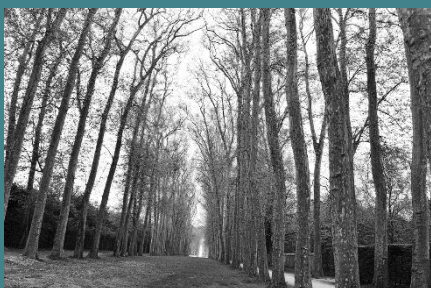


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Landscape Environmental Management Plan (LEMP)

Client

Barker Parry Town Planning

Project

Land off High Street,

Graveley

Date

October 2024

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Figure 1: Faunal Enhancements Plan

APPENDICES

Appendix A: Habitat Creation, Management and Maintenance Schedule

Rev	Issue Status	Prepared/Date	Approved/Date
A	Final	PA/02.10.24 / DJF 22.10.24	AJB/18.10.24

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 Barker Parry Town Planning in response to Condition 4 of the planning consent granted by North Hertfordshire District Council (21/02624/FP, dated 7th September 2021) for a residential development site south of Graveley, Hertfordshire.

1.2 Condition 4 states:

A landscape and ecological management plan (LEMP) shall be submitted to, and be approved in writing by, the local planning authority prior to the occupation of any of the dwellings hereby permitted. The content of the LEMP shall deliver a net gain of 0.83 habitat units from a combination of onsite and offsite measures (as detailed in the approved ecological report and biodiversity metric) to achieve a measurable net gain to biodiversity and include the following.

a) Description and evaluation of features to be managed.

b) Ecological trends and constraints on site that might influence management.

c) Aims and objectives of management.

d) Appropriate creation and management options for achieving the required number of ecological units as detailed in approved metric (including species mixes).

e) Prescriptions for management actions which must correspond with and directly reference the habitat and condition scores in the approved metric.

f) Preparation of a 5 year work schedule (including an annual work plan) capable of being rolled forward in perpetuity i.e. 30 years, with habitats clearly marked on plans.

g) Ongoing monitoring and reporting schedule, with assessment and triggers for remedial measures.

h) Required actions should habitat areas fail to reach stated condition in the approved metric.

i) Details of the body or organisation responsible for implementation of the plan.

j) Details of 9 integrated swift and 9 integrated bat boxes, make, model and location.

The LEMP shall also include details of the legal and funding mechanism(s) by which the long-term implementation of the plan will be secured by the developer with the management body(ies) responsible for its delivery. The plan shall also set out (where the results from monitoring show that conservation aims and objectives of the LEMP are not being met) how contingencies and/or remedial action will be identified, agreed and implemented so that the development still delivers the fully functioning biodiversity objectives of the originally approved scheme. The LEMP will be implemented in accordance with the approved details with any planting carried out before the end of the first planting season following either the first occupation of any of the dwellings or the completion of the development, whichever is the sooner.

Reason: in the interests of biodiversity and ecology and in accordance with The Environmental Act 2021.

1.3 This document seeks to discharge the above related condition.

- 1.4 The Detailed Public Open Space Plan created by M Scott Architectural Design (currently Drawings ref PL200 and PL201) should be consulted during the reading of this document.

Site Location and Context

- 1.5 Full details of the site (including Figures) can be found in the Ecological report (FPCR, 2018)¹, with the below comprising a summary of previous survey work. The site comprises a grassland field divided by fencing into seven field compartments with a stable block and two storage sheds also located within the survey area. Between High Street which runs to the east of the site boundary and the boundary itself is an area of planted trees. An area of scrub is located on the western boundary of the additional survey area. The village of Graveley is located to the north of the site.

¹ High St, Graveley - Eco App (2018) FPCR Environment and Design Ltd on behalf of Hallam Land Management Limited and William Davis Limited

2.0 ECOLOGICAL CONTEXT

- 2.1 The following outlines the receptors present within the proposed site, both existing and proposed.
- 2.2 The following habitats are those that will be subject to ongoing management/monitoring with plants sourced locally where possible. The current condition of existing habitats and the projected benefits to wildlife of the created habitats are discussed below. Please note for clarity the habitats below are classified according to the types on the attached plan, and the habitat types provided on the landscape plan may have different names.

Table 1: Habitat Types

Existing/Retained Habitats	Proposed Habitat (see LEMP)
Retained Mixed Woodland	Footpaths
Poor Semi-improved Grassland	Hardstanding
Tree to be Retained	Wildflower Meadow
Hedgerows	Residential Gardens
	Ornamental Shrubs
	Hedgerows
	New Trees

- 2.3 Based on the above table, here is a summary of the habitat types within the proposed site and their corresponding landscape plan references.

Retained broadleaved Woodland

- 2.4 A band broadleaved woodland is present on the site's eastern boundary. This feature will provide screening for the site as well as suitable foraging, commuting, resting and cover for a range of fauna such as badgers, bats and birds.
- 2.5 This habitat is listed on the landscape plans as '*Existing trees retained*'.

Trees To Be Retained

- 2.6 Most of the hedgerow trees are to be retained on-site. These trees will offer habitat for breeding birds and foraging habitat for bats and other wildlife.
- 2.7 This habitat type is listed on the landscape plans as '*Existing trees retained*'.

Hedgerows (Created, Lost and Retained)

- 2.8 Hedgerows are currently located along most of the boundaries of the site providing habitat for birds and commuting habitat for wildlife including bats. Most of the hedgerows are to be retained with losses along the northern boundary to facilitate access into the development by road and foot. This is listed on the landscape plans as '*Existing trees and vegetation to be retained*'.
- 2.9 New species rich hedgerow is to be planted on the eastern boundary of the site providing a new potential commuting and foraging route with links into the wider landscape.
- 2.10 The new features above are listed on the landscape plan as '*Proposed native mixed hedgerows*'.

- 2.11 All hedgerows will be managed to maximise the health and longevity of the habitat with all cutting occurring outside of the breeding bird season (March-August). Where gaps are present these will be planted-up using native locally appropriate species.

Footpaths

- 2.12 Hardstanding (bound gravel etc.) will be placed around the site. Please refer to the hard landscaping plan for the various types of material used.

Hardstanding

- 2.13 Hardstanding in the form of block paving, concrete slabs etc is to be provided throughout the site. Please refer to the hard landscaping plan for the various types of material used.

Wildflower Meadow

- 2.14 A large area of meadow will be created in the southern area of site using Emorsgate EM3 seed mix. These habitats will provide foraging habitat for a wide range of wildlife including invertebrate species who form the prey for other species including bats, badgers, hedgehog and birds.

- 2.15 The meadow areas are identified on the landscape plan as '*Additional land*'.

Residential Gardens

- 2.16 Gardens will comprise a mix of turf-based, species-poor grassland which will be of limited conservation value, aside from as part of a mosaic. Management of this habitat in the long term is not practical or feasible as it will be in private ownership.

- 2.17 This is identified on the landscape plans as '*Grass*'.

Ornamental Shrubs

- 2.18 Residential hedgerows will be planted around the outside of the residential development and within the development area, these will provide additional habitat for nesting birds.

- 2.19 This habitat type is listed on the landscape plans as, '*Proposed Ornamental Shrubs/ground cover*'.

New Trees

- 2.20 New trees will be planted throughout the site comprising a mix of native species. These will promote structural diversity and mosaics and will offer increased habitat for breeding birds and foraging habitat for bats and other wildlife.

- 2.21 This habitat type is listed on the landscape plans as '*Native trees*'.

Development Proposals

- 2.22 The development is for the construction of residential dwellings with associated access roads and gardens. The proposals will retain most of the hedges, with sections of the northern feature (H1) lost for access and the hedges will be enhanced with buffer planting. A linear hedge is also proposed along the existing eastern site boundary, which is currently open arable field.

3.0 OBJECTIVES

- 3.1 The over-arching objective for the creation and management of the green infrastructure component of the development is to enhance the nature conservation value of retained and newly-created habitats and provide green links around the boundary of the site, whilst creating an attractive and functional setting to the built development.

- 3.2 The plan promotes the following aims and objectives for the site's management:

Objective 1: Maintain Existing Nature Conservation Value

- 3.3 Maintain, protect and enhance the existing nature conservation value of the site for fauna including badgers, bats and birds, with associated habitats and species.

Objective 2: Enhance Biodiversity

- 3.4 Create new habitats to compensate for loss of receptors during construction, enhance biodiversity of the local area and maximise value through appropriate management ensuring green links between habitats are maintained and created.

Objective 3: Balance Recreation with Wildlife

- 3.5 To balance residential use of the site, with the wildlife interests within and adjacent to the site, particularly in relation to the potential impacts on the habitats/fauna.

Objective 4: Monitor and Re-evaluate

- 3.6 To monitor and manage retained and newly created habitats throughout the management period to ensure their increasing ecological diversity is maintained in the long-term, in tandem with their use. Feedback from site monitoring will be applied to appropriate refinement and/or revision of the plan, as long as the agreed modifications are in accordance with the vision and objectives set out above.

4.0 HABITAT CREATION AND MANAGEMENT

- 4.1 The following outlines the management prescriptions and timings to be utilised, with the relevant features shown on the Detailed Landscaping Proposals created by M Scott Architectural Services .
- 4.2 As many of the proposed habitats overlap (for example trees and grassland mixes) full planting details please refer to the most recently referenced planting plans which map and describe the habitats in a high level of detail.
- 4.3 The following receptors will be subject to management. Measures required associated with habitats to be removed/disturbed during construction are not listed here and instead are within the CEMP.

Habitats

- 4.4 For brevity the following headings may group some habitats where planting regimens and management is similar. Where this is the case the grouped habitat types are listed.

Woodland and Trees

- 4.5 This section incorporates the following habitat types :
- New Trees
 - Trees to be Retained
- 4.6 The trees will provide habitat for wildlife, in particular birds, bats and invertebrate species. The varied structure will provide opportunities for a wide range of niches within a single habitat. The recommended species have been informed by the Hertfordshire Landscape Guidelines to ensure that they are appropriate for the local area and site conditions.

Management Objective: Promote and maintain structurally diverse woodland and healthy tree resource

- 1) Minimal management to promote naturally diverse structure with pruning where necessary
- 2) Removal of deadwood where required

Planting

- 4.7 All trees will be planted in accordance with British Standard BS8545:2014 Trees: From Nursery to Independence in the Landscape. Work should be undertaken during the planting season (November to March) where possible following ground de-compaction and modelling works. The trees within the woodland will consist of specimens between 125cm and 150cm tall and will form 65% of the planting in the woodland areas.

Proposed Native Woodland Mixes (including specimen numbers):

<i>Acer campestre</i> - Field Maple	38	<i>Malus sylvestris</i> - Crab Apple	26
<i>Alnus glutinosa</i> - Common Alder	26	<i>Prunus avium</i> - Bird Cherry	38
<i>Betula pendula</i> - Silver Birch	26	<i>Prunus spinosa</i> Blackthorn	16
<i>Betula pubescens</i> - Downy Birch	16	<i>Quercus robur</i> - English Oak	99

<i>Acer campestre</i> - Field Maple	38	<i>Malus sylvestris</i> - Crab Apple	26
<i>Corylus avellana</i> Hazel	26	<i>Rhamnus cathartica</i> Buckthorn	16
<i>Cornus sanguinea</i> Dogwood	16	<i>Sambucus nigra</i> Elder	16
<i>Crataegus monogyna</i> Hawthorn	51	<i>Tilia cordata</i> - Small-leaved Lime	60
<i>Ilex aquifolium</i> Holly	16	<i>Viburnum opulus</i> Guelder-rose	16
<i>Ligustrum vulgare</i> Wild Privet	26		

- 4.8 Scattered trees and hedgerow trees will be planted as 2.5m – 6.25m standards in tree pits and supported by tree guards.

Proposed Trees (including specimen numbers):

Species	No.
<i>Malus sylvestris</i> (Crab Apple) 10-12cm girth	11
<i>Prunus spinosa</i> (Blackthorn) 10-12cm girth	9
<i>Corylus avellana</i> (Hazel) 10-12cm girth	9

Management

- 4.9 Failed tree specimens will be replaced on a like-for-like basis. Mulch around tree bases will be topped up and tree guards replaced where necessary. This should be undertaken between November and March.
- 4.10 Examine all tree stakes and ties and replace or adjust as appropriate during monthly inspections. If the tree has yet to establish, replace or adjust ties, spacers and tree tubes as appropriate. If the tree has established well, then all stakes, ties, spacers, tubes etc will be removed and holes in subsoil to be filled in. This should be undertaken between November and March.
- 4.11 Where periods of extreme drought occur, trees that have not yet established (such as unhealthy specimens, or those not in full leaf, or with suppressed growth) need to be watered where their tolerance to drought is deemed to be insufficient. There are no monthly timing restrictions on this work.
- 4.12 Arisings from any woodland management activity will, where possible, be used to provide opportunities for fauna such as 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 within the screening feature (as appropriate). Where practical, piles will be situated in partial sunlight with some shade. Where at all possible removal of woody vegetation should be undertaken outside bird nesting season (March to September).
- 4.13 After this first 5-year establishment period, the following 5-years would only require an annual inspection and during this period management should be limited to pruning dead/dying trees with deadwood placed in piles unless the inspection highlights other management practices are required.
- 4.14 Woodland ground flora is covered in sections below.

Wildflower Meadow

- 4.15 Given the similarities in planting regimens and management this section incorporates the following habitat :
- Wildflower Meadow
- 4.16 The retained Poor Semi-Improved Grassland will also be managed to be a Wildflower grassland. This will be located in the south of the site.

Management Objective: Create and maintain floristically diverse grassland 1) Cover of undesirable species (creeping thistle, spear thistle, curled dock, broad-leaved dock, common ragwort, common nettle and cow parsley) less than 5% 2) Cover of rye-grass and white clover is less than 10% 3) Cover of wildflowers throughout the sward (excluding the undesirable species listed above and creeping buttercup) is approximately 20% 4) The sward is at least moderately species-rich (8 species/m² including grasses) 5) Cover of scrub and bramble less than 5%
--

Ground Preparation & Sowing

- 4.17 Following ground de-compaction and modelling works the areas to be sown will be raked or harrowed to produce a medium fine tilth. All stones over 2.5mm in diameter will be removed. Wildflower Meadow Areas will be sown with the meadow grassland Emorsgate EM3 Special General Purpose Meadow Grassland (or similar approved) and the flowering lawn with Emorsgate EL1 Flowering Lawn (or similar) during spring (March-April) or preferably the optimal period for lowland sites of autumn (late August to September), selecting a time when the soil is moist and can be worked. Mixes for these are listed below.
- 4.18 The soils within the site likely have high nutrient levels, the topsoils will have a high weed burden and so wildflower grassland would be easier to achieve if planted directly into SS1/SS2 which will have lower weed burden and nitrogen content. Where planted in topsoils, extensive management will be required.

Proposed Wildflower Meadow mix:**Wildflowers**

Achillea millefolium - Yarrow
Agrimonia eupatoria - Agrimony
Anthyllis vulneraria - Kidney Vetch
Betonica officinalis - Betony
Centaurea nigra - Common Knapweed
Centaurea scabiosa - Greater Knapweed
Chaerophyllum temulum - Rough Chervil
Cruciata laevipes - Crosswort

Wildflowers

Knautia arvensis - Field Scabious
Lathyrus pratensis - Meadow Vetchling
Leucanthemum vulgare - Oxeye Daisy
Lotus corniculatus - Bird's-foot-trefoil
Malva moschata - Musk Mallow
Plantago lanceolata - Ribwort Plantain
Plantago media - Hoary Plantain
Poterium sanguisorba - Salad Burnet

Daucus carota - Wild Carrot

Echium vulgare - Viper's Bugloss

Filipendula ulmaria - Meadowsweet

Galium album - Hedge Bedstraw

Galium verum - Lady's Bedstraw

Geranium pyrenaicum - Hedgerow Crane's-bill

Primula veris - Cowslip

Ranunculus acris - Meadow Buttercup

Rhinanthus minor - Yellow Rattle

Silene dioica - Red Campion

Silene flos-cuculi - Ragged Robin

Vicia cracca - Tufted Vetch

Grasses*Agrostis capillaris* – Common Bent*Festuca rubra* – Red Fescue*Cynosurus cristatus* – Crested Dog's-tail*Poa pratensis* – Smooth-stalked Meadow-grass**Management**

- 4.19 The condition of the grassland areas will be reviewed within 6 months of its original seeding and any areas which have failed to establish would be re-seeded. To control any flush of annual weeds, the grassland would be cut regularly upon reaching a height of c.100mm within the first year of its development, as required. All arisings will be left for a minimum of 24 hours and a maximum of 7 days before being moved to a designated composting area or removed from site.
- 4.20 Following the initial year of its creation, the condition of grassland will be reviewed for the first 2 years for any areas of pernicious weeds (i.e. docks *Rumex spp.*, thistles *Cirsium spp.* or ragwort *Jacobaea spp.*), which will be controlled by the spot-application of target herbicides.
- 4.21 In the second year and subsequent years, management to maintain the structure of the grassland will entail a cut to a height of c.300mm, in September or October, with half of the grassland cut at one time. Following each mechanical cut of the grassland during its establishment or longer-term management, arisings will be left for a minimum of 24 hours and a maximum of 7 days before being removed from the site.

Hedgerow

- 4.22 This section incorporates species mixes and management recommendations for the following habitat type:
- Hedgerows to be Created
- 4.23 A new hedgerow will be planted along the eastern boundary.

Management Objective: Promote and maintain structurally diverse hedgerows
1) Introduction of sympathetic management regime on a two-year rotation to promote a dense hedgerow with thick nesting cover for birds and good berry production. 2) Hedgerows to be maintained at no less than 1.5m in height and 1m in width. 3) Introduction of cutting regime to encourage 2m growth herbaceous strip at base of hedge.

Planting

- 4.24 The hedgerows will be formed using double-staggered rows to provide a dense and well-structured hedgerow of value to wildlife. Bare rooted whips approximately 60-80cm in height will be used and the planting composition will be based on the species-mix provided in the table below, planted in double staggered rows. Planting will be undertaken between the months of November and March, preferably prior to January. Tree guards will be used to protect plants from rabbit grazing. Apply bark mulch to a minimum depth of 75mm.
- 4.25 Ground preparation will include a strim and spray of the, 600mm wide 450mm depth, planting strip with glyphosate-based herbicide at least 3 weeks prior to planting.

Proposed Native Hedgerow Mixes/Infill Mixes*Cornus sanguinea* - Dogwood*Prunus spinosa* - Blackthorn*Corylus avellana* - Hazel*Rhamnus cathartica* - Buckthorn*Crataegus monogyna* - Hawthorn*Rosa arvensis* - Field Rose*Euonymus europaeus* - Spindle*Rosa canina* – Dog Rose*Ilex aquifolium* - Holly*Viburnum opulus* – Guelder-rose*Ligustrum vulgare* - Wild Privet

- 4.26 To reduce competition and aid establishment of the created hedgerows and planted-up sections, the bases of the plants will be kept weed-free through spot treatment with a non-residual herbicide for the first three years.
- 4.27 At the end of the growing season the landscape contractor will mark all dead, dying and diseased plants which will then be replaced in the following planting season on a one-for-one basis. Replacement of protective guards or fencing will also be undertaken. This will be undertaken for the first 5 years following initial planting.
- 4.28 In years one to three, newly-planted hedgerows will be lightly trimmed to encourage dense growth. After three years both the created and established hedgerows will be maintained on a two to three-year cycle with a minimum height of approximately 2m by 1.5m wide. Cutting of all the hedgerows including existing/retained hedgerow features will be undertaken on a rotational basis, with half of the hedgerow resource (including retained hedgerows) cut in any given year. Cutting will be undertaken in late January or February, avoiding any periods of heavy frost.
- 4.29 The sides of the hedgerows would be perpendicular, but the tops may be flat at 90 degrees to the sides, rounded or an arch profile. All cuttings will be removed.

Formal/Ornamental Planting

- 4.30 This section incorporates species mixes and management recommendations for the following habitat types:
- Ornamental shrubs
 - Residential gardens

Residential Boundaries (shrubs)

- 4.31 The more species-rich boundary features (see Proposed Ornamental Shrub Mixes on landscape plan) will comprise a mix including Escallonia Crimson Spire (*Escallonia* sp), *Hypericum* Hidcote (St John's Wort) *Lavandula vera* (Lavender).
- 4.32 All the above will provide structure and microclimates for invertebrates and small mammals.
- 4.33 Plants of 30-80cm in size will be used, and the planting composition will be based on the species-mix provided in the table above. Planting will be undertaken between the months of November and March, preferably prior to January. Tree guards will be used to protect plants.
- 4.34 Following any ground de-compaction and modelling works, ground preparation will include a strim and spray of the planting strip with glyphosate-based herbicide at least 3 weeks prior to planting.

- 4.35 To reduce competition and aid establishment of the shrubs, the bases of the plants will be kept weed free through spot treatment of a non-residual herbicide for the first three years.
- 4.36 At the end of the growing season the landscape contractor will mark all dead, dying and diseased plants, which will then be replaced in the following planting season on a one-for-one basis. Replacement of protective guards or fencing will also be undertaken. This will be undertaken for the first 5 years following initial planting.
- 4.37 In years one to three, newly planted hedgerows will be lightly trimmed to encourage dense growth. After three years the hedgerow will be maintained by cutting on annual basis to maintain a low height (approx. 1m), with a third of the resource cut in any given year. Cutting will be undertaken in late January or February, avoiding any periods of heavy frost.
- 4.38 Pruning will be undertaken four times per year in February/March, June, August and October.

Residential Gardens

- 4.39 Ground preparation of gardens will comprise checking the quality and depth of topsoil to ensure it is at least 100mm, preferably 150mm, then creating level ground on which to place the turf.
- 4.40 Residential gardens will be covered in lawn turf and monitored during their establishment to ensure good condition. Where replacement is necessary this will be undertaken. Following handover to the homeowner, no further management prescriptions are considered practical or possible.

Additional Measures for Faunal Species

- 4.41 Although the above measures will create additional foraging and commuting habitat for a wide range of wildlife, the following species-specific measures are also recommended.

Badger

- 4.42 The off-site woodland provides suitable habitat for badgers. These habitats will be buffered from the development area by semi-natural habitats such as grassland, scattered trees. These habitats will provide additional foraging habitat for badger.

Bats

- 4.43 The retention of hedgerows and trees along the boundaries of the site and the provision of further woodland, hedgerow and trees will provide suitable foraging routes for bats around the site and into the wider landscape.
- 4.44 Should any trees require removal/remedial operations, these should first be checked for the presence of roosting bats by a licensed bat worker. Checks would comprise:
- Identification of the exact tree which requires the works by a qualified arboriculturist/tree surgeon.
 - Identification of any cavities/dead wood/splits or any other related features which could be used by bats as roosting features.
 - If the trees have any of the above features, a further survey would be carried out by a licenced bat worker (LBW). The survey will take the form of an aerial assessment by roped access LBWs, using equipment including lights, mirrors and endoscopes. If features can be

fully explored and no bats are recorded, then remedial operations can proceed, Otherwise, further survey may be required.

- If the feature cannot be fully explored and the presence of bats cannot be discounted, then the tree should be retained until it can be subject to further nocturnal survey. This can be undertaken between May and September.
- If bats are recorded within the tree at any point, a Natural England licence will be required to legitimise any operations which may affect the bats. In this circumstance further advice would be provided.
- Operations should be completed between September and February of any year to avoid nesting bird season. If this is not practicable, the tree should be assessed by an ecologist, who can confirm the presence/absence of nesting birds.

Birds

- 4.45 The dense woody vegetation on-site such as woodland, hedgerows and trees has potential for nesting birds. These habitats will be managed with nesting birds in mind, including any cutting or trimming occurring outside of the nesting bird season.
- 4.46 Any management works to the vegetation should be undertaken under an agreed good practice method statement. This will include the following:
- 4.47 Wherever feasible vegetation removal should be carried out outside the breeding bird season (March to August inclusive). If works must be completed during this period trees/scrub required for operations will be checked prior to works by a suitably qualified ecologist.
- 4.48 In the event that any active nests are recorded within this area an appropriate buffer will be provided, the extent of the buffer will depend on the species present, and the activity being carried out. This buffer will be marked with high-visibility tape so that contractors are aware of the presence of these sites.
- 4.49 The active nests would be re-checked prior to removal to ensure there are no dependant young or eggs present.
- 4.50 Integrated nest Boxes will be located on the southern and eastern aspects buildings, between 2m and 4m from the ground. Figure 1 illustrates suggested locations of these bird boxes. The types of boxes recommended are as follows but in the absence of stock, similar models are considered to be acceptable:
- 3 x Vivara Pro Inbuilt 28mm WoodStone Nest Box
 - 3 x Vivara Pro Inbuilt 32mm WoodStone Nest Box
 - 3 x Vivara Pro Inbuilt WoodStone Open Nest Box
 - 9 x Integrated WoodStone Build-in Swift Nest Box Deep
- 4.51 Bird boxes will be erected under the supervision of an ecologist to ensure their correct placement on the building. An updated plan showing the exact locations of the boxes will be submitted to the LPA once the boxes have been placed on site.

Hedgehog

- 4.52 The hedgerows and trees on-site provide suitable commuting and hibernation habitat for hedgehogs with the additional grassland providing enhanced foraging opportunities.
- 4.53 Small gaps (measuring approximately 13cm by 13cm) will be provided at the base of residential garden fences across the site to allow continued connectivity for wildlife such as hedgehogs (see Figure 1 for indicative locations). A sign should be placed above the holes to ensure residents are aware of the reason for the gaps.

General Measures

- 4.54 All relevant EU and UK nature conservation law will be adhered to in relation to the protection of ecological features and ecological enhancement. This will primarily include the protection afforded to nesting birds under the Wildlife and Countryside Act 1981 (as amended) and with reference to the protection of great crested newts and bats and their roosts under the Conservation of Habitats and Species Regulations 2017 (as amended). Regard has also been given to the Local Biodiversity Action Plan (LBAP).
- 4.55 All works will be undertaken by qualified contractors and ecologist supervision will not be necessary for most of the operations. Where supervision is necessary, FPCR will provide suitably qualified staff (such as an Ecological Clerk of Works/ECOW).
- 4.56 The client will be responsible for ensuring that management measures are implemented on site.
- 4.57 Tools will be selected based on their appropriateness for the task, and where associated with sensitive receptors, hand tools will be utilised where at all possible during management.
- 4.58 Results of ongoing works and monitoring will be passed to the local authority on an annual basis in the form of a short monitoring report or formal letter/email. Where necessary, the below measures can be rolled forward on a five-year basis, though some amendments may be necessary to prescriptions as habitats develop.

5.0 MONITORING

- 5.1 To ensure that the habitats created and retained within the site reach and maintain their maximum value to nature conservation, all habitats should be monitored at 6 months and years 1, 3 and 5. to check establishment. Results of this monitoring, together with ongoing checks during routine works should be used to inform changes to annual work prescriptions, with the management plan reviewed towards the end of the five-year rolling plan and work programme period. The prescriptions provided here are for overall guidance and should be flexible depending on success of management. Prescriptions should be altered if required.

6.0 WORK PROGRAMME

- 6.1 The work program outlines the initial five-year work programme required to help achieve the desired objectives with some additional ongoing management prescriptions. Exact yearly timings should follow those listed

Appendix A: Habitat Creation, Management and Maintenance Schedule

Receptor	Management/measures	Ecologist supervision required?	Year and month				
			1	2	3	4	5
General Measures	Works to be undertaken by qualified contractors supervised by client. Works to be supervised by ECoW where necessary.	On some elements, see below	Month dependant on works below	Month dependant on works below	Month dependant on works below	Month dependant on works below	Month dependant on works below
	Results of management and monitoring to be passed to local authority for records.	Ecologist to prepare document for client	Upon completion of works (November to January)	Upon completion of works (November to January)	Upon completion of works (November to January)	Upon completion of works (November to January)	Upon completion of works (November to January)
Trees (including New Trees, Retained trees)	Planting	No	November to March	<i>Not required</i>	<i>Not required</i>	<i>Not required</i>	<i>Not required</i>
	Failed specimens replaced on like for like basis.	No	November to March	November to March	November to March	November to March	November to March
	Examine trees and replace/readjust tree stakes and ties or removal where appropriate.	No	November to March	November to March	November to March	November to March	November to March
	During periods of extreme drought watering to be undertaken.	No	No monthly restriction	No monthly restriction	No monthly restriction	<i>Not required</i>	<i>Not required</i>
	<u>Ongoing management</u> Apart from an annual inspection, no management is likely to be required from Years 6-10 inclusive. Future management should be restricted to removal of deadwood when necessary. Any removal of woody vegetation should where at all possible be undertaken outside nesting bird season (March to September).						
Wildflower Meadow (Wildflower Meadow and Flowering Lawn)	Sowing	No	Late August to September (or March-April)	<i>Not required</i>	<i>Not required</i>	<i>Not required</i>	<i>Not required</i>
	Review and reseed as necessary	No	6 months after sowing	September to August	<i>Not required</i>	<i>Not required</i>	<i>Not required</i>

Receptor	Management/measures	Ecologist supervision required?	Year and month				
			1	2	3	4	5
	Cut to 100mm 2-3 times. Cuttings removed from site.	No	No monthly restriction	If sown in Autumn of Year 1. No monthly restriction	<i>Not required</i>	<i>Not required</i>	<i>Not required</i>
	Cut to 300mm with scythe or mower with half cut every year. Cuttings removed from site within 48hrs.	No	<i>Not required</i>	September or October	September or October	September or October	September or October
Hedgerow	Planting	No	November to March	<i>Not required</i>	<i>Not required</i>	<i>Not required</i>	<i>Not required</i>
	Spot treatment of a non-residual herbicide	No	No monthly restriction	No monthly restriction	No monthly restriction	<i>Not required</i>	<i>Not required</i>
	Failed specimens replaced on like for like basis.	No	November to March	November to March	November to March	November to March	November to March
	Examine specimens and replace/readjust stakes and ties or removal where appropriate.	No	November to March	November to March	November to March	November to March	November to March
	Trim lightly to encourage dense growth. Cuttings removed from site.	See Bird section	January to February	January to February	January to February	<i>Not required</i>	<i>Not required</i>
	Cut 1/3 of hedgerows on rotation to height of 2m by 1.5m wide. Cuttings removed from site.	See Bird section	<i>Not required</i>	<i>Not required</i>	<i>Not required</i>	January to February	January to February
Formal/Ornamental Planting – Residential Boundaries (Ornamental shrubs)	Planting	No	November to March	<i>Not required</i>	<i>Not required</i>	<i>Not required</i>	<i>Not required</i>
	Spot treatment of a non-residual herbicide	No	No monthly restriction	No monthly restriction	No monthly restriction	<i>Not required</i>	<i>Not required</i>
	Failed specimens replaced on like for like basis.	No	November to March	November to March	November to March	November to March	November to March
	Examine trees and replace/readjust tree stakes and ties or removal where appropriate.	No	November to March	November to March	November to March	November to March	November to March

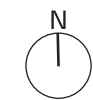
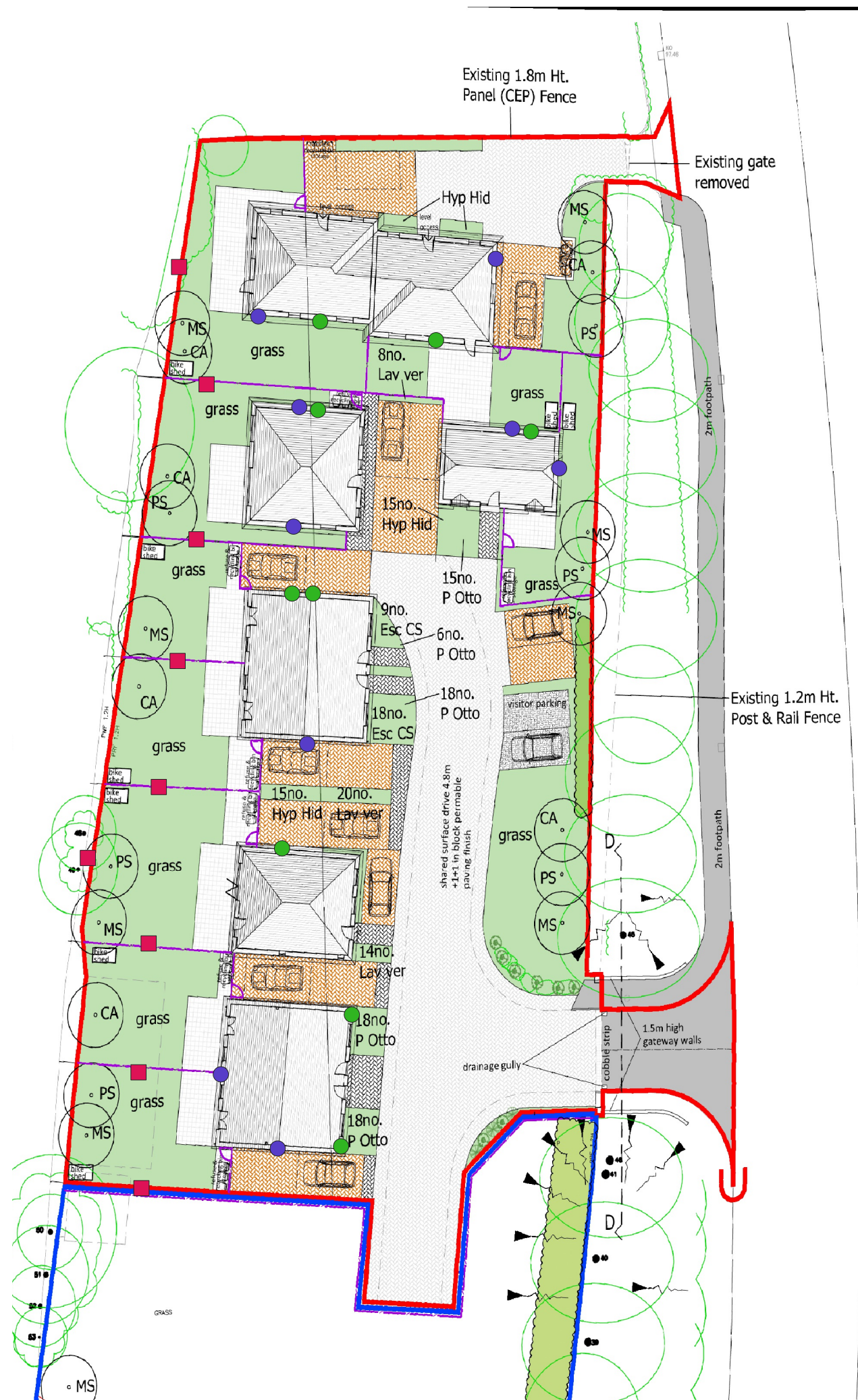
Receptor	Management/measures	Ecologist supervision required?	Year and month				
			1	2	3	4	5
	Trim lightly to encourage dense growth. Cuttings removed from site.	See Bird section	January to February	January to February	January to February	<i>Not required</i>	<i>Not required</i>
	Cut residential hedgerows annually to a low height (approx. 1m) Cuttings removed from site.	See Bird section	<i>Not required</i>	<i>Not required</i>	<i>Not required</i>	January to February	January to February
Formal/Ornamental Planting – Residential Gardens	Ground preparation for turf	No	No monthly restriction.	<i>Not required</i>	<i>Not required</i>	<i>Not required</i>	<i>Not required</i>
	Checking for success of establishment and replacement where necessary.	No	No monthly restriction.	<i>Not required</i>	<i>Not required</i>	<i>Not required</i>	<i>Not required</i>
Hard landscaping (Hardstanding, Footpaths)	Contractor/management company to ensure features are in good condition. Replacement where necessary. No other management practical.						
Bats	Contractors to be mindful of potential bat roosts within trees.	No	Month dependant on works above	Month dependant on works above	Month dependant on works above	Month dependant on works above	Month dependant on works above
	Removal or remedial operations on trees (Also see Bird section)	Yes	As required	As required	As required	As required	As required
Birds	Removal of woody vegetation in above listed habitats accordance with best practice timings.	No, outside March to August. Yes, ecologist supervision required to confirm absence of active nests within March-August period.	As required	As required	As required	As required	As required
	Installation of bird boxes within buildings	Yes	No monthly restriction	<i>Not required</i>	<i>Not required</i>	<i>Not required</i>	<i>Not required</i>
Hedgehog	Provision of small gaps at base of fences (13x13cm).	No	No monthly restriction	<i>Not required</i>	<i>Not required</i>	<i>Not required</i>	<i>Not required</i>

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Enhancement measures

- Bird box
- Swift box
- Hedgehog highway

date
22/10/24

drwn/chkd
DJF

client
Barker Parry Town Planning

project

High St, Graveley

title
FAUNAL ENHANCEMENTS PLAN

scale
1:400 @ A3

number

rev
-

FIGURE 1

FPCR | environment
& design