West Swainsford Farm, Woodlands Road, Mere, Warminster, Wilts, BA12 6JT

Landscape Ecological Management Plan

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Broadview Ecological Consultants

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Introduction

The following Landscape and Ecological Management Plan (LEMP) has been prepared by Broadview Ecological Consultants on behalf of the client, the Duchy of Cornwall. This document sets out the habitat creation, protection and management approaches for the landscape proposals within the proposed development at West Swainsford Farm. This document should be read in conjunction with Preliminary Ecological Appraisal Report[1] and the emergence and re-entry bat surveys[2], prepared by Broadview Ecological Consultants.

Background

This document has been prepared to discharge Condition 7 in respect of planning application Reference Number PL/2022/07937. A location plan with the ecological amendments for Biodiversity Net Gain is provided in Appendix 1.

A Landscape and Ecology Management Plan (LEMP) suitable to the scale of the development shall be submitted to, and approved in writing by, the Local Planning Authority. The LEMP includes long term objectives and targets, management responsibilities and maintenance schedules for each ecological feature within the development.

The LEMP includes, but not be limited to, the species list of the hedgerows to be planted and the seed mix to be used for the creation of the wildflower meadow. The LEMP shall be implemented in full and for the lifetime of the development in accordance with the approved details.

REASON: To ensure the long-term management of landscape and ecological features retained and created by the development, for the benefit of visual amenity and biodiversity for the lifetime of the scheme.

Legislation & Policy

All relevant EU and UK nature conservation law will be adhered to in relation to the protection of ecological features and ecological enhancement. This includes the protection afforded to nesting birds and reptiles under the Wildlife and Countryside Act 1981 (as amended) and with reference to the protection of bats and their roosts under the Conservation of Habitats and Species Regulations 2010 (as amended) (See Appendix 2 for relevant legislation). Regard must also be given to the Wiltshire Biodiversity Action Plan (BAP)[3] and Habitats of Principle Importance (HPI) as listed within Section 41 of the Natural Environment and Rural Communities (NERC) Act 2006.

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[1] Broadview Ecological Consultants (2022) Preliminary Ecological Assessment – West Swainsford Farm. R-21-007f.

2 Broadview Ecological Consultants (2021) Emergence and re-entry bat surveys at West Swainsford Farm, Mere, Wiltshire. R 21-00-7 c.

[3] Wiltshire Biodiversity Action Plan (2008). https://docplayer.net/20900429-Wiltshire-biodiversity-action-plan-2008.html .

Vision, Aims & Objectives

Vision

The Vision for the landscape design strategy is to increase the biodiversity and landscape value of the site over the long-term.

Aims & Objectives

The Vision consists of four main Aims, with each Aim being sub-divided into its Objectives. The Aims are outlined below, with Objectives described in detail on the following pages.

Aim 1: Maintain and enhance the biodiversity value of the site.

- Objective 1: Protect and maintain retained habitats and protected species within the site.
- Objective 2: To maximise the provision and establishment of native species, and species of local provenance that are appropriate to the immediate surrounds and local area.

Aim 2: Balance development amenity with wildlife.

- Objective 3: Provide a safe and pleasant landscape setting for new residential dwellings and to provide a high-quality landscape structure that enhances the appearance and character of the site and its environs. To create new habitat structures and foraging/sheltering opportunities for invertebrates, birds and small mammals (i.e., bats) through new native planting.

Aim 3: Manage the site for biodiversity in the long-term.

- Objective 4: Ensure the matrix of new and existing habitats establish and are suitably maintained to ensure long-term biodiversity gain. To provide new roosting/nesting opportunities for bat and bird species and create new sheltering and hibernation opportunities for amphibians, reptiles, invertebrates and small mammals.

Aim 4: Monitor the site and review the Plan.

- Objective 5: Provide a framework of monitoring and review periods.

Habitats and Protected Species to Be Retained and Protected

Objective 1: Protect and maintain retained habitats and protected species within the site.

Existing habitats will be retained where feasible within the development and will be protected through the enabling and construction phases.

Pre-construction Mitigation Measures

3.2 The following outlines the ecological mitigation measures to be undertaken ahead of commencing on site to minimise impact from construction works.

Existing Vegetation

Scattered trees, and sections of scrub along the periphery of the site are to be retained within the proposed scheme. Retained trees will be left unmanaged unless otherwise dictated for

reasons of public safety or to benefit the woodland structure or other adjacent or associated habitats or species.

During construction, any sections of retained hedgerows will be protected in accordance with BS5837:2012 and trees will be protected by fencing erected according to their calculated root protection area (RPA). No removal of woody vegetation will take place during the bird nesting season (March to September inclusive) unless a thorough survey by an appropriately experienced ecologist first confirms that no active nests are present. Any work will accord with the Wildlife and Countryside Act 1981 (as amended).

Trees will be inspected for signs of stress, disease or damage and appropriate remedial action taken. Arisings from any tree management activity will, where appropriate, be retained on site in piles to create wood habitat to maximise invertebrate and bryophyte biodiversity. Where it accords with health and safety inspection, standing dead wood will be left *in-situ* to provide additional dead wood habitats.

Mitigation Measures during Construction

Existing Hedgerows and Trees

Protective fencing will be maintained around the retained trees and hedgerows throughout the site. Regular checks will be undertaken throughout the enabling and construction phase to ensure these are maintained.

Any trees that require felling will be in accordance with an Arboricultural Method Statement if available or under the supervision of a qualified arborist/ tree surgeon and shall be assessed for bat roosts by a suitably qualified Ecologist.

Any hedgerow removal (if required) should be checked and overseen by a suitably qualified Ecologist and will be undertaken with care in stages using hand tools.

It is recommended that any removal of woody vegetation including hedgerow sections and trees should occur outside of the bird breeding season to minimise the risk of disturbance to breeding birds. If this is not possible, such vegetation must be checked prior to removal by a suitably experienced ecologist to confirm the absence of active nests.

If any nesting birds are present, the nest and a 5 m buffer surrounding it must be retained undisturbed until the birds have fledged. If works are undertaken outside of the bird breeding period, such restrictions do not apply.

Existing Grassland

During the construction phase, existing retained grassland will be kept short through mowing to prevent it becoming colonised by reptiles. Appropriate working methods comprise directional strimming of tall ruderal and grassland habitats prior to site clearance works, and the subsequent maintenance of on-site habitats with a short sward throughout works to minimise the potential for terrestrial fauna being harmed.

Site Storage

Care should be taken to store building materials off the ground, for example on pallets, to avoid creating temporary refugia.

Lighting

No construction lighting will be permitted on retained hedgerows to protect nocturnal animals such as bats. Alternatively, construction will be restricted to daylight hours, finishing at least 30 minutes before sunset and commencing at least 30 minutes after sunrise during the main bat activity season (April to October inclusive).

Excavations

Trenches or large excavations will be covered overnight to prevent wildlife falling in and failing to escape, or a strategically placed plank will provide a means of escape. Any large bore pipes will be capped at the end of the day to reduce the potential for wildlife to enter and become trapped.

Bats

Bat droppings were found in Building E and a bat roost was found in Building D. Refer to Emergence and re-entry bat surveys at West Swainsford Farm, Mere, Wiltshire (Page 10).

Reptiles

No reptiles were observed or surveyed for on site, but there is suitable habitat present for reptiles. Refer to Preliminary Ecological Appraisal Report (page 28).

Nesting Birds

Swallows were found nesting inside Building D and starlings were roosting in ivy attached to Building D. Refer to Emergence and re-entry bat surveys at West Swainsford Farm, Mere, Wiltshire (Page 10).

Landscape & Ecological Specification

Objective 2: Create a matrix of complimentary new habitats.

The Plan will create a matrix of new and existing habitats and corridors through the site to encourage the establishment and movement of wildlife. The following section outlines the specification and implementation, with Section 5 outlining the works programme and management regime.

General

Hedgerow planting is to be delivered and planted in accordance with HTA Standard 'Handling and establishing landscape plants' [4](obtainable from the Horticultural Trades Association) and should also accord with the planting plans. All plants should be stored only when necessary, in accordance with the HTA's 'Handling and establishing landscape plants'.

Planting is to remain materially undamaged, sturdy, healthy and vigorous, planted upright or well balanced with best side to front. All planting is to be true to name, of UK provenance and free from pests, diseases, discoloration, weeds, fungus and physiological disorders.

All works are to be undertaken with due diligence being sure to leave the works in a clean and tidy condition at completion and after any maintenance operations. Protect areas affected by

[4] *https://www.thenbs.com/PublicationIndex/documents/details?Pub=HTA&DocID=292311.*

planting operations using boards/tarpaulins and do not place excavated or imported material directly on adjacent grassed areas.

Bare root deciduous planting shall be carried out from late October to late March; herbaceous plants September/October or March/April. Container grown plants at any time of year if ground- and weather conditions are favourable. Bare root deciduous planting to be carried out only during suitable ground and weather conditions. Planting shall not be carried out in waterlogged or frozen ground.

Native Species-Rich Hedgerow Planting

Hedgerows are identified as a Habitat of Principle Importance (HPI) as listed within Section 41 of the Natural Environment and Rural Communities (NERC) Act 2006. New hedgerows will be created to provide site boundary enclosure and internal boundary elements. They are to be maintained at 1.8 m in height.

New hedgerows will be planted during the planting season (October to March inclusive) and will comprise mixed, native species planting at a density of 5 plants per linear metre (5/Lm), with plants arranged in an off-set double staggered row (DSR) in species groups of 5 to 11. All new hedgerow planting will be provided with 75 mm bark mulch. Individual spiral guards and bamboo canes will be required to prevent damage to saplings by browsers if deemed necessary.

The standard hedgerow planting mix will comprise the following species:

Species	**Density**	**Size**	**Root**	**%**
Acer campestre (Field Maple)	5/Lm DSR	60-90cm	BR	10
Cornus sanguinea (Dogwood)	5/Lm DSR	40-60cm	BR	5
Corylus avellana (Hazel)	5/Lm DSR	60-90cm	BR	20
Crataegus monogyna (Hawthorn)	5/Lm DSR	60-90cm	BR	45
Euonymus europaeus (Spindle)	5/Lm DSR	40-60cm	BR	5
Ilex aquifolium (Holly)	5/Lm DSR	5L	C	5
Rosa canina (Dog Rose)	5/Lm DSR	40-60cm	BR	5
Viburnum opulus (Guelder Rose)	5/Lm DSR	40-60cm	BR	5

Plants must be set in the holes at the same depth at which they have previously been growing with planting holes excavated approximately 150 mm larger than the root balls and backfilled with a mixture of topsoil. To be maintained at 1.2 m in height.

Plants to be a minimum of 300 mm from any adjacent hard surface. All stock to be well watered when planted with 20L of water per m^2. Following planting and watering operations,

all beds are to be mulched with 75mm of mulch (5-75mm particle size, British origin, FSC certified).

Wildflower meadow

4.35 the new area of wildflower meadow will be seeded using a species-rich meadow grassland mix such as Emorsgate EM3 –General Purpose Meadow Mix[5], sown at 4g/m² as per the manufacturer's instructions.

%	**Latin name (Common name)**
0.4	*Achillea millefolium* (Yarrow)
0.4	*Agrimonia eupatoria* (Agrimony)
0.1	*Anthyllis vulneraria* (Kidney Vetch)
0.1	*Betonica officinalis* - (Betony)
2.7	*Centaurea nigra* (Common Knapweed)
2.5	*Centaurea scabiosa* (Greater Knapweed)
1.5	*Daucus carota* (Wild Carrot)
1	*Galium mollugo* (Hedge Bedstraw)
0.1	*Geranium pratense* (Meadow Crane's-bill)
1.3	*Knautia arvensis* (Field Scabious)
3.2	*Leucanthemum vulgare* (Oxeye Daisy)
0.2	*Medicago lupulina* (Black Medick)
0.1	*Origanum vulgare* (Wild Marjoram)
0.4	*Pastinaca sativa* (Wild Parsnip)
0.5	*Poterium sanguisorba* - (Salad Burnet)
0.1	*Primula veris* (Cowslip)
2.5	*Prunella vulgaris* (Selfheal)
0.2	*Ranunculus acris* (Meadow Buttercup)

[5] *https://wildseed.co.uk/product/mixtures/complete-mixtures/general-purpose-meadow-mixtures/special-general-purpose-meadow-mixture/#:~:text=EM3%20is%20a%20complete%20mix,EG1%20for%20the%20grass%20component.*

%	**Latin name (Common name)**
0.2	*Rumex acetosa* (Common Sorrel)
0.1	*Silaum silaus* (Pepper Saxifrage)
1.4	*Silene vulgaris* (Bladder Campion)
0.5	*Torilis japonica* (Upright Hedge-parsley)
0.5	*Vicia cracca* (Tufted Vetch)
8	*Agrostis capillaris* (Common Bent)
28	*Cynosurus cristatus* (Crested Dogstail)
24	*Festuca rubra* (Red Fescue)
4	*Phleum bertolonii* (Smaller Cat's-tail)
16	*Poa pratensis* (Smooth-stalked Meadow-grass)

Areas to be sown will be first rotovated and raked or harrowed to produce a medium fine, firm tilth. Fertiliser will not be applied at any point as this will lead to the dominance of nutrient-loving species such as broad-leaved grasses, nettles and docks. The seed mix will be sown at a density as per the general manufacturer's recommendation to allow space for each species to establish and to produce good ground cover.

Seed will be sown in the autumn or spring, selecting a time when the soil is moist and can be worked. Seeding will be sown by hand broadcasting, seed fiddle, spinner, hydroseeding or grass seed drill on the surface and will not be raked or harrowed in.

Bird- and Bat Boxes

Bat boxes will be erected under the eaves of Building D and bat access ridge tiles on Building E. The bat boxes will be installed in accordance with standard best practice, such that the boxes are positioned at least 4 m above the ground, with the entrances to the boxes facing south-west to south-east. The entrances to the boxes are to be free of obstacles such that there is a clean and clear flight path to the new potential roost sites. This measure will provide increased roosting opportunities across the site over the existing situation.

Bird boxes will also be erected under the eaves of new dwellings. A variety of nest box types will provide new suitable nesting opportunities for a range of birds, and potentially encourage new bird species into the site. The bird boxes will be installed in accordance with standard best practice, such that the boxes are positioned generally around 1-3 m above the ground, with the entrances to the boxes facing between north and east. The entrances to the boxes are to be free of obstacles such that there is a clean and clear flight path to the new potential nesting sites.

The following boxes will be installed under eaves of Building D:

- 2 x Crevice Bat Boxes; (https://www.nestbox.co.uk/products/crevice-bat-box)

Bat boxes will be situated at least 4 m high and on to south and south easterly facing aspects within the dwelling elevations.

The following Bat access ridge tiles will be installed in Building E:

- 4 x bat access slate ridge tiles (https://beddoesproducts.com/products/bat-access-slate)

Lighting Design

No artificial lighting is to be used near, or directed towards, the bird- and bat boxes. To minimise potential effects to the local bat population, artificial lighting should be carefully designed adjacent to existing and new potential bat foraging areas including tree groups, hedgerows and commuting lines. See weblink for guidance https://www.bats.org.uk/news/2023/08/bats-and-artificial-lighting-at-night-ilp-guidance-note-update-released

Reptile hibernaculum- Log Piles

Log piles for reptiles and amphibians will ideally be placed at the interface between the existing hedgerow/scrub and the newly created wildflower meadow habitat, avoiding north-facing areas. The logs should be left in contact with the ground in dappled shade and built into a compact pile to maintain humidity. Stakes should be driven into the ground either side of the log pile to prevent the pile from collapsing.

Larger diameter logs (at least 100 mm thick) (Figure 1) with bark are of most value, particularly hard wood like ash, oak and beech, whereas freshly cut willow and poplar may re-sprout. Twigs, stems and shrub off-cuttings may also be added. Climbers may be allowed to grow thinly over the dead wood pile for stabilisation and moisture. Full sun will dry and heat the wood, supporting little life, whereas dense shade will promote the growth of fungi but may be too cool for insects.

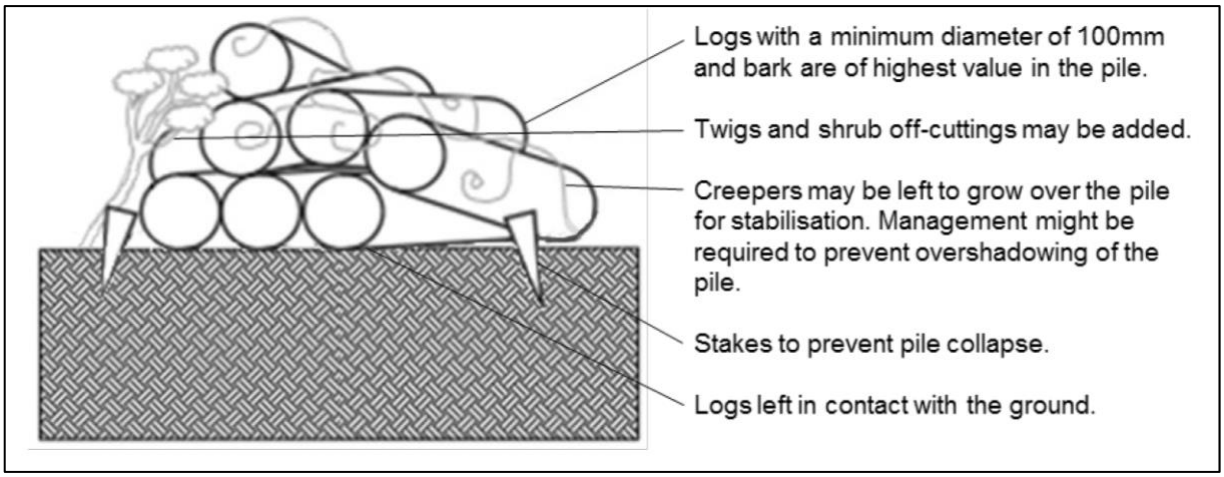


Figure 1 Log Pile detail.

Leisure Resource

Objective 3: Provide a safe and pleasant landscape setting for new residential dwellings, inspiring recreational and leisure resource.

The scheme will incorporate areas of visually attractive meadow grassland, short sward / amenity grassland, trees, scrubland, a variety of hedgerow features and ground flora.

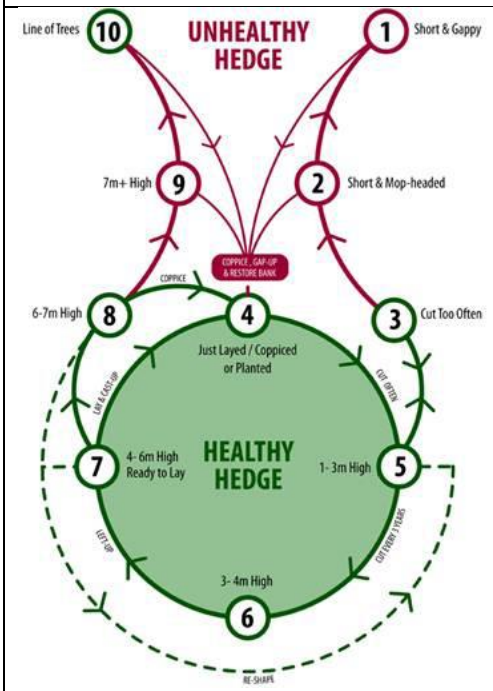
Landscape and Ecological Management

Objective 4: Ensure the matrix of new and existing habitats establish and are suitably maintained to ensure long-term biodiversity gain.

The following section outlines the works programme and management regime.

Existing Retained Trees and Hedgerows

Prescriptions/Years with Priority	**1**	**2**	**3**	**4**	**5**	**6-10**	**11-15**	**16-20**	**21-25**	**26-30**
Tree works will follow best practice procedures as set out in BS 3998:2010. No removal of woody vegetation will take place during the bird nesting season unless checked by a qualified Ecologist. Existing retained trees will be left unmanaged unless otherwise dictated for reasons of public safety. Existing trees will be inspected to record pests and diseases, deadwood and structural condition.	♥									
Existing trees will be inspected to record pests and diseases, deadwood and structural condition.			♥		♥	♥	♥	♥	♥	♥
Retained trees will be protected from damage and from soil compaction during construction using fenced Root Protection Areas (RPAs) where construction works are to be undertaken in the vicinity, in accordance with guidance in British Standard 5837:2012 – Trees in Relation to Design, Demolition and Construction – Recommendations.	♥									
Side trimming of hedgerows in an 'A' profile to promote a healthy hedgerow base. Hedgerows will be cut along one side annually, alternating between the two sides of the hedgerow each year.	♥	♥	♥	♥	♥	♥	♥	♥	♥	♥

Prescriptions/Years with Priority	1	2	3	4	5	6-10	11-15	16-20	21-25	26-30
In the long term, hedgerows will be taken through a Hedgerow Management Cycle (HMC)1. The ten steps of the HMC are shown in Figure 2. The cycle shows a healthy green core and two unhealthy red offshoots. The aim should be to keep the hedge in the green part (steps 3 to 8), periodically laying or coppicing it, with trimming at appropriate intervals in between. If the hedge is not permitted to go through this cycle, it will either, if cut too often, become short and gappy (steps 1 – 3) or, if neglected, develop into a line of trees (steps 8 to 10) (as required).										
 *Figure 2 Hedgerow Management Cycle*										

Native Hedgerow Planting

Prescriptions/Years with Priority	1	2	3	4	5	6-10	11-15	16-20	21-25	26-30
Following planting, water hedgerows in periods of extreme drought (2 or more weeks without substantial rainfall).	♥	♥	♥	♥	♥					

Prescriptions/Years with Priority	1	2	3	4	5	6-10	11-15	16-20	21-25	26-30
Replace failed specimens on a like-for-like basis.	♥	♥	♥	♥	♥					
Examine all guards and replace or adjust as appropriate. Remove guards once hedgerows are established.	♥	♥	♥	♥	♥					
Spraying or strimming of weeds to reduce competition and aid establishment. Not required if weed suppression matting used.	♥	♥	♥	♥	♥					
Side trimming of hedgerows in an 'A' profile to promote healthy hedgerow base. Starting in year 4 after planting, new hedgerows will be cut along one side annually, alternating between the two sides of the hedgerow each year. Top up mulch as required.				♥	♥	♥	♥	♥	♥	♥
Prune any diseased or rotten wood back to sound wood. Remove all cut material from site (as required).										
In the long term, hedgerows will be taken through a Hedgerow Management Cycle (HMC). See Figure 2.										

Wildflower Meadow

Prescriptions/Years with Priority	1	2	3	4	5	6-10	11-15	16-20	21-25	26-30
Following establishment, grassland will be mown on a rotational basis with areas either being mown once during early spring (March) and autumn (October). A later cut will benefit moth species by providing a food source for longer, and subsequently provide increasing foraging opportunities for bats in their active season of April to October.	♥	♥	♥	♥	♥	♥	♥	♥	♥	♥
Spot treat persistent pernicious weeds using herbicide following the first season's growth and/or manual hand strimming of										

Prescriptions/Years with Priority	1	2	3	4	5	6-10	11-15	16-20	21-25	26-30
target areas either in late summer when adjacent grassland is mown or in early spring. Care will be taken when using herbicide adjacent to riparian and aquatic habitats to prevent pollution of such habitats (as required).										

Bird Boxes and Bat Boxes

Prescriptions/Years with Priority	1	2	3	4	5	6-10	11-15	16-20	21-25	26-30
Bird boxes will have a non-invasive inspection in autumn or winter to check for damage. Replace lost or damaged boxes.	♥	♥	♥	♥	♥	♥	♥	♥	♥	♥
Bat boxes will have a non-invasive visual inspection in autumn or winter to check for damage, unless a separate agreement has been agreed with Natural England. Replace lost or damaged boxes. Any work required to the bat boxes will be carried out by a licenced bat worker.	♥	♥	♥	♥	♥	♥	♥	♥	♥	♥

Reptile hibernaculum

Prescriptions/Years with Priority	1	2	3	4	5	6-10	11-15	16-20	21-25	26-30
Following establishment, the grassed cap will be strimmed once annually in late summer (late August to September).	♥	♥	♥	♥	♥	♥	♥	♥	♥	♥
The margins of the hibernaculum will be inspected once annually to be kept clear from vegetation, leaving the fill exposed to allow access by wildlife.	♥	♥	♥	♥	♥	♥	♥	♥	♥	♥

General prescriptions

Prescriptions/Years with Priority	**1**	**2**	**3**	**4**	**5**	**6-10**	**11-15**	**16-20**	**21-25**	**26-30**
Check for control of invasive non-native species (INNS)	♥	♥	♥	♥	♥	♥	♥	♥	♥	♥
Litter to be removed from the site as part of the general management and maintenance visits. All litter, stones or other debris will be collected and removed by the Contractor immediately prior to grass cutting operations.	♥	♥	♥	♥	♥	♥	♥	♥	♥	♥
Ecological visual inspection to be carried out by a qualified ecologist for the first year to provide baseline data for future surveys to be monitored against.	♥				♥					♥
Work programme to be reviewed by those members of staff involved in site management.					♥					♥

Wildflower grasslands and flowering plants provide a valuable nectar and food source for invertebrates. Once established, wildflower grassland should be left to seed before a cut is taken (i.e., a late summer cut). Pruning of shrubs and herbaceous species should be undertaken once flowering has finished.

All hedgerow and tree works will be carried out with consideration of the potential presence of legally protected and priority species. Prior to commencement of any arboricultural or pruning works any trees with the potential to support roosting bats will be inspected by a qualified ecologist. Works will be scheduled to avoid the bird nesting season (March to August). Some deadwood will be retained to create additional log/brash piles and potential hibernation sites for fauna.

Amphibians and reptiles are typically active from March to October, so care is to be taken when cutting grass during these months. Heavily managed grassland will be short (exposed) therefore of very low risk, however medium to tall swards have a higher risk of amphibians and reptiles being present and therefore the grassed areas (edges in particular) should be walked slowly prior to cutting to encourage any amphibians and reptiles to move away of their volition (if present). Medium-to-tall sward grass should not be cut to ground level immediately and cutting should be undertaken in a directional manner, working from the middle of a space outwards to enable time for the amphibians and/or reptiles to escape.

Wildflower grasslands and flowering plants provide a valuable nectar and food source for invertebrates. Once established, wildflower grassland should be left to seed before a cut is taken (i.e., a late summer cut). Pruning of shrubs and herbaceous species should be undertaken once flowering has finished.

Implementation of the Maintenance Works

- Planting should be maintained by the landscape contractor for a minimum of 12 months following planting, with any defective planting replaced by the end of the first year.
- Maintenance of the landscape areas shall be undertaken by a competent Landscape Contractor, registered with the British Association of Landscape Industries (BALI).
- All soft landscape areas to be maintained to BS7370-4:1993 Grounds Maintenance.
- The landscape maintenance of the site is to be carried out to a high standard at all times and in accordance with the schedule and specifications within this management plan.
- The contractor shall ensure that the site is left tidy and safe following all maintenance works. All arisings should be removed from site in accordance with the maintenance schedule.
- The contractor shall programme their visits to coincide with appropriate weather conditions for carrying out maintenance operations including the use of chemicals and the mowing of grass. Grass mowing in excessively wet conditions is prohibited. Chemicals are not to be used if children and pets are present.
- A record of all maintenance visits should be completed by the maintenance contractor, and these should be submitted to the Client for review every six months.
- The maintenance contractor shall ensure that any chemical application is undertaken by trained personnel only with the appropriate NPTC certificates and in accordance with the manufacturer's recommendations.
- The 'Code of Practice for the Safe Use of Pesticides for Non-agricultural Purposes' will be observed where applicable. The use of any chemicals shall be included within the maintenance visit records as described above.
- The Contractor should notify the Client immediately to any significant pest or disease problem affecting plant stock and a suitable strategy for treatment should be discussed and agreed with the Client.

Monitor the Site and Review the Plan

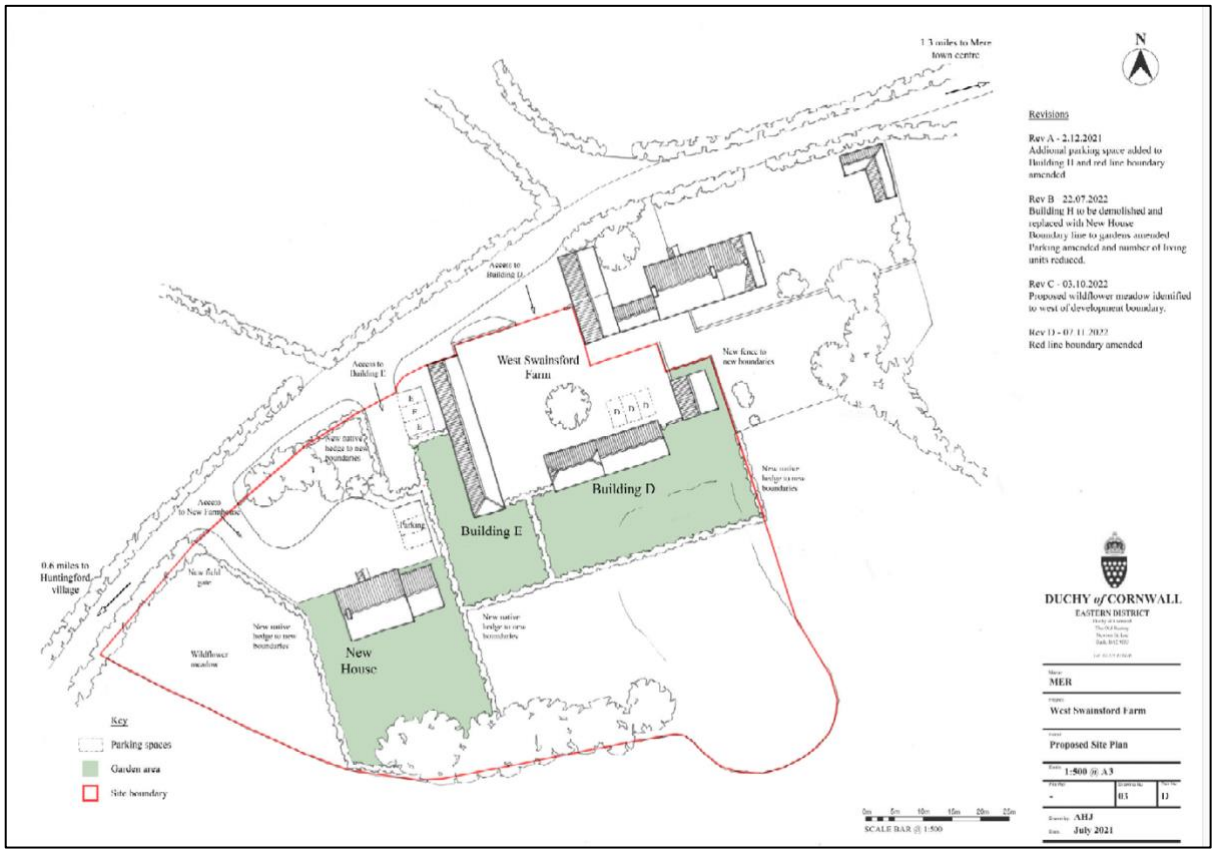
- *Objective 5: Provide a framework of monitoring and review periods.*

In order to ensure that the habitats created within the site reach and maintain their maximum value to nature conservation, all habitats will be monitored.

Results of this monitoring will be used to inform changes to the management plan and 30-year work programme. Biodiversity Net Gain for the site relies on maintenance of the newly created habitats (hedgerows and wildflower meadow) for at least 30 years. The prescriptions provided here will not be set in stone and will be altered if required in agreement with the Local Planning Authority (LPA). The management plan will run for a period of 30 years, with the work programme fully reviewed at the end of the initial five-year period by those members of staff involved in site management, and the LEMP updated accordingly, to be updated for the life of the development.

Ecological inspection by a qualified ecologist should be carried out in years 5 and 10 to provide baseline data for future surveys to be monitored against.

Appendix 1- Site location map with ecological modifications



Appendix 2 – Relevant legislation for protected and notable species relevant to the site

Bats

All species of bat are listed in Schedule 5 of the Wildlife and Countryside Act 1981 (as amended) and Schedule 2 of the Conservation of Habitats and Species Regulations 2010. They are afforded full protection under Section 9(4) of the Act and Regulation 41 of the Regulations. These make it an offence to:

• deliberately capture, injure or kill any such animal;

• deliberately disturb any such animal, including any disturbance which is likely to:

- impair its ability to survive, breed, or rear or nurture their young;

- impair its ability to hibernate or migrate.

- significantly affect the local distribution or abundance of that species; or

• damage or destroy a breeding site or resting place of any such animal; or

• intentionally or recklessly disturb any of these animals while it is occupying a structure or place that it uses for shelter or protection; or

• intentionally or recklessly obstruct access to any place that any of these animals uses for shelter or protection

In addition, five British bat species are listed on Annex II of the Habitats Directive. These are:

- Greater horseshoe bat (*Rhinolophus ferrumequinum*)
- Lesser horseshoe bat (*Rhinolophus hipposideros*)
- Bechstein's bat (*Myotis bechsteinii*)
- Barbastelle (*Barbastella barbastellus*)
- Greater mouse-eared bat (*Myotis myotis*)

Breeding Birds

With certain exceptions, all wild birds, their nests and eggs are protected by section 1 of the Wildlife and Countryside Act 1981 (as amended). Therefore, it is an offence to:

- intentionally kill, injure or take any wild bird;
- intentionally take, damage or destroy the nest of any wild bird while it is in use or being built; or
- intentionally take or destroy the egg of any wild bird.

These offences do not apply to hunting of birds listed in Schedule 2 subject to various controls.

Bird species listed on Schedule 1 of the Act receive further protection, thus for these species it is also an offence to:

- intentionally or recklessly disturb any bird while it is nest building, or is at a nest containing eggs or young; or
- intentionally or recklessly disturb the dependent young of any such bird.

Reptiles

The four widespread species of reptile that are native to Britain, namely common or viviparous lizard (*Zootoca vivipara*), slow worm (*Anguis fragilis*), adder (*Vipera berus*) and grass snake (*Natrix natrix helvetica*), are listed in Schedule 5 of the Wildlife and Countryside Act 1981 (as amended) and are afforded limited protection under Section 9 of this Act. This makes it an offence, *inter alia*, to:

- intentionally kill or injure any of these species.