
**Land at Johnson Drive
Finchampstead**

Report for:
Palatine Homes Limited
Ospreys
Scotswood Close
Beaconsfield
Buckinghamshire
HP9 2LJ

INTRODUCTION

Overview

AA Environmental Limited (AAe) has been commissioned by Palatine Homes Limited to produce a Landscape and Ecological Management Plan (LEMP) for the above site. This LEMP has been produced using the Nature Conservancy Council document¹ as a guide, with the intention to enhance the value of the site by creating a range of new habitats/opportunities for wildlife. The Plan also details the sympathetic management of these features to maximise their ecological value in the long term. In addition, this report will provide the information to assist with discharging Condition 16 attached to planning (Wokingham Borough Council application ref: 233086) which states:

Landscape and Ecological Management Plan

A long-term landscape and ecological management plan (LEMP) including long term design objectives, management responsibilities, timescales and maintenance shall be submitted to, and be approved in writing by, the local planning authority prior to the commencement of the development. The content of the LEMP shall include schedules for Landscape Wildlife Area and Landscape Wildlife Corridor and any other area other than privately owned domestic gardens, 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 management options for achieving aims and objectives.*
- e) Prescriptions for management actions.*
- f) Boundary treatments and measures to avoid garden grab and dumping of garden waste.*
- g) Preparation of a work schedule (including an annual work plan capable of being rolled forward over a five-year period).*
- h) Details of the body or organization responsible for implementation of the plan.*
- i) Ongoing monitoring and remedial measures.*

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 Owner with the management body 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 and 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 approved plan will be implemented in accordance with the approved details.

Reason: In order to ensure that provision is made to allow satisfactory maintenance of protection and enhancement for biodiversity hereby approved. Relevant policy: Core Strategy policies CP3, CP7, CC03, and TB21.

An Annotated Site Plan (Figure 1) showing the various enhancement measures has been attached for reference.

¹ Nature Conservancy Council 1988 (reprinted 1991). Site management plans for nature conservation, a working guide.

Site Description and Proposals

The site is located off Johnson Drive in Finchampstead, centred at National Grid Reference: SU 805651 and covers approximately 1.3 hectares. The site comprised the existing buildings, associated hardstanding and grassland areas. The site was bordered by woodland to the north and east and by residential properties and associated gardens to the south and west.

The consented scheme is for the erection of eight residential dwellings. This will require the demolition of the existing outbuildings and the clearance of some vegetation. The majority of the established boundary vegetation will be retained, protected and enhanced as part of the works. A wildlife area and wildlife corridors will be provided to enhance the site for protected species and other wildlife.

EVALUATION AND OBJECTIVES

The key enhancement measure will be the introduction of new, wildlife friendly planting, including trees, hedging and wildflower areas, which will provide a range of habitats for local wildlife. These areas will largely be within the wildlife area and associated wildlife corridors. Additional measures will be to install a series of wildlife boxes at suitable locations on the site in order to enhance roosting/nesting/sheltering opportunities along with some log piles and hibernacula.

ECOLOGICAL CONSTRAINTS AND CONTROLS

Overview

There are no habitats of international, national, county or local importance that would be directly affected by the proposals. **N.B. There is Deciduous Woodland, a Habitat of Principal Importance (HPI), located adjacent to the northern and eastern boundaries of the site but this habitat is outside of the site boundary and will be retained and protected.** Species recorded on the site can be described as common or abundant and are found in similar places across much of Britain, with common species of reptiles (slow worm and grass snake) recorded [REDACTED]

[REDACTED] In order to minimise disturbance to local wildlife and avoid contravention of current legislation the following controls will be applied during the ongoing management operations.

General Controls

All operatives employed by the management company will be suitably trained and aware of current legislation protecting [REDACTED] bats, nesting birds and reptiles. In the event that specialist advice is needed then a suitably experienced and qualified ecologist will be appointed, as necessary.

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

- there will be no fires on the site. The site will be kept tidy with any litter picked up and disposed of appropriately.

Bats

Although no confirmed bat roosts have been recorded on the site. In the event any tree felling/pruning is required, then works will be completed by competent tree surgeons who are fully conversant with current legislation protecting bats and their roosts.

If any bats are discovered at any point, then all work must immediately cease until a suitably experienced ecologist has been contacted for advice and works within the vicinity will be halted. It may be necessary to contact Natural England and obtain a licence prior to works continuing.

Nesting Birds

It should be noted that all species of wild bird and their nests are protected under the *Wildlife and Countryside Act 1981 (as amended)*. Therefore, management works to any areas of vegetation that could provide potential nesting habitat should be completed during the winter months or certainly timed to avoid the main bird nesting season, which, in general, runs from mid-February to September inclusive.

Reptiles

The wildlife areas of the site will contain a population of slow worms and grass snake. Due to the presence of reptiles, all site personnel will be given a toolbox talk to inform them about the sensitivity of the works and the legal protection they are afforded (copy of a generic toolbox talk is attached at Appendix B).

The wildlife area and wildlife corridors will be cut annually in late autumn, when reptiles are still active and the plants have set seed, to prevent any potential disturbance to hibernating animals. Grassy areas will be cut no shorter than 150 mm (to avoid killing/injuring any species), with all works completed using hand-held equipment only.

The hibernacula will be monitored on an annual basis, with any remedial works carried out as necessary, such as addition of material. Any remedial works to the hibernacula should be timed during the summer/autumn months.

Ditch

The ditch will require periodic checks, with any foreign debris removed, to ensure that the ditch continues to drain effectively. The ditch will require periodic clearing of debris/silt/vegetation. De-silting will be carried out carefully, with all arisings left along the edge of the ditch for a few days to allow any animals the chance to return to the water. The material will then be removed from site in accordance with the waste regulatory regime. Wherever possible, only a third should be de-silted in any one year. Removal of vegetation will avoid the bird nesting season.

PRESCRIPTIONS

Overview

A range of generic and site-specific measures have been provided below. An overarching summary table detailing the management prescriptions and checklist has been attached at Appendix C. More detailed management and monitoring prescriptions including key objectives (based upon the Statutory Biodiversity Metric Condition Assessments) for each specific feature/habitat has been attached at Appendix D. It is the intention for these tables to be used on at least an annual basis during management operations. More regular monitoring surveys may be required, which would be determined by the management company and their appointed specialists. Please note that these management prescriptions will only apply to the land within

shared ownership and under the control of the management company and not within private ownership of the various plots.

General Principles

Participation – involvement of the public (new residents) is central to the conservation and enhancement of the site as a whole. Active support encourages a sense of ownership and responsibility, which always assists in overcoming problems, such as vandalism and misuse of areas. The Management Company will seek to engage the public in the overall management and maintenance of the site, where practicable and safe to do so.

Health & Safety - public access and the often labour-intensive management tasks mean that the health and safety of the public (new residents and general public) and contractors is a priority. Therefore, as part of the management of the site the Management Company will complete appropriate risk assessments, as necessary.

Security – all fences will be inspected frequently, and any necessary remedial action taken immediately in order to preclude public access to private and wildlife sensitive areas. As well as controlling access, the condition of the existing fencing is an important safety consideration.

Litter - rubbish or debris in any form conveys a lack of respect, which can encourage further casual disposal. Some litter can also present a safety risk or be lethal to small mammals and some invertebrates and it must be cleared on a regular and systematic basis. This will reflect the responsibilities and requirements placed on landowners and managers under the Environmental Protection Act 1990.

Deadwood - deadwood is an essential habitat for many species, especially invertebrates, bryophytes and fungi. Removal of deadwood and 'tidying-up' leads to relatively sterile conditions and takes away an essential habitat. Where possible, all wood from windblow, or arising from management operations, should be left on-site in suitable locations as low brush or added to the log piles.

Use of chemicals - there will be a general presumption against the use of herbicides, pesticides and fertilisers. By their very nature all such chemicals are potentially damaging to the environment to a greater or lesser extent, can lead to impoverishment of habitats and may be a danger to the public. Consequently, such use will be restricted to essential tasks when other management methods are inappropriate or have failed. Application of chemicals must be undertaken by staff or contractors with current certification of competence.

Boundary treatment - where possible, existing boundary vegetation will be retained and protected, with any new boundary treatment designed to promote permeability of the site to minimise fragmentation, allowing free movement of wildlife throughout the site. These measures will aim to strengthen habitat connectivity and provide additional foraging habitat, cover and nesting opportunities for local wildlife. If close boarded fences are required for security reasons, these should be minimised and raised slightly off the ground (c. 150-200 mm) to allow animals to pass underneath, or installed with strategically placed gaps, to permit the free movement of hedgehogs and other wildlife.

Garden waste – garden waste of any description can introduce additional nutrients and other elements to the soil. It upsets the natural balance of habitats into which it is introduced, can introduce non-native invasive species, can smother important wildflowers and can encourage pests, such as rats. Any vegetation deposited within the existing or newly created habitats by adjacent properties or from management operations must be cleared on a regular and systematic basis. Any non-native plant material will be deposited off-site in accordance with the waste regulatory regime or retained on-site in designated compost areas.

Bat Boxes

In order to provide roosting opportunities for bats, three bat boxes (x3 Eco Kent Bat Boxes, or equivalent) will be installed on suitable trees on site. In addition, eight bat tubes (Ibstock Enclosed Bat Box B, or equivalent) will be installed onto the new builds. The boxes will be positioned in accordance with best practice and installed prior to occupation. Indicative locations are shown on Figure 1 and a guidance document is attached at Appendix E. Although, bat boxes do not require regular cleaning periodic maintenance checks should be

carried out with any damaged boxes replaced as necessary (**Note: any works/checks to bat boxes might require a licensed bat worker**).

Bird Boxes

In order to enhance nesting opportunities for birds, five bird boxes (x5 Vivaro Pro Seville Bird Boxes, or equivalent) will be installed on suitable trees on site. The nest boxes on trees should be cleaned out once a year during the winter months, and, in the event that any become damaged, replaced as necessary. In addition, eight bird boxes (Habibat Swift Box, or equivalent) will be installed onto the new builds. Integrated bird boxes do not require cleaning. All boxes will be positioned in accordance with best practice and installed prior to occupation. Indicative locations are shown on Figure 1 and a guidance document is attached at Appendix E.

Hedgehog Gaps

In order to allow free movement of hedgehogs and other wildlife, enhancing connectivity with adjacent habitats, three hedgehog gaps will be installed at the boundaries of the new private gardens and boundary fences of the site. The hedgehog gaps will be regularly checked and kept free from obstructions. Indicative locations are shown on Figure 1.

Hibernacula

In order to enhance the sheltering opportunities for reptiles on the site two hibernacula will be created within the on-site wildlife area and wildlife corridor (a copy of generic reptile hibernacula specification has been attached at Appendix F for reference). The hibernacula created will also be monitored, with any remedial works carried out as necessary, such as addition of material. Any remedial works to the hibernacula should be timed during the summer/autumn months.

Log Piles

Log piles will be created to provide enhanced shelter and overwintering for invertebrates and other species. Any larger material arising from on-site management operations will be added to the log piles so that the log piles are maintained and contain wood in a varying state of decay, indicative locations are shown on Figure 1.

New Planting

As part of the overall landscape treatment of the site, planting will be carried out, details provided in the Soft Landscaping Plan by Treetop Landscapes Ltd (Drawing No. TTL-SM-PHJD2102001 Rev. F attached at Figure 2 for reference). Such planting will include a variety of native and ornamental species of value to wildlife. In particular, flowering plants will be of benefit to invertebrate species and shrubs, hedgerows and trees may provide nesting opportunities for birds once they become established.

A check of the new planting will be conducted, with replacement planting carried out where necessary. The planting will require minimal maintenance, with occasional weeding and pruning of plants where necessary. Shrub areas, planted for the benefit of invertebrates, should be covered with a mulch for water retention, which will aid flower/nectar production. Regular dead-heading of flowers will encourage further flowering, improving the supply of nectar for butterflies and other insects. At the end of the season, plants should not be pruned or dead-headed until later in the winter, allowing birds to feed on any seeds.

Wildlife Area and Wildlife Corridor

Wildflowers will be sown within the 'Wildlife Area' and 'Wildlife Corridor' areas in the north, east and west of the site. Further details are shown on the Soft Landscaping Plan (Figure 2). This type of habitat will provide opportunities for a range of wildlife, including invertebrates.

Management - first-year cutting may not be necessary but will be dependent upon site conditions and sward height. Initially aiming to keep the sward height short to encourage tillering and reduce competition from rank

species (species such as yellow rattle could be sown to assist with reducing the dominance of grasses). **N.B. as the areas contain reptiles areas of grassland should be cut no shorter than 150 mm and use hand held equipment only.** After cutting, arisings should be removed from the area. The grassland should be cut on an annual basis in year 2 and 3 in late summer/autumn, which will allow flowers to set seed and certain invertebrates to complete their life cycle, with all arisings left on site for a few days to allow the seed bank to disperse, before being collected and disposed of either in designated composting areas or disposed off-site. It is important to remove arisings from the area to maintain low nutrient status, favourable to wildflowers. Periodic clearance of weeds and any scrub encroachment will be required to maintain the open nature of the grassland, with all arisings retained removed from site or used as chippings to act as a mulch in suitable locations on the site. Spot control of invasive/over dominate species (e.g. common nettles, ragwort and spear thistle) may need to be carried out but any treatment will be completed by suitably trained and licensed contractors who are fully aware of the presence of reptiles.

Mixed Scrub Planting

Mixed scrub will be sown within the 'Wildlife Corridor' areas in the north, east and west of the site. Further details are shown on the Soft Landscaping Plan (Figure 2). The newly planted scrub will provide a direct and indirect food source for a number of common species of invertebrates, birds and small mammals, as well as potential sheltering sites and bird nesting habitat once the scrub becomes established.

Management – annual checks of the new scrub planting will be conducted, with replacement planting carried out where necessary. The scrub planting will require minimal maintenance, with occasional weeding and pruning of plants where necessary. At the end of the season, plants should not be pruned or dead-headed until later in the winter, allowing birds to feed on any seeds. Cutting and pruning of any scrub areas will be carried out on a rotational basis, with a maximum of one third of the area cut in any one year, where practicable to do so, allowing species to flower and produce seed/fruit. The timing of any management/pruning should be carried out during the late winter months. Late January/early February is ideal as the majority of the berries have been eaten but is before the onset of the main bird nesting season.

Hedge Planting

As part of the landscaping, new native hedgerows will be planted, with species including hawthorn (*Crataegus monogyna*), hazel (*Corylus avellana*), field maple (*Acer campestre*), wild privet (*Ligustrum vulgare*), blackthorn (*Prunus spinosa*) and hornbeam (*Carpinus betulus*). Further details are shown on the Soft Landscaping Plan (Figure 2). The hedgerows will be of benefit to wildlife, providing a nectar source for insects when in flower, as well as enhancing habitat connectivity.

Management – annual checks of the new planting will be completed, with replacement planting carried out where necessary. Cutting of hedgerows will be carried out on a rotational basis with only a third cut in any one year, where practicable to do so. The hedgerows will be cut to a height of between 1.5 and 2.0 m. Any cutting/pruning will be timed during the late winter months. Late January/early February is ideal as the majority of the berries have been eaten but before the onset of the main bird nesting season. All arisings will be retained on site either as low brash or as chippings to act as a mulch, where practicable to do so.

Trees

A number of new trees will be planted on the site to complement the established trees to be retained, with species including field maple, silver birch (*Betula pendula*), hornbeam, cherry apple (*Malus domestica*), whitebeam (*Sorbus aria*), rowan (*Sorbus aucuparia*), wild service tree (*Sorbus torminalis*), large-leaved lime (*Tilia platyphyllos*), oak (*Quercus robur*) and other tree species. Further details are shown on the Soft Landscaping Plan (Figure 2). Once established, the new trees will provide a food source for a variety of wildlife, including insects and birds, and bird nesting opportunities. **N.B. The existing trees within the western and eastern sections of the site are covered by a Tree Preservation Order (TPO) and, therefore, any works to these trees would require approval from the LPA.**

Management – annual check of new planting will be carried out, with replacement planting carried out where necessary. Once established, the trees may need periodic pruning, with any arisings retained on site either

as low brash or as chippings to act as a mulch, where practicable to do so. Weeding will be carried out where necessary to ensure new planting establishes. The timing of any management should be carried out during the late winter months. January is ideal as the majority of the berries have been eaten, but before the onset of the main bird nesting season.

MONITORING AND REVIEW

A summary table and checklists of the various prescriptions to be implemented has been attached at Appendices C and D. An annual review of this management strategy will be carried out between those parties responsible for the management of the areas, to determine the effectiveness of the prescriptions and to identify any amendments or additional measures that may be necessary to the Plan. A record should be kept using the checklists attached in order to track the progress of management year by year and provide details of any remedial actions that are required for the following year.

Maintenance checks of the site will be carried out on a more regular basis, such as a check on fencing and replacement planting will be carried out as necessary.

Provision for not less than the first five years of completed Annual Monitoring Sheets before 31 October each year will be submitted to the Local Planning Authority. Any material amendments to the LEMP and all subsequent 5-yearly reviews and updates of the LEMP to be submitted to and agreed by the Local Planning Authority.

RESPONSIBILITIES

Palatine Johnson Drive Limited² will be responsible for the management/maintenance as set out in this LEMP. An annual fee paid by the residents will fund the ongoing management of the site. Ecological supervision may be required for ongoing management work and to monitor habitat conditions, specialist consultants would be appointed by the management company to complete this work, as necessary.

Author:

Alan Beaumont
BSc (Hons) MSc MCIEEM
Director of Ecology
E alan.beaumont@aae-ltd.co.uk

Office:

AA Environmental Ltd
Units 4-8
Cholswell Court
Shippon
Abingdon
Oxon OX13 6HX

Company No. 8474322

E info@aae-ltd.co.uk

T 01235 536042

F 01235 523849

² Company No. 16116254 appointed by Palatine Homes Limited and the residents.

Figure 1
Annotated Site Plan



Eco Kent Bat Box



Ibstock Enclosed Bat Box 'B'



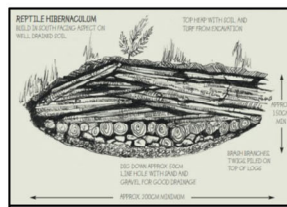
Vivaro Pro Seville Bird Box



Habibat Swift Box



Hedgehog Gap



Hibernacula



Log Pile



Notes

Bat Boxes

x3 Eco Kent Bat Boxes (or equivalent)

Bat Tubes

x8 Ibstock's Enclosed Bat Box B (or equivalent)

Bird Boxes

x5 Vivaro Pro Seville Bird Boxes (or equivalent)

Swift Boxes

x8 Habibat Swift Boxes (or equivalent)

Hedgehog Gaps

x3 Hedgehog Gaps

Hibernacula

x2 Hibernacula

Log Piles

x4 Log Piles

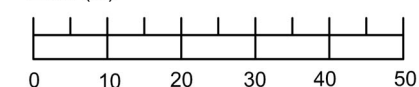
A sensitive lighting scheme will be adopted for the proposals and no lighting will be directed onto any bat boxes installed.

KEY

- Site Boundary *
 - Individual Tree (Topographed)
 - Bat Box *
 - Bat Tube *
 - Bird Box *
 - Swift Box *
 - Hedgehog Gap *
 - Hibernacula *
 - Log Pile *
- * Indicative Location



Scale (m)



Rev.	Details	Drawn	Date
		Chkd.	
Project			
233292			
Land at Johnson Drive			
Finchampstead			
Title			
Annotated Site Plan			
AA Environmental Ltd			
Units 4-8			
Cholswell Court			
Shippon Abingdon			
Oxon OX13 6HX			
T: (01235) 536042			
F: (01235) 523849			
info@aae-ltd.co.uk			
www.aae-ltd.co.uk			
Scale	Date	Drg. No.	Rev.
As shown	13.05.25	Figure 1	
Drawn	NAB	Chkd.	
		ARB	

Figure 2
Soft Landscaping Plan



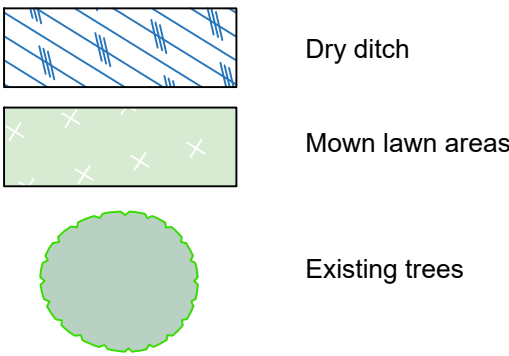
Wildlife Corridor
Bare root plants to be planted 45-60cm tall in 5m centres and grown on as shrubs to provide shelter, habitat and food for a wide range of wildlife
10% Corylus avellana
10% Sambucus nigra
5% Salix caprea
10% Crataegus monogyna
2.5% Rosa canina
2.5% Ilex aquifolium
10% Viburnum opulus
10% Viburnum lantana
10% Ligustrum vulgare
10% Prunus spinosa
10% Cornus sanguinea
10% Euonymus europaeus

Planting to fronts of Plot 6 - 8 -
In each plot split between beds
4 x Taxus baccata 40cm Ball
2 x Daphne odora Aureomarginata 5L
1 x Pittosporum Silver Ball 10L
3 x Abelia grandiflora Confetti 10L
6 x Lavandula Hidcote 5L
3 x Hebe fran. Blue Gem 5L
3 x Euonymous Emerald Gaiety 10L
3 x Hebe Sutherlandii 5L
3 x Choisya ternata 5L

Planting to fronts of Plot 4 and 5
In each plot split between beds:
4 x Taxus baccata 40cm Ball
2 x Daphne odora Aureomarginata 5L
3 x Cistus Silver Pink 5L
3 x Lavandula Hidcote 5L
3 x Choisya ternata 5L
3 x Hebe sutherlandii 5L
3 Euonymous Emerald Gaiety

Planting to fronts of Plots 1 - 3
In each plot to be split between beds:
4 x Taxus baccata 40cm Ball
2 x Daphne odora Aureomarginata 5L
3 x Viburnum tinus 10L
3 x Euonymous fortunei Silver Queen 5L
3 x Choisya ternata
3 x Hebe Sutherlandii

- Notes**
- All plant material to be compatible with British Standard 3936 part 1. 1992 specifications - 'Nursery Stock'
 - All soft landscaping work/planting to be compatible with British Standard 4428 specifications 1989 - Landscape Operations
 - All planting areas to be completely cleared of grass, weeds, debris and stones/concrete etc exceeding 50mm dia.
Soil in all scheduled planting areas outside existing canopy spreads of trees that has compacted/denatured/contaminated during work on the site, to be excavated to a minimum depth of 50mm.
 - All planting areas to be cultivated to a minimum depth of 500mm and topdressed with an organic slow release fertilizer such as sterilised bonemeal.
 - No peat products used.
 - All planting areas around trees and shrubs to receive a 70mm layer (minimum) of seasoned medium grade chipped bark mulch, upon completion of planting.
Tree pits shall be of a diameter 600mm greater than the rootball. The depth of the pit shall be 225mm deeper than the rootball and not less than 600mm deep. The top soil shall be stripped from the area of the pit and stascked for re-use; the sub-soil is to be excavated and removed from the site. the base of the put shall be forked over to a depth of 225mm and left with a slightly higher centre to permit drainage.
All trees to be single staked and tied including the use of 1 spacer block per tree. Trees of 14-16cm girth and above should be double staked, one on either side of the trunk. Stakes not to extend more than 600mm above ground level. Stakes should be positioned on the windward side of the tree.
An area of 1.5m wide (minimum) to be left free of all grass turf, weed growth, scrub vegetation, etc. around the bases of all newly planted trees situated within grassed areas and mulched as specified above.
 - All non-specified areas to be turfed with good quality seed grown turf.



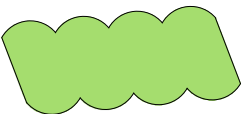
Plant Schedule

New Trees to be planted
All size 12-14cmg. container grown or RB depending on availability

Qty	Plant Name	KEY
3	Acer campestre	Ac
5	Acer campestre Elsrijk	AcE
9	Betula pendula	Bp
3	Carpinus betulus	Cb
12	Malus domestica	Md
2	Quercus robur	Qr
6	Sorbus aria	Sa
3	Sorbus aucuparia	Sau
7	Sorbus torminalis	St
5	Tilia platyphyllos	Tp

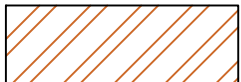
Planting to front of houses

- 3 Abelia grandiflora Confetti 10L
- 9 Choisya ternata 5L
- 3 Cistus Silver Pink 5L
- 6 Daphne odora Aureomarginata 5L
- 6 Euonymous Emerald Gaiety 10L
- 3 Euonymous fortuneii Silver Queen 5L
- 3 Hebe fran. Blue Gem 5L
- 9 Hebe sutherlandii 5L
- 9 Lavandula Hidcote 5L
- 1 Pittosporum Silver Ball 10L
- 12 Taxus baccata 40cm Ball
- 3 Viburnum tinus 10L



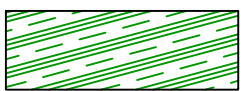
Native Hedge Mix - approx 430m

- 50% Crataegus monogyna
- 10% Corylus avellana
- 10% Acer campestre
- 10% Ligustrum vulgare
- 10% Prunus spinosa
- 10% Carpinus betulus



Wildflower Seeded Areas - to be seeded as per supplier instructions

Wildlife Area - approx 2100sqm - to be seeded with EW1F Wild Flowers for Woodland - Supplied by Emorsgate



Wildlife Corridor - approx 3200sqm - to be seeded with EH1 Hedgrow Mixture (contains grasses and wildflowers) - Supplied by Emorsgate



Treetop Landscapes Ltd

1 Northbury Cottages, Castle End Road,
Ruscombe, Berkshire, RG10 9XJ
(0118)9344132
nick@treetoplandscapes.co.uk
fiona@treetoplandscapes.co.uk

Palatine Homes - Land at Johnsons Drive, Finchamstead

Date: 25/03/2025

Scale: 1:500 @ A1

Drawing No: TTL-SM-PHJD2102001

Rev F

Appendix A
Toolbox Talk [REDACTED]



Appendix B
Toolbox Talk (Reptiles)

TOOLBOX TALK: REPTILES

Did you know?

- There are six species of reptile native to the UK, three of which are snakes and three are lizards.
- Smooth snakes and Sand lizards are very rare and are presently restricted to a few localised areas.
- Adders, Grass snakes, Common lizards and Slow-worms are widespread and found in a number of different urban and rural habitats across the UK.
- All reptiles are ectothermic. This means they rely upon the sun's heat for warmth. As a result, you may find reptiles basking in sunny places. If it becomes too warm they will seek shade, to avoid overheating.
- Reptiles movement will be slower in cooler conditions.
- Reptiles hibernate during the winter and may not wake up if disturbed. This makes them vulnerable to site works during winter months.
- Reptiles depend upon a varied habitat for survival. They need basking spots, shade, protection from predators, food resources and somewhere to hibernate!

Identification

- Reptiles may be found in a variety of habitats within a site. Most species favour scrubland, heathland or long grassland. Railway embankments are also highly favoured.
- On the right are photos of the reptiles you are most likely to encounter on a site, if any.
- Adders can be distinguished from Grass snakes by the diamond (or jagged) stripe running down the centre of their back.
- Slow-worms look a lot like a snake but are in fact legless lizards! They tend to be light brown/golden in colour, with a smooth appearance.
- Common lizards are fast-moving, but may be sighted from a distance when basking.

Legislation

- All reptile species are protected under UK law.
- This makes it **illegal** to intentionally or recklessly kill or injure and protects them against sale and transporting for sale.

Site Controls

- There is always a **risk** that as reptiles move through the habitat that they could be encountered during site works.
- **If any reptiles are encountered during works the following controls must be applied to avoid breaking the law:**
 1. If reptiles are discovered/suspected works must stop **immediately**, with any reptiles left in-situ and AAe immediately contacted (contact details above).
 2. During works, operatives must wear gloves in case of accidental contact with reptiles.
 3. Site operative must not intentionally handle reptiles.
 4. Care must be taken when moving logs, stones or rubble. These are favoured habitats for reptiles and they may be found sheltering underneath.
 5. Stockpiling of materials is only permitted within designated areas. Any building materials must be stored above ground on pallets and any waste material must be placed into skips, to prevent the risk of reptiles taking refuge within them.
 6. Trenches must be covered overnight to prevent animals falling into them.

These controls have been put in place to protect all site operatives from breaking the law. You are not expected to be able to identify reptiles or their presence so remember, **if in doubt shout and contact the relevant person.**

Key Contact

AA Environmental Ltd, Units 4-8 Cholswell Court, Shippon, Oxfordshire, OX13 6HX

Tel: 01235 536042



Appendix C Management Prescriptions and Checklist Summary

Management Prescriptions and Checklist Summary

Overall Management Objectives		Enhance nesting/roosting opportunities for birds, bats, reptiles and invertebrates. Protect, maintain and enhance the retained habitats and newly planted-up areas. Introduce new native and wildlife-friendly planting within the site to provide a connected range of habitats for local wildlife. Provide enhanced habitats and features of value for a range of species. Sympathetic management of the site to take into account the continued presence of protected species and other wildlife																																																																																																									
General Management Operations		To clear away any litter on a regular and systematic basis and ensure minimal use of chemicals. Allow all wood from windblow or arising from management operations to be left on-site in suitable locations as hibernacula, log piles/low brash. Fence condition will be inspected frequently, any remedial action taken immediately to preclude public access to private + wildlife sensitive areas. Any garden waste deposited within the existing/newly created habitats by adjacent properties will be removed and deposited off-site in accordance with the waste regulatory regime. Annual inspection of all planting with replacement planting as necessary. Annual check of wildlife boxes (during the winter months) with cleaning and repairs completed as necessary (Note: any works/checks to bat boxes might require suitably licensed individuals).																																																																																																									
Specific Habitat Operations		<table><tr><th colspan="2" rowspan="2"></th><th rowspan="2">Management Operations</th><th colspan="7">Year from Start</th></tr><tr><th>1</th><th>2</th><th>3</th><th>4</th><th>5</th><th>10</th><th>30</th></tr><tr><td>1</td><td>Hibernacula and Log Piles</td><td>Construct a series of hibernacula and log piles on the site and any larger material arising from on-site management operations will be added to the hibernacula and log piles so that they are maintained and contain wood in a varying state of decay.</td><td>✓</td><td>✓</td><td>✓</td><td>✓</td><td>✓</td><td>✓</td><td>✓</td></tr><tr><td>2</td><td>Wildflower Meadow</td><td>Once established single cut at the end of September/October. Arisings/mowings removed after left in-situ for a few days to allow seed to drop to the ground.</td><td>✓</td><td>✓</td><td>✓</td><td>✓</td><td>✓</td><td>✓</td><td>✓</td></tr><tr><td>3</td><td>Mixed Scrub</td><td>Pruning may be required as identified during annual inspection as planting matures. Any management timed during the winter months to allow plants to flower and set seed, birds to eat berries and before the onset of the main bird nesting season.</td><td>✓</td><td>✓</td><td>✓</td><td>✓</td><td>✓</td><td>✓</td><td>✓</td></tr><tr><td>4</td><td>Hedgerows</td><td>Cutting of hedgerows will be carried out on a rotational basis with only a third cut in any one year, where practicable to do so. Any cutting/pruning will be timed during the late winter months. All arisings will be retained on site either as low brash or as chippings to act as a mulch.</td><td>✓</td><td>✓</td><td>✓</td><td>✓</td><td>✓</td><td>✓</td><td>✓</td></tr><tr><td rowspan="2">5</td><td rowspan="2">Trees</td><td>Trees may need pruning and or pollarding. Any pruning will be timed during the late winter months. All arisings will be retained on site either as low brash or as chippings to act as a mulch.</td><td>✓</td><td>✓</td><td>✓</td><td>✓</td><td>✓</td><td>✓</td><td>✓</td></tr><tr><td>Remove redundant tree support systems once trees are fully established.</td><td></td><td></td><td></td><td></td><td>✓</td><td></td><td></td></tr><tr><td colspan="2">LEMP Review</td><td>Review of the LEMP and take into consideration any other objectives/initiatives in consultation with interested parties. Amend as necessary.</td><td>✓</td><td>✓</td><td>✓</td><td>✓</td><td>✓</td><td>✓</td><td>✓</td></tr><tr><td colspan="3">Management work completed by (add company details):</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td colspan="3">Initials of Manager:</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr></table>			Management Operations	Year from Start							1	2	3	4	5	10	30	1	Hibernacula and Log Piles	Construct a series of hibernacula and log piles on the site and any larger material arising from on-site management operations will be added to the hibernacula and log piles so that they are maintained and contain wood in a varying state of decay.	✓	✓	✓	✓	✓	✓	✓	2	Wildflower Meadow	Once established single cut at the end of September/October. Arisings/mowings removed after left in-situ for a few days to allow seed to drop to the ground.	✓	✓	✓	✓	✓	✓	✓	3	Mixed Scrub	Pruning may be required as identified during annual inspection as planting matures. Any management timed during the winter months to allow plants to flower and set seed, birds to eat berries and before the onset of the main bird nesting season.	✓	✓	✓	✓	✓	✓	✓	4	Hedgerows	Cutting of hedgerows will be carried out on a rotational basis with only a third cut in any one year, where practicable to do so. Any cutting/pruning will be timed during the late winter months. All arisings will be retained on site either as low brash or as chippings to act as a mulch.	✓	✓	✓	✓	✓	✓	✓	5	Trees	Trees may need pruning and or pollarding. Any pruning will be timed during the late winter months. All arisings will be retained on site either as low brash or as chippings to act as a mulch.	✓	✓	✓	✓	✓	✓	✓	Remove redundant tree support systems once trees are fully established.					✓			LEMP Review		Review of the LEMP and take into consideration any other objectives/initiatives in consultation with interested parties. Amend as necessary.	✓	✓	✓	✓	✓	✓	✓	Management work completed by (add company details):										Initials of Manager:									
		Management Operations				Year from Start																																																																																																					
			1	2	3	4	5	10	30																																																																																																		
1	Hibernacula and Log Piles	Construct a series of hibernacula and log piles on the site and any larger material arising from on-site management operations will be added to the hibernacula and log piles so that they are maintained and contain wood in a varying state of decay.	✓	✓	✓	✓	✓	✓	✓																																																																																																		
2	Wildflower Meadow	Once established single cut at the end of September/October. Arisings/mowings removed after left in-situ for a few days to allow seed to drop to the ground.	✓	✓	✓	✓	✓	✓	✓																																																																																																		
3	Mixed Scrub	Pruning may be required as identified during annual inspection as planting matures. Any management timed during the winter months to allow plants to flower and set seed, birds to eat berries and before the onset of the main bird nesting season.	✓	✓	✓	✓	✓	✓	✓																																																																																																		
4	Hedgerows	Cutting of hedgerows will be carried out on a rotational basis with only a third cut in any one year, where practicable to do so. Any cutting/pruning will be timed during the late winter months. All arisings will be retained on site either as low brash or as chippings to act as a mulch.	✓	✓	✓	✓	✓	✓	✓																																																																																																		
5	Trees	Trees may need pruning and or pollarding. Any pruning will be timed during the late winter months. All arisings will be retained on site either as low brash or as chippings to act as a mulch.	✓	✓	✓	✓	✓	✓	✓																																																																																																		
		Remove redundant tree support systems once trees are fully established.					✓																																																																																																				
LEMP Review		Review of the LEMP and take into consideration any other objectives/initiatives in consultation with interested parties. Amend as necessary.	✓	✓	✓	✓	✓	✓	✓																																																																																																		
Management work completed by (add company details):																																																																																																											
Initials of Manager:																																																																																																											

Appendix D

Specific Management Prescriptions and Checklists

AA Environmental Limited

Wildflower Meadow - Wildflowers will be sown within the 'Wildlife Area' and 'Wildlife Corridor' areas in the north, east and west of the site. The wildlife area will be oversown with EW1F wildflower for woods (supplied by Emorsgate) and the wildlife corridor oversown with EH1 Hedgerow mix (supplied by Emorsgate). Further details are shown on the Soft Landscaping Plan (Figure 2). This type of habitat will provide opportunities for a range of wildlife, including invertebrates.

Condition Assessment Criteria	Management Action	Prescriptions
A consistently high proportion of characteristic indicator species present	Laying and sowing	Oversowing of suitable seed mixes. EW1F to be oversown within the Wildlife Area and EH1 within the Wildlife Corridor.
Sward height is varied (at least 20% of the sward is less than 7 cm and at least 20% is more than 7 cm)	Mowing Regime	First-year cutting will be dependent upon site conditions and sward height. Initially aiming to keep the sward height short to encourage tillering and reduce competition from rank species (species such as yellow rattle could be sown to assist with reducing the dominance of grasses). Varied cutting times/heights, to enable a series of microclimates to form (rotational cutting, with only 1/3 cut at any one time). N.B. as the areas contain reptiles grassland should be cut no shorter than 150 mm and use hand held equipment only.
Cover of bare ground is between 1% and 5%	Watering	Immediately after sowing the areas should be kept well-watered to ensure that the wildflower seeds germinate. Additional watering may be required early on. After it will only be necessary to water during excessively dry spells.
Cover of bracken Pteridium aquilinum is less than 20% and cover of scrub is less than 5%	Weed clearance	Periodic clearance of weeds and any scrub encroachment will be required to maintain the open nature of the grassland, with all arisings retained removed from site or used as chippings to act as a mulch in suitable locations on the site.
No invasive non-native plant species	Ongoing invasive species monitoring	Spot control of invasive/over dominate species (e.g. common nettles, ragwort and spear thistle) may need to be carried out but any treatment will be completed by suitably trained and licensed contractors who are fully aware of the presence of reptiles.
10 or more vascular plant species per m2 present	Laying and sowing	Oversowing of suitable seed mixes. EW1F to be oversown within the Wildlife Area and EH1 within the Wildlife Corridor. Sowing of a flowering lawn mix and/or planting of wildflowers (either plug plants or seed mix)

Management Prescriptions Timing

Month	Jan	Feb	Mar	April	May	June	Jul	Aug	Sep	Oct	Nov	Dec
Infill planting checks												
Mowing Schedule												
Weeds/invasive species check												

Management work completed. Any amendments/comments should be provided below and continued on further sheets if necessary.

Work completed by (add company details):

Initials of Manager:

Mixed Scrub – Mixed scrub will be sown within the ‘Wildlife Corridor’ areas in the north, east and west of the site. Further details are shown on the Soft Landscaping Plan (Figure 2). The newly planted scrub will provide a direct and indirect food source for a number of common species of invertebrates, birds and small mammals, as well as potential sheltering sites and bird nesting habitat once the scrub becomes established.

Condition Assessment Criteria	Management Action	Prescriptions
At least 80% of scrub is native, there are at least three native woody species, no single species comprises more than 75% of the cover.	Planting	The mixed scrub planting will include hawthorn (<i>Crataegus monogyna</i>), hazel (<i>Corylus avellana</i>), blackthorn (<i>Prunus spinosa</i>), wild privet (<i>ligustrum vulgare</i>), common dogwood (<i>cornus sanguinea</i>) and other species, as listed within the Soft Landscaping Plan (Figure 2). Annual checks of the new planting will be completed, with replacement planting carried out where necessary.
Seedlings, saplings, young shrubs and mature (or ancient or veteran3) shrubs are all present.	Maintenance	Cutting and pruning of any scrub areas will be carried out on a rotational basis, with a maximum of one third of the area cut in any one year, where practicable to do so, allowing species to flower and produce seed/fruit.
No invasive non-native plant species	Ongoing invasive species monitoring	Spot control of invasive/over dominate species may need to be carried out but any treatment will be completed by suitably trained and licensed contractors who are fully aware of the presence of reptiles.

Management Prescriptions Timing

Month	Jan	Feb	Mar	April	May	June	Jul	Aug	Sep	Oct	Nov	Dec
Cutting schedule												
Maintenance checks												
Invasive species check												
Replacement planting												

Management work completed. Any amendments/comments should be provided below and continued on further sheets if necessary.

Work completed by (add company details):

Initials of Manager:

Hedgerows - As part of the landscaping, new native hedgerows will be planted, with species including hawthorn (*Crataegus monogyna*), hazel (*Corylus avellana*), field maple (*Acer campestre*), wild privet (*Ligustrum vulgare*), blackthorn (*Prunus spinosa*) and hornbeam (*Carpinus betulus*). Further details are shown on the Soft Landscaping Plan (Figure 2). The hedgerows will be of benefit to wildlife, providing a nectar source for insects when in flower, as well as enhancing habitat connectivity.

Condition Assessment Criteria	Management Action	Prescriptions
Height of between 1.5 – 2.0 m along length; >1.2 m average width along length; Gap between ground and base of canopy <0.5 m for >90% of length	Cutting	Cutting of hedgerows will be carried out on a rotational basis with only a third cut in any one year, where practicable to do so. The hedgerows will be cut to a height of between 1.5 and 2.0 m. Any cutting/pruning will be timed during the late winter months. Late January/early February is ideal as the majority of the berries have been eaten but before the onset of the main bird nesting season. All arisings will be retained on site either as low brash or as chippings to act as a mulch, where practicable to do so.
Gaps make up <10% of total length; and no canopy gaps <5 m	Top-up planting	Annual checks of the new planting will be completed, with replacement planting carried out where necessary. Newly planted hedgerows need watering regularly for the first 6 months. After it will only be necessary to water during excessively dry spells.
>1 m width of undisturbed ground with perennial herbaceous vegetation for >90% of length	Restricted mowing	A strip of ground beneath the hedgerows will always be left unmown.
Plant species indicative of nutrient enrichment of soils dominate <20% cover of the area of undisturbed ground (nettles, cleavers + docks)	Maintenance	Allow hedge bottom species to become established, with occasional cutting to reduce dominance of non-target species.
>90% of the hedgerow and undisturbed ground is free of invasive non-native plant species and recently introduced species	Ongoing invasive species monitoring	Spot control of invasive and recently introduced species will be required to maintain the target species within the hedgerow, may need to be carried out but any treatment will be completed by suitably trained and licensed contractors who are fully aware of the presence of reptiles.
>90% of the hedgerow or undisturbed ground is free of damage caused by human activities	Maintenance checks	Annual checks of the new planting will be completed, with replacement planting carried out where necessary.

Management Prescriptions Timing

Month	Jan	Feb	Mar	April	May	June	Jul	Aug	Sep	Oct	Nov	Dec
Cutting schedule												
Maintenance checks												
Invasive species check												
Replacement planting												

Management work completed. Any amendments/comments should be provided below and continued on further sheets if necessary.

Work completed by (add company details):

Initials of Manager:

Trees - A number of new trees will be planted on the site to complement the established trees to be retained. Once established, the new trees will provide a food source for a variety of wildlife, including insects and birds, and bird nesting opportunities. **N.B. The existing trees within the western and eastern sections of the site are covered by a Tree Preservation Order (TPO) and, therefore, any works to these trees would require approval from the LPA.**

Condition Assessment Criteria	Management Action	Prescriptions
The tree is a native species (or at least 70% within the block are native species).	Planting	Species planted will include field maple (<i>Acer campestre</i>), silver birch (<i>Betula pendula</i>), hornbeam (<i>Carpinus betulus</i>), cherry apple (<i>Malus domestica</i>), whitebeam (<i>Sorbus aria</i>), rowan (<i>Sorbus aucuparia</i>), wild service tree (<i>Sorbus torminalis</i>), large-leaved lime (<i>Tilia platyphyllos</i>), oak (<i>Quercus robur</i>) and other tree species. Further details are shown on the Soft Landscaping Plan (Figure 2).
The tree is mature (or more than 50% within the block are mature).	Watering	Remove redundant tree support systems once trees are fully established. Newly planted trees need watering regularly for the first 6 months to increase chance of reaching maturity. After it will only be necessary to water during excessively hot / dry spells. Trees may need pruning to help reach maturity. Any pruning will be timed during the late winter months. All arisings will be retained on site either as low brash or as chippings to act as a mulch.
Little or no evidence of an adverse impact on tree health by human activities (such as vandalism, herbicide, etc.)	Tree maintenance	Annual check of new planting will be carried out, with replacement planting carried out where necessary. Once established, the trees may need periodic pruning, with any arisings retained on site either as low brash or as chippings to act as a mulch, where practicable to do so. Weeding will be carried out where necessary to ensure new planting establishes. The timing of any management should be carried out during the late winter months. January is ideal as the majority of the berries have been eaten, but before the onset of the main bird nesting season.
More than 20% of the tree canopy area is oversailing vegetation beneath	Management	Areas directly underneath tree canopies will be left clear and not used for storage etc. When the planting starts to mature, periodic thinning of trees might be required to prevent competition.

Management Prescriptions Timing

Month	Jan	Feb	Mar	April	May	June	Jul	Aug	Sep	Oct	Nov	Dec
Pruning (species dependent)												
Planting checks												
Replacement planting if required												

Management work completed. Any amendments/comments should be provided below and continued on further sheets if necessary.

Work completed by (add company details):

Initials of Manager:

Appendix E
Bird and Bat Box Guidance Document

BIRD AND BAT BOX/TUBE GUIDANCE DOCUMENT

Overview

The boxes/tubes used should be made of woodcrete material¹ (or equivalent) wherever possible and be positioned in accordance with good practice. All of the boxes can be obtained from the following suppliers:

Jacobi Jayne www.jacobijayne.co.uk

Wildcare www.wildcare.co.uk

NHBS www.nhbs.com

Bird Box Installation Guidance

The requirements for nest boxes vary between species. However there are some general rules to follow:

- Boxes should be located in a sheltered position out of strong sunlight, wind and rain. Generally this means that the box should be positioned somewhere between the north east and south east side of a structure.
- For extra shelter, smaller boxes should be positioned at a slight forward angle.
- Large open boxes should be angled upwards when mounted to allow the nest to rest naturally at the back of the box.
- Boxes should be positioned out of the reach of predators where possible (e.g. cats).
- A density of around 10 bird boxes per hectare is acceptable.
- Position boxes away from bird tables and other feeding areas where possible.

Bat Box/tube Installation Guidance

- Boxes should be located in a sheltered position, out of strong wind, but exposed to sunlight for part of the day to provide solar warming.
- When installed on trees, where possible boxes should be put up in groups of two or three, facing in different directions to allow bats access to a range of temperature conditions. Furthermore, it is recommended that, to avoid competition for bat boxes, bird boxes should also be installed on the same trees².
- It should be ensured that the entrance hole to the box is kept clear, so that bats can access it freely.
- Ideally bat boxes should be positioned near linear vegetation (e.g. a hedgerow).
- When installing boxes on trees, the ideal position is at around 5 metres or more.
- On buildings, boxes should be positioned high up by the eaves to avoid bats being predated by cats and other predators.
- Boxes should be installed out of the direct line of artificial lighting, both current and to be installed.

References

1. Du Feu, C. (1993). *Nestboxes BTO Guide No. 23*. BTO, Thetford.
2. The Bat Conservation Trust (2003). *Bat Boxes - Your Questions Answered*.
3. Meddings, A., Taylor, S., Batty, L., Green, R., Knowles, M., Latham, D. (2011). Managing competition between birds and bats for roost boxes in small woodlands, north-east England. *Conservation Evidence*, 8, pg. 74-80.

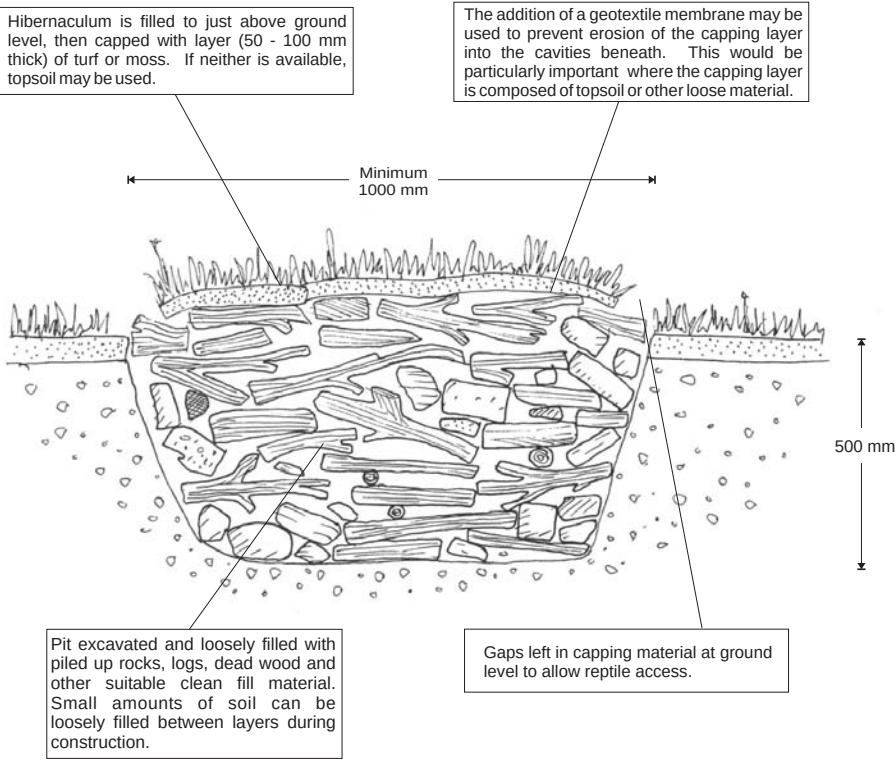
¹ Woodcrete is a blend of cement and sawdust. This material is found to be as successful as wooden bat boxes/tubes with greater durability and longevity. Schwegler bat boxes/tubes are constructed from this material.

² Research carried out by Meddings *et al.* (2011) suggests that installing bird and bat boxes on the same tree will reduce the likelihood of birds nesting in bat boxes and thus preventing a reduction in roosting opportunities for bats.

Appendix F
Hibernacula Design

Hibernaculum on free-draining ground

Where ground conditions allow, the hibernaculum should be incorporated into a shallow pit. This design is more likely to remain frost-free, and will be less obtrusive and thus unlikely to be subject to interference.



Hibernaculum on impermeable ground

Where ground conditions are impermeable, then an 'above-ground' or mounded design should be utilised in order to prevent the hibernaculum from flooding. This design should also be used if it is not possible to excavate a pit for any other reason.

