Priority									
	1	2	3	4	5	6	7	8	9	10+
ties, spacers and tree tubes as appropriate. If the tree has established well, then remove all stakes, ties, spacers, tubes etc. and make good surfaces disturbed – filling any holes with suitable topsoil.										
Where periods of extreme drought occur, trees that have not yet established (not healthy, not in full leaf, suppressed growth) need to be watered where their tolerance to drought is deemed to be insufficient.	✓	✓	✓	✓	✓					
Meadow Grassland										
Following establishment grassland will be mown on a rotational basis with areas either being mown once during early spring (March) and autumn (October). A later cut will benefit moth species by providing a food source for longer, and subsequently provide increases foraging opportunities for bats in their active season of April to October.	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Grassland adjacent to hedgerows and woodland habitat will be cut once on alternate years with some ruderal species being allowed to colonise for further species and habitat diversity. Arisings will be left for 48 hours to allow dispersal of seeds and invertebrates prior to removal, to encourage grassland establishment and prevent soil enrichment and thatching.	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Spot treat persistent pernicious weeds using herbicide following the first season's growth and/or manual hand strimming of target areas either in late summer when adjacent grassland is mown or in early spring. Care will be taken when using herbicide adjacent to riparian and aquatic habitats to prevent pollution of such habitats.	As required									
Amenity Grassland										
During initial establishment of new grassland, it will be mown to a height of 50mm 6-8 weeks after germination and subsequently to a height of 35-40mm as required, but not more regularly than once every 4 weeks until such a time as a knitted turf is established. Once established, amenity grassland will be cut 16 times per year between March and October. Strimming should not occur within 100mm of tree stems.	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Mowing will be reduced during prolonged dry periods and the mowing height increased to 50mm at such times. Similarly in very wet conditions all grass cutting operations will cease until conditions allow for grass cutting to take place.	As required									
Spot treat persistent pernicious weeds using herbicide following the first season's growth and/or manual hand strimming of target areas either in late summer when adjacent grassland is mown or in early spring. Care will	As required									

Prescriptions	Years with Priority									
	1	2	3	4	5	6	7	8	9	10+
be taken when using herbicide adjacent to riparian and aquatic habitats to prevent pollution of such habitats.										
Attenuation Basins/SUDs										
Following establishment, the Wet Grassland in the basins will be cut on a rotational basis with no more than one third cut in any one year. The Wet Grassland will be cut during March or August/September, to create a varied structure of grassland habitat that will be of benefit to invertebrates, amphibians, reptiles and other species. Strimming should not occur within 100mm of tree stems.		✓	✓	✓	✓	✓	✓	✓	✓	✓
Excessive growth of unwanted plants can be removed by hand. Where large emergent species, such as reeds are present these may need regular management to maintain areas of open water and diversity of marginal habitats within the ponds. Management should ensure one or two species do not dominate the new site. Heavy equipment should not be used to avoid damage to soil and vegetation. Material removed will be left adjacent to the pond for 1-2 days to allow fauna to escape back to the pond before being removed and piled up elsewhere within the site as a habitat feature. Use of herbicide will be avoided except where invasive non-native species occur, in which case an eradication strategy will need to be determined, taking account of the relevant permissions and guidelines relating to the use of herbicides in and around waterbodies			✓	✓	✓	✓	✓	✓	✓	✓
Silt will be removed from the basin as and when required. Removal should take place in autumn/ winter when most wildlife will have left the water for winter on land. Any invertebrates or amphibians accidentally removed with the silt will be returned to the water.	As required									
Swales										
During establishment newly sown grassland will be mown regularly to a height of 40-60mm, with cuttings removed. This will help to control weed growth and maintain balance between faster growing grasses and slower developing wildflowers.	✓	✓								
Strim vegetation from ditches in September / October and remove arisings from site. Any residual perennial weeds (i.e., Docks) can be dug out or pulled by hand. Litter / debris within swales should be collected and removed from site prior to strimming.			✓	✓	✓	✓	✓	✓	✓	✓

Prescriptions	Years with Priority									
	1	2	3	4	5	6	7	8	9	10+
Marginal Planting										
The vegetation in each of the water bodies will be cleared on a rotational basis, starting at year 3. The basin will be cleared, between September and November, to create a varied structure of habitat that will be of benefit to invertebrates, amphibians and other species. The vegetation will be removed by hand. Machines and heavy equipment should not be used to avoid damage to soil and vegetation.			✓	✓	✓	✓	✓	✓	✓	✓
Dense stands of single species may benefit from selective thinning as required. Vegetation removal causes the least disruption to wildlife when carried out between September and November.	As Required									
Spot treat persistent pernicious weeds using herbicide following the first season's growth and/or manual hand strimming of target areas either in late summer when adjacent grassland is mown or in early spring. Care will be taken when using herbicide adjacent to riparian and aquatic habitats to prevent pollution of such habitats.	As Required									
Bird and Bat Boxes										
Bird boxes sited on trees should be inspected annually in later autumn or winter, with old nests/debris cleaned out to reduce parasite build-up. Where fixings have become loose or branches upon which boxes are fitted have been damaged, boxes should be re-fixed securely or moved to a safe location nearby. Only forestry approved aluminium nails should be used to secure boxes to trees.	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Bat boxes installed on trees/within communal areas of the site will be regularly inspected to ensure the fittings are secure and replaced where necessary. Any works required to bat boxes will be conducted by a licenced bat worker.	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Information on bird boxes sited on houses/garages will be provided within the sales literature, advising homeowners how to best maintain the boxes.	✓	✓								
Information on bat boxes sited on houses/garages will be provided within the sales literature, advising homeowners on maintenance. The literature should specify that any work required to the bat boxes should be carried out by a licenced bat worker.	✓	✓								
Fences and Gates										
Fencing and gates shall have a twice annual inspection in spring and autumn.	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Footpaths										

Prescriptions	Years with Priority									
	1	2	3	4	5	6	7	8	9	10+
Ensure access paths are free from weeds, trip hazards or other obstructions. This includes a once annual spray of weeds and any depressions / pits to be filled.	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Street Furniture										
Maintain all furniture in good condition. Should any part be damaged then prohibit use, obtain guidance and/ or repair or replace as required. Repaint as required.	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Once annual spray and weed around footings.	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Play Equipment										
Maintain all play equipment in good condition. Should any part be deemed below standard then prohibit use, obtain guidance and/ or repair or replace as required.	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Inspect on a regular basis to manufacturers / ROPSA requirements. Record inspections and any actions arising from inspections.	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
General										
Litter will be removed from the site as part of the general management and maintenance visits. All litter, stones or other debris will be collected and removed by the Contractor immediately prior to grass cutting operations. Alternatively, signs will be installed/maintained to encourage members of the public to take litter home.	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Ecological visual inspection by a qualified ecologist to provide baseline data for future surveys to be monitored against.	✓				✓					✓
Arboricultural visual inspection, as part of the tree safety risk assessment for the development.	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Work programme review by those members of staff involved in site management.					✓					✓

5.0 MONITORING AND REVIEW

5.1 In order to ensure that the habitats created within the site reach and maintain their maximum value to nature conservation, all habitats will be monitored. Monitoring is an essential part of any management plan to:

- ensure that the proposed management is being implemented;
- respond to unexpected outcomes from management; and
- determine if objectives are being achieved.

5.2 Visual inspection of trees by an arboriculturist will be conducted annually and following major storms, as part of the tree safety risk assessment for the development.

- 5.3 Ecological inspection by an experienced ecologist will take place in years 1, 5 and 10 to ensure the ecological specification has been fulfilled and to provide baseline data for future surveys to be monitored against.
- 5.4 Monitoring results will be used to inform changes to the management plan and ten- year work programme. The prescriptions provided here will not be set in stone and will be altered if required in agreement with the Local Planning Authority (LPA). Should monitoring indicate conservation aims are not being met, appropriate remedial measures will be taken. The management plan will run for a period of ten years, with the work programme fully reviewed at the end of the initial five- year period by those members of staff involved in site management, and the LEMP updated accordingly.

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Key

- Site Boundary
- Bat Box
- 32mm Nest Box
- House Sparrow Nest Box
- Open Front Nest Box
- Insect House
- Log Pile





client
Redrow Homes Ltd.

project
Land off Jacksons Lane,
Etwell

drawing title
Biodiversity Enhancement Plan

scale
1:1447

drawn
LTW/JD

issue
22/2/2022

drawing / figure number
Figure 1

rev
9743

APPENDIX A



LEGEND

INDICATES EXISTING TREES TO BE RETAINED

INDICATES EXISTING HEDGEROWS TO BE RETAINED

INDICATES EXISTING HEDGEROWS TO BE REMOVED

P.O.S.
(2500m²)

HATCHING INDICATES AREAS OF PUBLIC OPEN SPACE

INDICATES PROPOSED TREE PLANTING - REFER TO DETAILED LANDSCAPE SCHEME

HATCHING INDICATES AREAS OF 15m LANDSCAPE BUFFER TO EASTERN BOUNDARY

BUFFER PLANTING TO REINFORCE AREAS OF PUBLIC OPEN SPACE AND NATIONAL FOREST BOUNDARY

INDICATES POND AND SWALE ORANGE TO ENGINEERS DETAILED DESIGN

INDICATES FINE BUFF GRAVEL FOOTPATH WITH THICKET EDGES WITHIN P.O.S. AREA

INDICATES 1.0m HIGH NATIVE HEDGEROW PLANTING AT BACK OF FOOTPATH

INDICATES 1.8m HIGH SCREEN WALL

INDICATES 1.8m HIGH CLOSE BOARDED FENCE

INDICATES 1.8m HIGH GREEN SCREEN FENCE

INDICATES 2.0m HIGH ACOUSTIC FENCE TO ACHIEVE A SUPERLATERAL MASS OF 10kg/m²

INDICATES POSITIONS OF SECONDARY WINDOWS IN SIDE ELEVATIONS

INDICATES POSITIONS OF GATED ACCESS TO LANDSCAPE BUFFER AREAS TO SIDE OF PLOT 1 & REAR OF PLOT 4

SCHEDULE OF ACCOMMODATION

Area	Heritage Name	Sq Ft	Beds	Total	Total Ft ²	House Type	Roof	Garage Roof
A	Blenheim	2306	5	4	9224	Gable		Gable
A	Highgrove	2764	5	1	2764	Gable		Gable
A	Balmoral	1808	4	3	5424	Gable		Gable
B	Blenheim	2306	5	9	20754	Hipped		Hipped
B	Balmoral	1808	4	9	16272	Hipped		Hipped
B	Harrogate	1555	4	2	3110	Hipped		Hipped
C	Harrogate	1555	4	10	15550	Hipped		Hipped
C	Cambridge	1394	4	4	5576	Hipped		Hipped
C	Balmoral	1808	4	6	10848	Hipped		Hipped
C	Leamington	1417	4	2	2834	Hipped		Hipped
A+B+C	Grand Total			50	92356			
Average					92362			

REV	1	LANDSCAPE BUFFER ADDED TO LAYOUT	11/01/22	JAM
REV	2	ADDED ACCESS TO LANDSCAPE BUFFER ADJACENT TO PLOT 1 AND REAR OF PLOT 4	10/01/22	JAM
REV	3	ADDED ACCESS TO LANDSCAPE BUFFER ADJACENT TO PLOT 1 AND REAR OF PLOT 4	10/01/22	JAM
REV	4	ADDED ACCESS TO LANDSCAPE BUFFER ADJACENT TO PLOT 1 AND REAR OF PLOT 4	10/01/22	JAM
REV	5	ADDED ACCESS TO LANDSCAPE BUFFER ADJACENT TO PLOT 1 AND REAR OF PLOT 4	10/01/22	JAM
REV	6	ADDED ACCESS TO LANDSCAPE BUFFER ADJACENT TO PLOT 1 AND REAR OF PLOT 4	10/01/22	JAM
REV	7	ADDED ACCESS TO LANDSCAPE BUFFER ADJACENT TO PLOT 1 AND REAR OF PLOT 4	10/01/22	JAM
REV	8	ADDED ACCESS TO LANDSCAPE BUFFER ADJACENT TO PLOT 1 AND REAR OF PLOT 4	10/01/22	JAM
REV	9	ADDED ACCESS TO LANDSCAPE BUFFER ADJACENT TO PLOT 1 AND REAR OF PLOT 4	10/01/22	JAM
REV	10	ADDED ACCESS TO LANDSCAPE BUFFER ADJACENT TO PLOT 1 AND REAR OF PLOT 4	10/01/22	JAM
REV	11	ADDED ACCESS TO LANDSCAPE BUFFER ADJACENT TO PLOT 1 AND REAR OF PLOT 4	10/01/22	JAM
REV	12	ADDED ACCESS TO LANDSCAPE BUFFER ADJACENT TO PLOT 1 AND REAR OF PLOT 4	10/01/22	JAM
REV	13	ADDED ACCESS TO LANDSCAPE BUFFER ADJACENT TO PLOT 1 AND REAR OF PLOT 4	10/01/22	JAM
REV	14	ADDED ACCESS TO LANDSCAPE BUFFER ADJACENT TO PLOT 1 AND REAR OF PLOT 4	10/01/22	JAM
REV	15	ADDED ACCESS TO LANDSCAPE BUFFER ADJACENT TO PLOT 1 AND REAR OF PLOT 4	10/01/22	JAM
REV	16	ADDED ACCESS TO LANDSCAPE BUFFER ADJACENT TO PLOT 1 AND REAR OF PLOT 4	10/01/22	JAM
REV	17	ADDED ACCESS TO LANDSCAPE BUFFER ADJACENT TO PLOT 1 AND REAR OF PLOT 4	10/01/22	JAM
REV	18	ADDED ACCESS TO LANDSCAPE BUFFER ADJACENT TO PLOT 1 AND REAR OF PLOT 4	10/01/22	JAM
REV	19	ADDED ACCESS TO LANDSCAPE BUFFER ADJACENT TO PLOT 1 AND REAR OF PLOT 4	10/01/22	JAM
REV	20	ADDED ACCESS TO LANDSCAPE BUFFER ADJACENT TO PLOT 1 AND REAR OF PLOT 4	10/01/22	JAM
REV	21	ADDED ACCESS TO LANDSCAPE BUFFER ADJACENT TO PLOT 1 AND REAR OF PLOT 4	10/01/22	JAM
REV	22	ADDED ACCESS TO LANDSCAPE BUFFER ADJACENT TO PLOT 1 AND REAR OF PLOT 4	10/01/22	JAM
REV	23	ADDED ACCESS TO LANDSCAPE BUFFER ADJACENT TO PLOT 1 AND REAR OF PLOT 4	10/01/22	JAM
REV	24	ADDED ACCESS TO LANDSCAPE BUFFER ADJACENT TO PLOT 1 AND REAR OF PLOT 4	10/01/22	JAM
REV	25	ADDED ACCESS TO LANDSCAPE BUFFER ADJACENT TO PLOT 1 AND REAR OF PLOT 4	10/01/22	JAM
REV	26	ADDED ACCESS TO LANDSCAPE BUFFER ADJACENT TO PLOT 1 AND REAR OF PLOT 4	10/01/22	JAM
REV	27	ADDED ACCESS TO LANDSCAPE BUFFER ADJACENT TO PLOT 1 AND REAR OF PLOT 4	10/01/22	JAM
REV	28	ADDED ACCESS TO LANDSCAPE BUFFER ADJACENT TO PLOT 1 AND REAR OF PLOT 4	10/01/22	JAM
REV	29	ADDED ACCESS TO LANDSCAPE BUFFER ADJACENT TO PLOT 1 AND REAR OF PLOT 4	10/01/22	JAM
REV	30	ADDED ACCESS TO LANDSCAPE BUFFER ADJACENT TO PLOT 1 AND REAR OF PLOT 4	10/01/22	JAM
REV	31	ADDED ACCESS TO LANDSCAPE BUFFER ADJACENT TO PLOT 1 AND REAR OF PLOT 4	10/01/22	JAM
REV	32	ADDED ACCESS TO LANDSCAPE BUFFER ADJACENT TO PLOT 1 AND REAR OF PLOT 4	10/01/22	JAM
REV	33	ADDED ACCESS TO LANDSCAPE BUFFER ADJACENT TO PLOT 1 AND REAR OF PLOT 4	10/01/22	JAM
REV	34	ADDED ACCESS TO LANDSCAPE BUFFER ADJACENT TO PLOT 1 AND REAR OF PLOT 4	10/01/22	JAM
REV	35	ADDED ACCESS TO LANDSCAPE BUFFER ADJACENT TO PLOT 1 AND REAR OF PLOT 4	10/01/22	JAM
REV	36	ADDED ACCESS TO LANDSCAPE BUFFER ADJACENT TO PLOT 1 AND REAR OF PLOT 4	10/01/22	JAM
REV	37	ADDED ACCESS TO LANDSCAPE BUFFER ADJACENT TO PLOT 1 AND REAR OF PLOT 4	10/01/22	JAM
REV	38	ADDED ACCESS TO LANDSCAPE BUFFER ADJACENT TO PLOT 1 AND REAR OF PLOT 4	10/01/22	JAM
REV	39	ADDED ACCESS TO LANDSCAPE BUFFER ADJACENT TO PLOT 1 AND REAR OF PLOT 4	10/01/22	JAM
REV	40	ADDED ACCESS TO LANDSCAPE BUFFER ADJACENT TO PLOT 1 AND REAR OF PLOT 4	10/01/22	JAM
REV	41	ADDED ACCESS TO LANDSCAPE BUFFER ADJACENT TO PLOT 1 AND REAR OF PLOT 4	10/01/22	JAM
REV	42	ADDED ACCESS TO LANDSCAPE BUFFER ADJACENT TO PLOT 1 AND REAR OF PLOT 4	10/01/22	JAM
REV	43	ADDED ACCESS TO LANDSCAPE BUFFER ADJACENT TO PLOT 1 AND REAR OF PLOT 4	10/01/22	JAM
REV	44	ADDED ACCESS TO LANDSCAPE BUFFER ADJACENT TO PLOT 1 AND REAR OF PLOT 4	10/01/22	JAM
REV	45	ADDED ACCESS TO LANDSCAPE BUFFER ADJACENT TO PLOT 1 AND REAR OF PLOT 4	10/01/22	JAM
REV	46	ADDED ACCESS TO LANDSCAPE BUFFER ADJACENT TO PLOT 1 AND REAR OF PLOT 4	10/01/22	JAM
REV	47	ADDED ACCESS TO LANDSCAPE BUFFER ADJACENT TO PLOT 1 AND REAR OF PLOT 4	10/01/22	JAM
REV	48	ADDED ACCESS TO LANDSCAPE BUFFER ADJACENT TO PLOT 1 AND REAR OF PLOT 4	10/01/22	JAM
REV	49	ADDED ACCESS TO LANDSCAPE BUFFER ADJACENT TO PLOT 1 AND REAR OF PLOT 4	10/01/22	JAM
REV	50	ADDED ACCESS TO LANDSCAPE BUFFER ADJACENT TO PLOT 1 AND REAR OF PLOT 4	10/01/22	JAM
REV	51	ADDED ACCESS TO LANDSCAPE BUFFER ADJACENT TO PLOT 1 AND REAR OF PLOT 4	10/01/22	JAM
REV	52	ADDED ACCESS TO LANDSCAPE BUFFER ADJACENT TO PLOT 1 AND REAR OF PLOT 4	10/01/22	JAM
REV	53	ADDED ACCESS TO LANDSCAPE BUFFER ADJACENT TO PLOT 1 AND REAR OF PLOT 4	10/01/22	JAM
REV	54	ADDED ACCESS TO LANDSCAPE BUFFER ADJACENT TO PLOT 1 AND REAR OF PLOT 4	10/01/22	JAM
REV	55	ADDED ACCESS TO LANDSCAPE BUFFER ADJACENT TO PLOT 1 AND REAR OF PLOT 4	10/01/22	JAM
REV	56	ADDED ACCESS TO LANDSCAPE BUFFER ADJACENT TO PLOT 1 AND REAR OF PLOT 4	10/01/22	JAM
REV	57	ADDED ACCESS TO LANDSCAPE BUFFER ADJACENT TO PLOT 1 AND REAR OF PLOT 4	10/01/22	JAM
REV	58	ADDED ACCESS TO LANDSCAPE BUFFER ADJACENT TO PLOT 1 AND REAR OF PLOT 4	10/01/22	JAM
REV	59	ADDED ACCESS TO LANDSCAPE BUFFER ADJACENT TO PLOT 1 AND REAR OF PLOT 4	10/01/22	JAM
REV	60	ADDED ACCESS TO LANDSCAPE BUFFER ADJACENT TO PLOT 1 AND REAR OF PLOT 4	10/01/22	JAM
REV	61	ADDED ACCESS TO LANDSCAPE BUFFER ADJACENT TO PLOT 1 AND REAR OF PLOT 4	10/01/22	JAM
REV	62	ADDED ACCESS TO LANDSCAPE BUFFER ADJACENT TO PLOT 1 AND REAR OF PLOT 4	10/01/22	JAM
REV	63	ADDED ACCESS TO LANDSCAPE BUFFER ADJACENT TO PLOT 1 AND REAR OF PLOT 4	10/01/22	JAM
REV	64	ADDED ACCESS TO LANDSCAPE BUFFER ADJACENT TO PLOT 1 AND REAR OF PLOT 4	10/01/22	JAM
REV	65	ADDED ACCESS TO LANDSCAPE BUFFER ADJACENT TO PLOT 1 AND REAR OF PLOT 4	10/01/22	JAM
REV	66	ADDED ACCESS TO LANDSCAPE BUFFER ADJACENT TO PLOT 1 AND REAR OF PLOT 4	10/01/22	JAM
REV	67	ADDED ACCESS TO LANDSCAPE BUFFER ADJACENT TO PLOT 1 AND REAR OF PLOT 4	10/01/22	JAM
REV	68	ADDED ACCESS TO LANDSCAPE BUFFER ADJACENT TO PLOT 1 AND REAR OF PLOT 4	10/01/22	JAM
REV	69	ADDED ACCESS TO LANDSCAPE BUFFER ADJACENT TO PLOT 1 AND REAR OF PLOT 4	10/01/22	JAM
REV	70	ADDED ACCESS TO LANDSCAPE BUFFER ADJACENT TO PLOT 1 AND REAR OF PLOT 4	10/01/22	JAM
REV	71	ADDED ACCESS TO LANDSCAPE BUFFER ADJACENT TO PLOT 1 AND REAR OF PLOT 4	10/01/22	JAM
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REV	73	ADDED ACCESS TO LANDSCAPE BUFFER ADJACENT TO PLOT 1 AND REAR OF PLOT 4	10/01/22	JAM
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REV	77	ADDED ACCESS TO LANDSCAPE BUFFER ADJACENT TO PLOT 1 AND REAR OF PLOT 4	10/01/22	JAM
REV	78	ADDED ACCESS TO LANDSCAPE BUFFER ADJACENT TO PLOT 1 AND REAR OF PLOT 4	10/01/22	JAM
REV	79	ADDED ACCESS TO LANDSCAPE BUFFER ADJACENT TO PLOT 1 AND REAR OF PLOT 4	10/01/22	JAM
REV	80	ADDED ACCESS TO LANDSCAPE BUFFER ADJACENT TO PLOT 1 AND REAR OF PLOT 4	10/01/22	JAM
REV	81	ADDED ACCESS TO LANDSCAPE BUFFER ADJACENT TO PLOT 1 AND REAR OF PLOT 4	10/01/22	JAM
REV	82	ADDED ACCESS TO LANDSCAPE BUFFER ADJACENT TO PLOT 1 AND REAR OF PLOT 4	10/01/22	JAM
REV	83	ADDED ACCESS TO LANDSCAPE BUFFER ADJACENT TO PLOT 1 AND REAR OF PLOT 4	10/01/22	JAM
REV	84	ADDED ACCESS TO LANDSCAPE BUFFER ADJACENT TO PLOT 1 AND REAR OF PLOT 4	10/01/22	JAM
REV	85	ADDED ACCESS TO LANDSCAPE BUFFER ADJACENT TO PLOT 1 AND REAR OF PLOT 4	10/01/22	JAM
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REV	87	ADDED ACCESS TO LANDSCAPE BUFFER ADJACENT TO PLOT 1 AND REAR OF PLOT 4	10/01/22	JAM
REV	88	ADDED ACCESS TO LANDSCAPE BUFFER ADJACENT TO PLOT 1 AND REAR OF PLOT 4	10/01/22	JAM
REV	89	ADDED ACCESS TO LANDSCAPE BUFFER ADJACENT TO PLOT 1 AND REAR OF PLOT 4	10/01/22	JAM
REV	90	ADDED ACCESS TO LANDSCAPE BUFFER ADJACENT TO PLOT 1 AND REAR OF PLOT 4	10/01/22	JAM
REV	91	ADDED ACCESS TO LANDSCAPE BUFFER ADJACENT TO PLOT 1 AND REAR OF PLOT 4	10/01/22	JAM
REV	92	ADDED ACCESS TO LANDSCAPE BUFFER ADJACENT TO PLOT 1 AND REAR OF PLOT 4	10/01/22	JAM
REV	93	ADDED ACCESS TO LANDSCAPE BUFFER ADJACENT TO PLOT 1 AND REAR OF PLOT 4	10/01/22	JAM
REV	94	ADDED ACCESS TO LANDSCAPE BUFFER ADJACENT TO PLOT 1 AND REAR OF PLOT 4	10/01/22	JAM
REV	95	ADDED ACCESS TO LANDSCAPE BUFFER ADJACENT TO PLOT 1 AND REAR OF PLOT 4	10/01/22	JAM
REV	96	ADDED ACCESS TO LANDSCAPE BUFFER ADJACENT TO PLOT 1 AND REAR OF PLOT 4	10/01/22	JAM
REV	97	ADDED ACCESS TO LANDSCAPE BUFFER ADJACENT TO PLOT 1 AND REAR OF PLOT 4	10/01/22	JAM
REV	98	ADDED ACCESS TO LANDSCAPE BUFFER ADJACENT TO PLOT 1 AND REAR OF PLOT 4	10/01/22	JAM
REV	99	ADDED ACCESS TO LANDSCAPE BUFFER ADJACENT TO PLOT 1 AND REAR OF PLOT 4	10/01/22	JAM
REV	100	ADDED ACCESS TO LANDSCAPE BUFFER ADJACENT TO PLOT 1 AND REAR OF PLOT 4	10/01/22	JAM

white ridge
architecture
urban design
landscape planning

White Ridge Architecture is a multi-disciplinary design firm specialising in the creation of high quality, sustainable and innovative designs for residential, commercial and public spaces. We work closely with our clients to understand their needs and deliver solutions that are both functional and aesthetically pleasing. Our team consists of experienced professionals in architecture, urban design, landscape planning and interior design. We are committed to delivering exceptional service and creating lasting value for our clients.

2267/03/02

REDROW

Residential Development off Egginton Road, Etwall, Derbyshire.

Proposed Site Layout

Scale: 1:500 @ A0

Date: 16/11/20

Drawn: U

Residential Development off Egginton Road, Etwall