

LANDSCAPE & ECOLOGICAL MANAGEMENT PLAN

WINDRUSH INDUSTRIAL PARK, PLOT B, WITNEY, OXFORDSHIRE

prepared by



commissioned by

CANMOOR ASSET MANAGEMENT

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LANDSCAPE AND ECOLOGICAL MANAGEMENT PLAN

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The information, data and advice which has been prepared and provided is true, and has been prepared and provided in accordance with the Chartered Institute of Ecology and Environmental Management's (CIEEM) Code of Professional Conduct. We confirm that the opinions expressed are our true and professional bona fide opinions. This report and its contents remain the property of Clarkson and Woods Ltd. until payment has been made in full.



1 INTRODUCTION

- 1.1.1 Clarkson and Woods Ltd. were commissioned by Canmoor Asset Management to prepare a Landscape and Ecological Management Plan (LEMP) for Windrush Industrial Park – Plot B in Witney, Oxfordshire, OX29 7DX (central grid ref: SP333103).
- 1.1.2 This document has been prepared in order to satisfy the requirements for LE05 (Long term impact on biodiversity) of the BREEAM ¹assessment for the development at Windrush Industrial Park in Witney.
- 1.1.3 The preparation of this LEMP has been informed by the following documents:
- Ecological Impact Assessment ²
 - Landscape Plan ³⁴
 - Arboricultural Impact Assessment⁵ and Tree Retention & Removal Plan⁶

1.2 Scope

- 1.2.1 The purpose of this LEMP is to:
- Set out the agreed objectives for landscape management of the Site;
 - Set clear standards for the performance of landscape maintenance work;
 - Assist in the development of work programmes for landscape maintenance staff;
 - Establish landscape maintenance responsibilities; and
 - Help monitor success and progress against the objectives
- 1.2.2 The LEMP provides management regimes and schedules for the habitats and key ecological features present (or expected to be present) within the Site, as well as details of responsible personnel. In addition, prescriptions for the installation and maintenance of habitat enhancement features are described. Long-term monitoring of the Site is also specified to evaluate success and progress against the aims and objectives, and to provide strategies for identifying and implementing remedial measures if required.
- 1.2.3 This LEMP has been prepared in accordance with guidelines set out within the Biodiversity – Code of Practice for Planning and Development, British Standard 42020:2013.
- 1.2.4 The National Planning Policy Framework (NPPF), revised in July 2021, provides guidance on consideration of biodiversity in the planning process and states that the planning system should contribute to and enhance the natural and local environment by “minimising impacts on and providing net gains for biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures”. It also states that “opportunities to incorporate biodiversity in and around developments should be encouraged”. This LEMP seeks to maximise the ecological benefits which the development may offer.
- 1.2.5 The prescriptions laid out in this LEMP relate to the construction phase and Years 1 to 5 during the occupation of the development. After 5 years, the details of this plan must be reviewed by competent and qualified persons and revised if necessary. Once this period has elapsed, the LEMP will be rolled forward and implemented in perpetuity. However, the LEMP may be modified at any time to address issues identified at the Site, although any changes to the LEMP must be sent to the LPA for approval.

¹Using BREEAM UK New Construction, Non-domestic Buildings (United Kingdom) Technical Manual 2018 2.0

² Clarkson and Woods (July 2023), Windrush Industrial Park Plot B, Witney. Ecological Impact Assessment v2.0

³ Bea Landscape Design Ltd (July 2023), Plot B, Windrush Industrial Estate. Planting Plan ref: 23-043-P-06

⁴ Hale Architecture (January 2024), Windrush, Witney, Plot B. Proposed Hard & Soft Landscape ref: PL-1004-01

⁵ Bea Landscape Design Ltd (July 2023), Plot B, Windrush Industrial Estate. Arboricultural Impact Assessment ref: 2343/EH/AIA001

⁶ Bea Landscape Design Ltd (July 2023), Plot B, Windrush Industrial Estate. Tree Retention & Removal Plan ref: 23-043-P-04



2 RESPONSIBLE PERSONNEL & LINES OF COMMUNICATION

2.1 Site Owner

- 2.1.1 Canmoor Asset Management are to be responsible for the implementation of this LEMP through the lifespan of the development and shall ensure that the party responsible for management of the Site fulfils the measures detailed in this LEMP.
- 2.1.2 The Site owners shall liaise with the Ecological Clerk of Works (ECoW) to commission and arrange an ecologist's input or site attendance, where required.
- 2.1.3 Should management responsibilities of the Site change, new personnel will be made aware of and action this LEMP.

2.2 Management Company and Landscape Contractors

- 2.2.1 The appointed management company shall supply landscape contractors who are duly competent and have a duty to ensure that the stipulated measures in the LEMP are being implemented correctly.

2.3 Ecological Clerk of Works (ECoW)

- 2.3.1 The ECoW will be a line of enquiry for issues requiring ecological expertise during the operational phase of the development. The ECoW shall assist and advise Canmoor Asset Management and their appointed management company in their adherence to the requirements of this LEMP.
- 2.3.2 Ecological queries should be directed to Clarkson & Woods Ltd. Where another ecological consultancy is employed to fulfil this role, any ecologist must be suitably qualified, have at least two years' experience and be in receipt of suitable training in how the responsibilities of the ECoW are to be discharged.

2.4 Contact Details

	Name	Address	Contact Details
Site Owner	Canmoor Asset Management	22c Leathermarket Street, London, SE1 3HP	Richard Booth: RBooth@canmoor.com
Management Company	TBC		
Landscape Contractor	TBC		
ECoW	Clarkson & Woods	Overbrook Business Centre, Poolbridge Road, Blackford, Somerset, BS28 4PA	Charlie Durigan: Charlie.durigan@clarksonwoods.co.uk 01934 712500



3 SITE DESCRIPTION

- 3.1.1 The Site lies within Windrush Industrial Park on the western outskirts of Witney. The Site lies 2km east of Minster Lovell, and Oxford city centre is approximately 20km east. The development site is approximately 2.14ha in area. An aerial photo of the Site and surrounding area is provided in Figure 1.
- 3.1.2 Habitats within the Site comprised a single, large building utilised as a warehouse with offices, tarmacked access roads, an area of rough grassland to the south, ornamental planting to the north and a species-poor ornamental shrub hedgerow along the eastern boundary. Two semi-mature trees were present along the northern boundary.
- 3.1.3 Prior to development, the Site was assessed as providing low value habitat for wildlife, with areas of grassland and ornamental planting offering potential for use by foraging and nesting birds, and other widespread species. The building was assessed as offering low potential for use by crevice-roosting bats only. However, further survey confirmed that the building was largely unsuitable and highly unlikely to be used for roosting by bats. No bats were recorded during the survey. A blue tit *Cyanistes caeruleus* was recorded entering and exiting the building from a small gap on the northeastern elevation, potentially nesting, while a little owl *Athene noctua* had been reported within the wider site.
- 3.1.4 The development comprises the demolition of the existing building and removal of all existing areas of vegetation. Subsequent development plans comprise the construction of seven new warehouse units totalling approximately 1.2ha in area, as well as associated hardstanding access roads and car parking. Soft landscaping for the operational site includes the following:
- Wildflower seeded areas, approximately 0.06ha;
 - Amenity grassland seeded areas, approximately 0.08ha;
 - Ornamental shrub planting including ground cover shrubs, approximately 0.01ha;
 - Native shrub planting, approximately 0.03ha;
 - Building and hardstanding, approximately 1.94ha;
 - Native, species-rich hedgerow with trees, approximately 244m in length
 - Native, species-rich hedgerow without trees, approximately 35m in length
- 3.1.5 The approved landscaping plan (Appendix 2) should be referred to for detailed information on planting schedules.



Figure 1: Aerial photograph of site boundary (Red Line) (Google, 2023)



4 OBJECTIVES

- 4.1.1 This LEMP has been prepared to ensure that the opportunities for landscape and biodiversity mitigation and enhancement presented by the development are realised, and to maximise the potential for biodiversity net gain.
- 4.1.2 The following objectives have been identified which, if met, will ensure that retained and newly created habitats and ecological features are managed appropriately for the long-term benefit of biodiversity.
- 4.1.3 These objectives will be addressed through the Prescriptions provided in Section 5, along with a timetable of implementation in Appendix A. The Prescriptions will be implemented by the landscape maintenance contractors/ management personnel who will action this LEMP during the operational phase of the development.

- **Objective 1: To manage the newly seeded grassland to establish a diverse sward**

An area of approximately 604m² along the northern boundary of the Site will be seeded with Emorsgate EM2 'Standard General Purpose Meadow Mixture' and will be managed as a wildflower meadow. Additionally, approximately 863m² of amenity grassland will be seeded with Emorsgate EL1 'Flowering Lawn Mixture' in various locations across the Site, including between the meadow grassland and hardstanding along the northern boundary, as well as in the westernmost part of the Site. Along the southern boundaries of the Site, Emorsgate 'EL1 Flowering Lawn Mixture' will be sown and managed as amenity grassland.

Areas of grassland will benefit a range of species including birds, small mammals (including foraging bats) and invertebrates.

- **Objective 2: To manage newly planted hedgerow and tree/shrub buffers to maximise their biodiversity value**

Newly planted hedgerows along the northern and southern site boundaries, and a native shrub buffer along the eastern boundary will be managed to maximise their value for wildlife and visual amenity. This will be achieved through a cutting regime that allows wildlife to survive and recolonise before subsequent cuts.

Additional trees will be incorporated throughout the site boundaries within hedgerows and will be allowed to grow tall within these features.

Several discrete areas of non-native ground covering shrubs will be incorporated and will be managed to maximise the potential to provide suitable habitat for wildlife.

- **Objective 3: To provide and maintain shelter sites for protected/notable species during the operational phase of development**

To enhance the site for protected and notable species during the operational phase of development, bat and bird boxes will be installed around the Site during construction phase to maximise its value for biodiversity. These features will be monitored and maintained as part of ongoing management operations to ensure they are safeguarded. All newly installed habitat measures for protected/notable species are displayed in Figure 2.

- **Objective 4: To monitor the Site and assess the success of management and adherence to the prescribed management**

In order to deliver the proposed ecological objectives, monitoring of the effects of management prescriptions will be required in order to ensure that these are effective, and to inform any necessary refinement of the site management. In addition, monitoring will include inspections of the ecological enhancements to assess their success and ensure their continued suitability.



5 PRESCRIPTIONS

- 5.1.1 In order to achieve the objectives outlined in Section 4, the following management prescriptions have been identified.
- 5.1.2 Implementation of the occupation phase measures will be co-ordinated by the appointed management company.
- 5.1.3 A summary of timings for implementation of these prescriptions is provided in Appendix A.
- 5.1.4 The Planting Plan, which shows the locations of all ecological habitats and features to be managed and monitored under the LEMP, is provided in Appendix B.
- 5.1.5 Periodic review of the prescriptions will be undertaken, informed by monitoring by the management company and the ecologist, to ensure that the recommendations remain relevant and any required remedial action is taken. Should any changes in management be required, this LEMP will be amended.



PR1: Management of Wildflower Grassland

Contributes to Objective 1

In order to encourage pollinators onto the Site, an area of flower-rich wildflower grassland will be established along the northern boundary. Additionally, areas along the northern and southern boundaries will be sown with a flowering lawn grassland seed mix and will be managed for amenity.

First Year of Management (after seeding)

The wildflower meadow area, sown with Emorsgate EM2 'Standard General Purpose Meadow Mixture', as well as all areas sown with Emorsgate EL1 'Flowering Lawn Mixture' will be subject to regular cutting during the first year of establishment in order to prevent annual weeds from establishing, with arisings moved off-site. All areas of grassland will be mown to a height of 40-60mm. At least four cuts will be taken in the first year between March and October in order to suppress competing weeds or vigorous grasses. This can be increased or carried out in subsequent years should annual weeds persist in the sward following monitoring.

An inspection will be undertaken by the landscape contractor in the March or August following sowing the previous season. In the event that newly seeded grassland fails to establish upon areas of bare ground, these areas will be lightly scarified and re-seeded in the next planting window (spring or autumn) with the same species mix sown during the initial seeding.

Subsequent Years

Areas sown with Emorsgate EM2 'Standard General Purpose Meadow Mixture' will be managed as a meadow, with mowing not being undertaken during the principal growing season (May – mid-July). Grassland will be cut to a height of 50mm between mid-August to early October. All arisings from cuttings will be collected and removed off site. This will prevent soil nutrients building up as this will favour coarse competitive species at the expense of smaller herbs.

Areas sown with Emorsgate EL1 'Flowering Lawn Mixture' will be mown regularly once established. Mowing will be relaxed from late June to allow some flowering (leaving the sward between 4-8 weeks). All arisings will be collected and removed off site.

Mowing will only take place during periods of dry weather to ensure that waterlogged ground is not damaged by machinery.

No weeding of the areas sown with wildflower mixes should take place, unless an abundance of any injurious weeds e.g. creeping thistle *Cirsium arvense*, spear thistle *Cirsium vulgare*, broad leaved dock *Rumex obtusifolius*, curled dock *Rumex crispus* or ragwort *Jacobaea vulgaris* develops. Should an abundance of any of the above species be identified, they will be hand-pulled and the arisings removed from the Site. No chemical fertilisers will be used on the wildflower planting as this encourages the growth of vigorous grasses and weeds, restricting meadow flowers. Use of weed killers will be avoided where possible and used only as spot treatments and/or with hand-held sprayers where necessary.



PR2: Management of Ornamental Ground Cover/Shrubs

Contributes to Objective 2

First Year of Management (after planting)

Specimen shrub planting and evergreen ground cover planting will occur in accordance with the approved planting plan. During the first season of planting, shrub species will be watered as necessary in accordance with the recommendations of the supplier. They will also be kept free of weeds and protected from rabbits.

New planting will be inspected at 6 and 12 months after planting. Any failed planting will be identified and failed plants will be replaced. Up to 10% failure rate for shrubs will be allowed, but if more than 10% failures occurs then replacement planting of all failed specimens will be provided. A small number of ornamental cherry *Prunus avium* 'Plena' trees are proposed for planting within the south-eastern corner of the Site. Any trees which fail will be replaced on a like-for-like basis.

Subsequent Years

Ornamental shrubs are likely to require minimal maintenance, limited to annual pruning to achieve a tidy appearance and weeding. Pruning should ideally take place between October and February inclusive. Watering may be required during extended periods of dry weather.

Inspections every September will be conducted to assess the condition of the shrubs and inform the need for any replacement planting. Any dead or damaged plants or trees will be noted and replaced (as specified above) on an annual basis for the first 5 years from initial planting.



PR3: Management of Newly Planted Hedgerows and Trees

Contributes to Objective 2

Two new native species-rich hedgerows will be created along the northern and southern boundaries of the Site. These will be planted in double or triple staggered rows (according to the planting plan). All new hedgerow plants will be sourced in accordance with BS 3936 and will be planted in accordance with BS 4428: 1989, with protective fencing around the plantings. Soil around newly planted hedgerow will be watered immediately after planting and prior to the spreading of mulch. Standard trees will be incorporated into these linear features, including hornbeam *Carpinus betulus*, rowan *Sorbus aucuparia*, whitebeam *Sorbus aria*, and Norway maple *Acer platanoides* 'Emerald Queen'. Any trees which fail will be replaced on a like-for-like basis.

Years 1 to 3

New planting shall be instated between October and February inclusive. During the first season of planting, all whips will be watered as necessary in accordance with the recommendations of the supplier. They will also be kept free of weeds and protected from rabbits.

New planting will be inspected at 6 and 12 months after planting. Any failed planting will be identified and failed plants will be replaced. Up to 10% failure rate will be allowed, but if more than 10% failures occurs then replacement planting of all failed specimens will be provided. Any trees which fail will be replaced on a like-for-like basis.

Damaged, diseased or dead wood will be pruned immediately after first leaf break. The whips will be lightly trimmed every second or third year, allowing the hedgerow to increase in size each time.

Subsequent Years

Removal of tree protection will be undertaken promptly once specimens have successfully established after at least three years, and once specimens are of a reasonable height. This is to prevent trunk distortion, damage and constriction which can be caused by tree guards and stakes, which can lead to structural weakness developing in the trunks.

Annual inspections will be conducted by the landscape contractor to assess the condition of the hedgerow and inform the need for any replacement planting. Any dead or damaged plants will be noted and replaced (as required) on an annual basis for the first 5 years from initial planting.

Hedgerow cutting will aim to maximise the health and vigour of the individual plants and structure and thus ensure the longevity of the hedgerow. This will also benefit the range of wildlife associated with the hedgerow habitat, such as invertebrates, bats and birds amongst others present within the local area, by ensuring foraging, commuting and sheltering opportunities are enhanced.

Hedgerows will be cut using an incremental cutting regime in January or February to avoid the bird nesting season (usually between March and August but seasonally variable) and to ensure that the hedgerows provide shelter and foraging resources through the winter months.

All standard trees will be left to grow tall and will not be cut along with the rest of the hedgerows. Locations of these trees are shown within the planting plan in Appendix B.

The hedgerows will be cut annually with the cutting height raised by 10-15cm each year. This will allow plants to produce flowers and berries fruits are primarily produced on the last years' growth, therefore providing



foraging resources for invertebrates, birds and small mammals; whilst preventing the hedgerow height from increasing too rapidly. Further information can be found in Hedgeline UK's "The Hedgerow Management Cycle" guidance document⁷.

⁷ Adams, N. The Hedgerow Management Cycle. *Hedgeline UK*







PR4: Provision and Maintenance of Wildlife Habitat Features

Contributes to Objective 3


The wildlife habitat features listed in Table 1 below and shown on Figure 2 will be installed during the construction phase on the warehouse buildings and trees within the site boundary as detailed. These features will provide additional shelter opportunities for bats and birds.

The bat boxes will be attached to the fabric of the new warehouse buildings as specified within the existing EclA for the Site. Table 1 gives two options for possible bat box types, depending on how appropriate these are to the new proposed buildings. Bird boxes will be incorporated into the fabric of the new buildings. These boxes will be made of woodcrete for durability and proven success and will target species such as house sparrow *Passer domesticus* and swifts *Apus apus*.

Table 1: Recommended bird and bat boxes

Type	Detail	Number
	<p>Schwegler 1WQ Summer and Winter Bat Roost</p> <p>Install on external walls of new warehouse buildings during construction on a southern or western elevation at a minimum of 3m above ground level. Ideally this should be positioned in a location where there is a clear flight path for bats entering and exiting the box.</p> <p>No maintenance is permitted unless by a licensed ecologist.</p>	<p>Total of 4 (any combination)</p>
	<p>Green & Blue Bat box</p> <p>Install on external walls of new warehouse buildings during construction on a southern or western facing elevation at a minimum of 3m above ground level. Ideally this should be positioned in a location where there is a clear flight path for bats entering and exiting the box.</p> <p>No maintenance is permitted unless by a licensed ecologist.</p>	
	<p>Schwegler 1SP Sparrow Terrace Bird Box</p> <p>Install on surface of new warehouse buildings or incorporated into brickwork at a height of at least 3m high, avoiding south-facing aspects.</p> <p>Requires annual cleaning between October and February inclusive.</p>	<p>2</p>
	<p>Woodstone Swift Nest Box</p> <p>Install at least 5m above the ground, ensuring that there is unobstructed access for birds entering and leaving, and ideally under the shelter of overhanging roofs.</p> <p>Should be placed away from windows. Ideally position east through to north-west, avoiding north-west to east facing aspects.</p> <p>No maintenance is required on account of the minimal nesting material used by swifts.</p>	<p>2</p>



Type	Detail	Number
	<p>Little Owl Apex Nest Box</p> <p>Site between 3 and 5 metres high on an isolated tree (such as T8 on Tree Retention & Removal Plan, or appropriate tree outside of red line boundary) or building in proximity to grass and hedges. Line box with woodchips or shredded bark to cushion eggs, but avoid sawdust or soil that may clog drainage holes. Not included on Fig.2.</p>	<p>1</p>

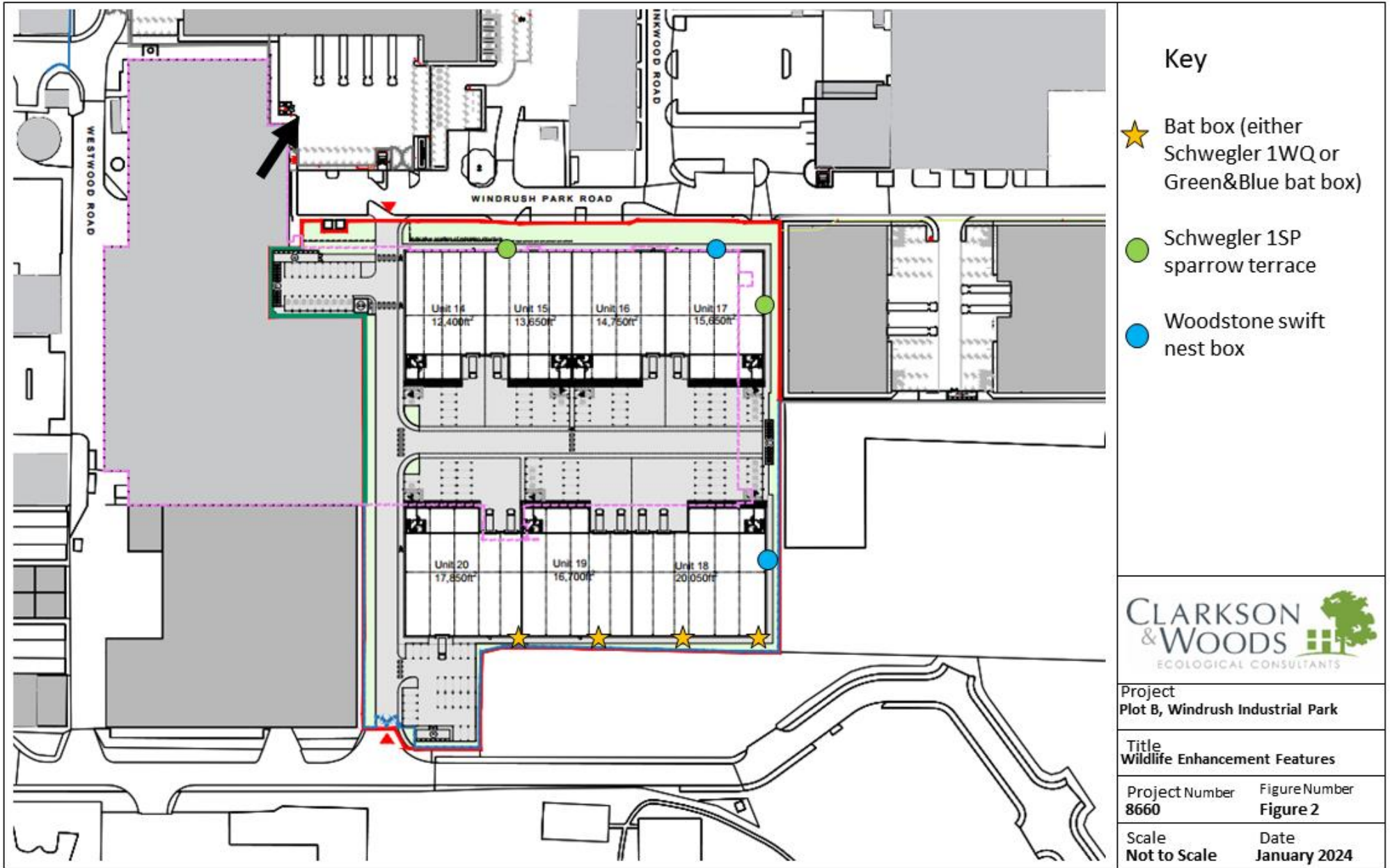


Figure 2: Proposed habitat measures for protected/notable species



PR5: Good Horticultural Practice

Contributes to Objectives 1 and 2

The use of peat topsoil/conditioners will be avoided.

No slug pellets will be used within the planting areas.

Use of plant fertilisers, herbicides and pesticides will be avoided where possible, although where expressly required to facilitate new planting growth will be used as spot treatment only.



PR6: Monitoring of Landscape Planting and Habitat Features

Contributes to Objective 4

A sign-off visit by an experienced ECoW will be required at the end of construction, or photographic evidence provided to the ECoW to confirm that all features have been installed. A log of installation is to be kept by Canmoor.

In May, June or July of Years 1 and 5, the Site shall be monitored by an experienced ECoW to assess the establishment and development of habitats. As well as establishment of the habitats, planting failures and the presence of any invasive species will be recorded. Bat and bird boxes will be inspected at this time to assess their condition and check for evidence of occupation.

A brief monitoring report will be prepared following completion of each year's monitoring to inform the BREEAM post-construction assessment for the Site. Where necessary, recommendations will be made to amend the management prescriptions to protect/enhance the habitats and species within the site, and thus ensure the objectives of this management plan are met.

Annually, between November and February, all bat and bird boxes will be inspected from the ground by maintenance staff to confirm their continued presence and condition. Clarkson & Woods should be contacted to assist with this if required.

Should there be any need to move, modify, or internally inspect the bat boxes within the building, this must only be carried out by an ecologist who holds the appropriate Natural England licence to disturb bats.

Should monitoring inform the need for maintenance or replacement of any of these habitat features, they will be repaired or replaced by Canmoor Developments on a like-for-like basis. This will ensure that sheltering and nesting habitat is available within the Site for the long term.



APPENDIX A: MANAGEMENT TIMETABLE

Annual Management Timetable										Suitable/Optimal					
										Unsuitable/Sub-optimal					
										Not Required/Prohibited					
Prescription	Activity	Timing Detail	J	F	M	A	M	J	J	A	S	O	N	D	
PR1	Cutting of Wildflower Areas (First Year) to 40-60mm	Every 4-6 weeks, Year 1 following seeding													
	Inspection of Wildflower Grassland Condition	An inspection will be undertaken by the landscape contractor in the next March or August following sowing													
	Re-seeding of Failed Wildflower Grassland (if required)	As necessary, duration of operation													
	Cutting of Wildflower Areas (Subsequent Years) sown with EM2 'Standard General Purpose Meadow Mixture'	Annually, duration of operation (only during periods of dry weather)													
	Cutting of Wildflower Areas (Subsequent Years) sown with EL1 'Flowering Lawn Mixture'	Mown regularly once established (only during periods of dry weather) managing as amenity grassland, leaving early spring plants to flower and relaxing mowing after June													



Annual Management Timetable										Suitable/Optimal				
										Unsuitable/Sub-optimal				
										Not Required/Prohibited				
Prescription	Activity	Timing Detail	J	F	M	A	M	J	J	A	S	O	N	D
PR2	Inspection of Native Shrub Planting, Ornamental Specimen Shrub and Evergreen Ground Cover Planting Condition	Inspection at 6 and 12 months after planting and annually thereafter												
	Watering of Native Shrub Planting, Ornamental Specimen Shrubs and Evergreen Ground Cover Planting	As necessary, duration of operation. More regular during periods of drought												
	Weeding of Native Shrub Planting, Ornamental Specimen Shrubs and Evergreen Ground Cover Planting	As necessary, duration of operation												
	Pruning of Native Shrub Planting, Ornamental Specimen Shrubs and Evergreen Ground Cover Planting	As necessary, duration of operation												
	Replacement Planting	Failed plants will be replaced (as required) on an annual basis for the first 5 years from initial planting												



PR3	Installation of new hedgerow planting and Standard Trees	To be carried out after construction												
	Inspection of Hedgerow Planting and Standard Trees Condition	Inspection at 6 and 12 months after planting and annually thereafter												
	Watering of Hedgerow Planting and Standard Trees	As necessary, until established. Weekly during periods of drought												
	Weeding of Hedgerow Planting	As necessary, until established												
	Removal of Tree Guards	Promptly once specimens have successfully established after at least three years (without cutting), and are of a reasonable height												
	Replacement Planting	Failed plants will be replaced (as required) on an annual basis for the first 5 years from initial planting												
	Hedgerow Cutting	Annually, once established, for the duration of operation and with cutting height raised by 10-15cm each year and avoiding cutting standard trees												
PR4	Installation of Wildlife Habitat Features	During or post-construction												
	Sign-off Inspection by ECoW	Completion of construction												



PR6	Annual Inspection and Maintenance of Wildlife Boxes (by site personnel)	Annually, duration of operation	Green	Green	Orange	Orange	Orange	Orange	Orange	Orange	Orange	Orange	Orange	Green	Green
	Ecological Monitoring of Planting/Habitat Establishment	Years 1 and 5	Orange	Orange	Orange	Orange	Green	Green	Green	Orange	Orange	Orange	Orange	Orange	Orange



APPENDIX B: LANDSCAPING SCHEME

PLANNING NOTES (SOFT LANDSCAPE):

1. SOILS: Subgrade / subsoil to be prepared in accordance with BS 8601:2013 and BS 4428:1989 and...
2. BUILDING FOUNDATION DESIGN: All tree and shrub planting proposals are to be referred to by the structural engineer during building foundation design.

3. PLANT STOCK: Unless agreed otherwise all trees and shrubs are to be of UK provenance where plants have been propagated and grown for a minimum of 5 years in the UK for trees and 2 years for shrubs.

4. EXISTING TREES: Specimens that are to be retained are to be retained to a full arboricultural inspection to assess condition and safety. Retained trees are to be protected by erection of 2.3m wide mesh fencing on a scaffold framework in accordance with BS 5837:2012 Figure 2.

5. TREE SURGERY / REMOVAL: Tree surgery and tree removal to be carried out by an Arboricultural Association approved Tree Surgeon in accordance with BS 3998:2010. Allowing to be removed to a licensed tip.

6. TREE PLANTING: All trees to be in accordance with BS 3096, BS8545 and The National Plant Specification (Roadside) Tree recommendations. Trees to be planted in accordance with BS 4289:1989 double staked (10-12cm - 14-16cm girth trees) tied and braced with flexible webbing loops and spacers.

7. SHRUB & HERBACEOUS PLANTING: plants to be in accordance with BS 3038 and handed in accordance with NPS Handing & Establishment guidelines and planted in accordance with BS 4289:1989 Nursery stock supplier to be approved by the Landscape Architect.

8. NATIVE HEDGE PLANTING: plants to be in accordance with BS 3936 and handed in accordance with the NPS Handing & Establishment guidelines and planted in accordance with BS 4428:1989. Hedge plants to be at plant in double staggered rows 300mm apart at 450mm centres (or as scheduled) with the growing tip (top 100mm) of the hedge plant removed to encourage spreading growth.

9. NATIVE SHRUB PLANTING: plants to be in accordance with BS 3038 and planted in accordance with BS 4428:1989. Transplants to be at plant at 1 metre centres (or as scheduled) in random groupings of 3-5 and 7-10 shrub species depending on numbers of plants.

10. WILDFLOWER SEEDING: grass areas to be seeded in accordance with BS 4428:1989 during March, April or September. Unimproved or low fertility topsoil to be imported, cultivated and leveled to remove all earth hollows or ridges.

11. MAINTENANCE: To be carried out at approximately monthly intervals with operations to include but not limited to the following:
- Eradicate weeds by hand or appropriate chemical means.

12. WATERING: All plant material (including turf) to be watered in dry periods until established during April through to September with fine rose until the water penetrates the topsoil to at least 50mm depth and achieves field capacity.

Plant Schedule table with columns: Species Name, Specification, Girth, Height, Density. Lists various tree and shrub species like Acer campestre, Acer platanoides, Prunus laurocerasus, etc.

Shrub table with columns: No., Species Name, Specification, Spread, Height, Pot Size, Density. Lists shrub species like Brachyglottis Sunshine, Ceanothus Blue Mound, Cornus sanguinea, etc.

Herbaceous table with columns: No., Species Name, Specification, Spread, Height, Pot Size, Density. Lists herbaceous species like Berberis cordifolia Purpurea, etc.

Table with columns: No., Species Name, Specification, Spread, Height, Pot Size, Density. Lists various plant species.

Table with columns: No., Species Name, Specification, Spread, Height, Pot Size, Density. Lists various plant species.

Table with columns: No., Species Name, Specification, Spread, Height, Pot Size, Density. Lists various plant species.

Table with columns: No., Species Name, Specification, Spread, Height, Pot Size, Density. Lists various plant species.

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LEGEND: SOFT LANDSCAPING

- GROUND COVER: evergreen or deciduous shrub wildlife attracting ground planting.
NATIVE HEDGE: native species rich hedge as detailed planted in double or triple staggered rows, reinforced where required by a post and three rail fence.
SPECIMEN SHRUBS: specimen shrub planting as detailed.
GRASS: areas to be seeded with Emorgate EL1 Flowering Lawn sown at 15g/m2. Existing grass made good.
WILDFLOWER MEADOW: to be seeded with Emorgate EM2 'Standard General Purpose Meadow Mixture' at 4g/m2.
NATIVE SHRUB PLANTING: native species rich shrub mix planted at 0.5 metre centres.
TREE PLANTING: standard tree planting with top canopy spread illustrated at 25 years growth. Tree volume to be in accordance with GBU guidelines. Root barriers used as necessary.
EXISTING TREES: to be retained in accordance with BS 5837 'Trees in relation to Construction' 2012.
TREES TO BE REMOVED

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Revision table with columns: rev, date, amendments, and initials. Shows revisions for layout changes and new layout.

cdm 2015: designers residual risk information
LEGEND: CDM RESIDUAL RISKS

- 1. LEVEL CHANGES: changes in level across the site including ramped access, steps, slopes or ditches, restricting access with risk of operatives falling from height!
2. PEDESTRIAN & VEHICULAR TRAFFIC: car park, road and pavement within or adjacent to working areas; risk of collision with operatives, risk of harm to pedestrians.
3. EXISTING SERVICES: proximity of adjacent buildings and associated buried / overhead live services i.e. electricity or gas. Risk to operatives during excavations or mooring work.

It is assumed that works will be carried out by competent landscape subcontractor working, where appropriate to a risk assessment and method statement approved by the Principal Contractor.

INSET PLAN



TYPICAL SECTION: to Windrush Park Road frontage (Scale 1:50)

Project information including client name (CANMOOR), project name (PLOT B, WINDRUSH INDUSTRIAL ESTATE), title (PLANTING PLAN), status (PLANNING), date (JUL 23), and company details for bea landscape design ltd.

Clarkson and Woods Ltd.

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