BIODIVERSITY ENHANCEMENT PLAN

REVISION 4

COLES AUTOMOTIVE PROPERTY LTD.

UNIT 2 (EAST)
SOUTHDOWNS ENTERPRISE PARK
SHOREHAM ROAD
HENFIELD WEST SUSSEX

16TH APRIL 2024

REF: 19019

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1. INTRODUCTION

Background

1.1 CT Ecology Limited was commissioned by Coles Automotive Property Ltd. to compile a biodiversity enhancement plan in relation to land at relation to land within the east of Southdowns Enterprise Park in Henfield, West Sussex (hereafter referred to as "the site"). This document is required as part of a Minor Material Amendment application to alter the layout of the car parking area and landscaping areas around the front of Unit 2 (east).

1.2 An update Preliminary Ecological Assessment (PEA) of the current application site took place in September 2023 (CT Ecology 2023) which has been used to inform this document.

Site Description

1.3 Southdowns Enterprise Park is in a rural location within the southern extent of Henfield in the Horsham District of West Sussex. The site is accessed from the A2037, Shoreham Road.

1.4 The survey area is a broadly rectangular shaped parcel of land within the eastern extent of the wider Enterprise Park, extending over approximately 0.2 hectares (ha) at National Grid Reference TQ218 144.

1.5 The application site comprises recently colonised ephemeral and tall ruderal vegetation and areas of semi-improved grassland together with scattered trees and scrub around the site boundaries. The survey area has been subject to regular disturbance since 2020 when construction of the wider business park began, with the main site access for the wider business park originally extending through the current application site. Shoreham Road is to the east, agricultural land is to the north, the wider Enterprise Park is to the south and west.

1.6 In the wider surrounds, commercial units are to the south. Agricultural fields and associated tree lines and hedgerows dominate the landscape together with woodland blocks and scattered residential properties. Henfield Business Park is to the east of Shoreham Road and Henfield village is to the north.

Proposed Works

1.7 Current proposals are for the construction of a new commercial unit with associated parking and landscaping. The current development will require the removal of discrete areas of recently colonised ephemeral and ruderal vegetation together with discrete areas of semi-improved grassland. Boundary scrub and trees will be retained as part of the proposals.

2. SITE ENHANCEMENT MEASURES

2.1 Details of site enhancement and compensation measures are provided below. Recommendations contained within Preliminary Ecological Appraisal (CT Ecology, 2023) have been incorporated into this document. Locations of the enhancement / compensation features are shown on Figure 1 in Appendix A. Specific planting details are included on the Landscape Strategy Plan: PDA-ENT-LD-001-5 REV F (Furse Landscape Architects Ltd. 2024) submitted as part of the planning application.

Habitat Retention- Trees, Scrub and Hedgerow

2.2 Existing mature and semi-mature trees, scrub and a new hedgerow planting undertaken as part of the wider development will be retained and protected along the northern and eastern boundaries of the site.

2.3 Retention of these features serve to maintain connectivity for more mobile animals in the locality and contributes to the overall biodiversity value at the site. The species supported are of wildlife value, providing a food source for birds and trees and the trees and scrub are also likely to provide nesting opportunities for a range of bird species such as house sparrow, starling and dunnock. The features also provide foraging and commuting habitat for bats.

2.4 The retained trees, scrub and hedgerow are shown on Figure 1 in Appendix A.

Grassland

2.5 Areas of grassland will be created in the northern and eastern extent of the site once the construction phase is complete.

2.6 Grassland areas will comprise areas of wildflower grassland. Grassland areas are shown on Figure 1 in Appendix A. Grassland reseeding will cover approximately 0.03ha.

<u>Wildflower Grassland</u>

2.7 The grassland areas will be managed for biodiversity in order to enhance the quality of reptile habitat available at the site. A standard meadow mixture will be used to provide biodiversity value in these areas. Flowering grassland species present in the sward can be productive invertebrate habitats for conspicuous nectar-feeding species such as butterflies and bumblebees, for nocturnal moths and their associated predators which in turn provide food sources for birds and bats. Grassland areas will provide habitat connectivity and foraging opportunities for reptiles and small mammals.

2.8 Species potentially benefiting from the proposed planting include house sparrow (*Passer domestica*), starling (*Sturnus vulgaris*), bats including soprano pipistrelle (roost compensation has been provided in the wider site for this species as part of the Southdowns Enterprise Park development) and widespread reptiles.

2.9 Ground preparation should include scarification however where the ground has been disturbed through construction activities, these areas may also require any ground compaction to be reversed prior to grassland seeding commencing, with the ground being levelled off. All seeded areas will be protected from further disturbance after sowing.

2.10 The seed mix to be used is Emorsgate's EM4 –Meadow Mixture for Clay Soils. The composition of this seed mix is provided below and this mix should be sown at a rate of 4g/m^2 and firmed in with a roller.

Table 2.1: Emorsgate EM4 Grassland Seed Mix

%	Latin name	Common name
Wildflowers		
0.5	*Achillea millefolium*	Yarrow
1.8	*Betonica officinalis - (Stachys officinalis)*	Betony
1.8	*Centaurea nigra*	Common Knapweed
0.4	*Filipendula ulmaria*	Meadowsweet
3.5	*Galium verum*	Lady's Bedstraw
3.5	*Leucanthemum vulgare*	Oxeye Daisy - (Moon Daisy)
0.4	*Lotus corniculatus*	Bird's-foot Trefoil
0.8	*Plantago lanceolata*	Ribwort Plantain
3.5	*Prunella vulgaris*	Selfheal
0.2	*Rhinanthus minor*	Yellow Rattle
0.4	*Rumex acetosa*	Common Sorrel
0.7	*Sanguisorba officinalis*	Great Burnet
0.5	*Silaum silaus*	Pepper Saxifrage
0.2	*Silene flos-cuculi - (Lychnis flos-cuculi)*	Ragged Robin
1.8	*Vicia cracca*	Tufted Vetch
Grasses		
10	*Agrostis capillaris*	Common Bent
1	*Alopecurus pratensis*	Meadow Foxtail (w)

3	*Anthoxanthum odoratum*	Sweet Vernal-grass (w)
1	*Briza media*	Quaking Grass (w)
26	*Cynosurus cristatus*	Crested Dogstail
24	*Festuca rubra*	Slender-creeping Red-fescue
1	*Hordeum secalinum*	Meadow Barley (w)
4	*Phleum bertolonii*	Smaller Cat's-tail (w)
10	*Poa pratensis*	Smooth-stalked Meadow-grass

Tree/Shrub Planting

2.11 The tree and shrub planting will be a mix of native and non-native specimens, principally for biodiversity as well as for aesthetic purposes. Some of the species chosen will be of wildlife value, particularly for nectar-feeding invertebrates which in turn will provide a food source for birds, bats and hedgehog. The berry yielding species will also provide a food source for birds.

2.12 Much of the proposed planting will provide a layered structure. The combination of tree and shrub planting, together with grassland habitat will serve to provide a productive habitat for a range of bird species such as house sparrow, starling and dunnock. The vegetation structure will also provide foraging habitat for bats in addition to sheltering opportunities for reptiles and sheltering and commuting features for hedgehog and other mammals, including fox.

2.13 A total of no:15 trees will be planted throughout the site. New tree planting will extend over approximately 8m^2. Species will include cypress oak (*Quercus robur* 'Fastigiata' Koster); English oak (*Quercus robur*); hornbeam (*Carpinus betulus*); field maple (*Acer campestre*); and Norway maple (*Acer platanoides* 'Deborah').

2.14 Shrub planting will comprise a mix of ground cover planting and larger shrub planting around the site margins and in discrete areas between car parking spaces in the western extent of the site.

2.15 Species planted as part of the ground cover planting will include primrose (*Primula vulgaris*); rock crane's-bill (*Geranium macrorrhizum*); garden scabious (*Scabiosa caucasica*); and elephant-ears (*Bergenia silberlicht*).

2.16 Proposed shrub species will include dogwood (*Cornus sanguinea*); hazel (*Corylus avellana*); holly (*Ilex aquifolium*); hawthorn (*Crataegus monogyna*); wild privet (*Ligustrum vulgare*); and lavender (*Lavandula sp.*).

2.17 New shrub planting will equate to approximately 0.1ha. Proposed areas of new shrub planting are shown on Figure 1 in Appendix A.

New Hedgerow

2.18 A new native hedgerow will be planted in the south of the site. All of the species chosen will be of wildlife value, particularly for nectar-feeding invertebrates which in turn will provide a food source for birds, bats and hedgehog. The berry yielding species will also provide a food source for birds.

2.19 The hedgerow will contribute to the layered habitat structure at the site, serving to provide a productive habitat for a range of bird species such as house sparrow, starling and dunnock, once developed. The vegetation structure will also provide foraging habitat for bats in addition to sheltering and commuting features for hedgehog and other small mammals. Once established, the hedge will be maintained at a height of 1.5m.

2.20 A total of nine species will be incorporated into the hedge line which will extend for approximately 30m. Species will include dogwood; hawthorn; hazel; wild privet; holly (*Ilex aquifolium*); spindle (*Euonymus europaeus*); common buckthorn (*Rhamnus cathartica*); dog-rose (*Rosa canina*) and guelder rose (*Viburnum opulus*).

2.21 The proposed new hedgerow is shown on Figure 1 in Appendix A.

Bird Boxes

2.22 The site provides nesting opportunities for a range of widespread garden bird species including BAP priority species such as starling (*Sturnus vulgaris*). The provision of nest boxes will serve to provide additional nesting opportunities within the site.

2.23 The proposed bird boxes will create nesting habitat of potential value to widespread bird species including blue tit (*Cyanistes caeruleus*), robin (*Erithacus rubecula*), wren (*Troglodytes troglodytes*), song thrush (*Turdus philomelos*) and house sparrow (*Passer domesticus*).

2.24 Schwegler 'woodcrete' bird boxes have been specified as they are durable and long-lasting (20-25 years), protect nesting birds from draughts, fluctuations in temperature and humidity. In addition, these boxes are simple to install.

2.25 The boxes will be placed on retained mature/ semi-mature trees along the northern site boundary and will include different designs to attract a range of bird species. Suggested designs include the Schwegler 2H open-fronted box, suitable for pied wagtail (*Moticilla alba)* and occasionally robin and wren. The Schwegler 1B hole-fronted nest boxes will also be used. This type is suitable for a variety of urban bird species including; great tit *(Parus major)*, blue tit, house sparrow, redstart (*Phoenicurus phoenicurus*) and possibly wren.

2.26 In total, one of the boxes will comprise the 1B with a 32mm hole and a single 2H box will be installed.

2.27 All bird boxes will be positioned at a minimum height of 2m (preferably 3-6m) and a discrete distance apart, out of direct sunlight. However, the final position must be decided between the project ecologist, the landowner and the on-site contractor.

2.28 The boxes will be positioned with a southern, western or eastern orientation and sheltered from prevailing wind, rain and strong sunlight. Small boxes, including the 1B and 2H specified, must be angled forwards to give additional shelter to their entrances.

2.29 A Schwegler sparrow terrace will also be installed on the new building. This should be located on the eastern elevation, directly below the eaves of the building.

2.30 Attachment will be by the recommended patented Schwegler standard directions for each box.

Table 2.2: Bird Box Details

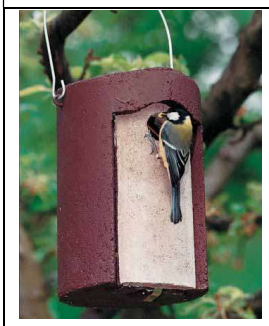
Example	**Number**	**Type**	**Dimension** **L x W x H (cm)**	**Target species**
 Schwegler ©	1x 32mm entrance	**Nest Box 1B** Hole-fronted • 32mm entrance hole	18 x 15.5 x 25.5	Multi-purpose, including; great and blue tit, house sparrows and redstart amongst others.

Table 2.2: Bird Box Details

Example	Number	Type	Dimension L x W x H (cm)	Target species
 Schwegler ©	1	**Nest Box 2H** Open-fronted 120mm opening	18.5 x 15 x 20	Pied wagtail, occasionally robin and wren.
 Schwegler ©	1	**Schwegler Sparrow Terrace 1SP**	20 x 43 x 24.5	House sparrow. It may also occasionally attract tits, redstarts and spotted flycatchers.

2.31 Schwegler products are supplied in the UK by the following companies:

* Envisage Wildcare http://www.wildcareshop.com
* NHBS NHBS - Wildlife, Ecology & Conservation

2.32 If there are supply issues with Schwegler bird box products at the time of purchasing, the project ecologist should be contacted to provide advice on suitable alternative makes/models.

3. REFERENCES

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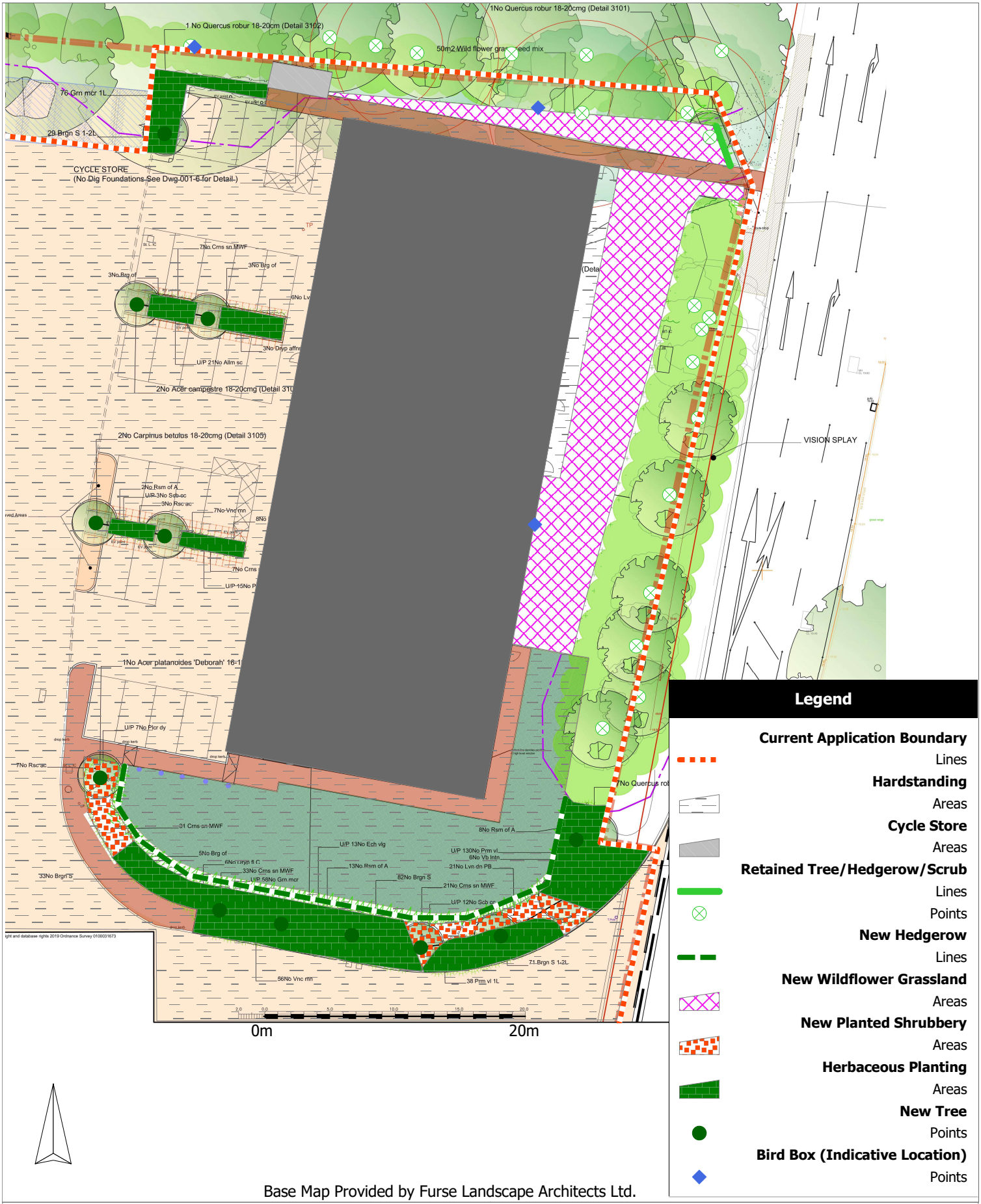
Appendix A
Biodiversity Enhancement Plan



Base Map Provided by Furse Landscape Architects Ltd.

Figure 1: Unit 2 Southdowns Enterprise Park Site Enhancement Plan

Drawn by: CT
Date: 16/04/2024
Scale: See Plan

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