



Peverill Securities

Bicester Arc

YASA (ZONE B) BIODIVERSITY ECOLOGY STATEMENT

August 2023

FPCR Environment and Design Ltd

Registered Office: Lockington Hall, Lockington, Derby DE74 2RH

Company No. 07128076. [T] 01509 672772 [E] mail@fpcr.co.uk [W] www.fpcr.co.uk

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E		VF / 22.08.23	

1.0 INTRODUCTION & METHODOLOGY

Introduction

- 1.1 The following report has been prepared on behalf of Peverill Securities and provides an ecology statement to accompany a reserved matters application for The YASA (Zone B) application on a site known as Bicester Arc (hereafter referred to as the 'Site').
- 1.2 The Bicester Arc Site is subject to an outline planning application secured in 2017 (Ref 17/02534/OUT) for the erection of a business park of up to 60,000 sq.m (GEA) of flexible Class B1(a) office / Class B1(b) research & development floorspace; associated vehicle parking, landscaping, highways, infrastructure and earthworks.
- 1.3 This outline permission is subject to the following condition:
- 25. No development shall take place until a scheme of landscaping and ecological mitigation/enhancement measures as well as a long-term management plan (to include a timetable and who is responsible for the management/ maintenance) in relation to all of the land edged blue to the east of the Superstore as shown on drawing no. 1105_P_004 Rev. A. has been submitted to and approved in writing by the Local Planning Authority. The approved landscaping and ecological mitigation/enhancement measures shall deliver a net biodiversity gain which shall be provided/created within the blue edged land prior to the first occupation of any development on the application site and shall thereafter be maintained in accordance with the approved long-term management plan.*
- 1.4 To fulfil this condition, an 'eco park' will be created within the Site which will serve to provide the necessary biodiversity net gain for the entire development and thus any landscaping for each forthcoming reserved matters application will only serve to increase the net gain. Details of the net gain provided by the 'Eco Park' can be found in the Technical Note and accompanying metric produced by FPCR¹ which should be read in conjunction with this document. This document is the overall BNG strategy. This is the baseline for which this YASA (zone B) phase provides additionality.
- 1.5 This application is for the YASA (Zone B) area. It is not possible/practical to implement the biodiversity net gain scheme discussed in the relevant technical note¹ in its entirety prior to occupation of this phase. Therefore, a smaller area of this entire scheme will be implemented prior to occupation of this scheme.
- 1.6 This technical note includes the calculations for the additional landscaping provided within this YASA (Zone B) application and the additionality they bring to the overall biodiversity scheme. These calculations are provided in an accompanying metric.
- 1.7 It also separates out the areas of the 'eco park' which will be implemented prior to the YASA (Zone B) application to show that this area alone, does provide a significant biodiversity net gain in isolation, prior to occupation. These calculations are provided in a second accompanying metric.
- 1.8 The outline consent above is also subject to the following condition:

¹ FPCR 2023. BICESTER ARC. ECOLOGY TECHNICAL NOTE – OVERALL BIODIVERSITY NET GAIN CALCULATIONS. Produced for Peverill Securities

12. All applications for reserved matters approval relating to a phase shall be accompanied by a biodiversity statement that has regard to the ecological information contained within Appendix B to the Environmental Statement Addendum (June 2018) and shall include an assessment of the ecological implications of development within that phase together with the measures to be incorporated within that phase to help mitigate/enhance ecological interest on the site. Development within the phase must thereafter take place in accordance with the measures contained within the approved biodiversity statement for that phase.

- 1.9 To fulfil this condition, an update ecological appraisal was produced for the site in 2023 by FPCR² based on update survey work conducted in 2021 and 2023. This document assesses the ecological impacts of the entire Bicester Arc Development and the mitigation measures required to enable this development to proceed without significant harm to biodiversity or protected species. It is considered that this document is relevant to this YASA (Zone B) application.

Methodology

- 1.10 National Planning Policy Framework 2021 (Paragraph 174) recommends that “*planning policies and decisions should... minimise impacts on and provide net gains for biodiversity.*” However, the government is seeking to mandate biodiversity net gain across all future developments in England, with the Environment Bill used to make the statutory changes necessary to implement mandatory net gain. The Environment Bill was passed in November 2021 and Part 6 of the Bill ‘Nature & biodiversity’ is has not been mandated but this is expected in late 2023.
- 1.11 In addition, Policy ESD10 of the Cherwell Local Plan 2011-2031 (adopted 2015) begins with “*In considering proposals for development, a net gain in biodiversity will be sought by protecting, managing, enhancing and extending existing resources, and by creating new resources*”.
- 1.12 To assess whether the proposals are capable of delivering a biodiversity gain, the Department for Environment, Food and Rural Affairs (DEFRA) Biodiversity Impact Assessment Calculator v3.0 was used. This is a transparent way to calculate the biodiversity value of the habitats and hedgerows on a site, before (based on the extended phase 1 habitat mapping) and after (based on the site layout) development. It is a proxy measure to determine if the development will result in an on-site habitat biodiversity net loss or gain.
- 1.13 An Extended Phase 1 Habitat Survey was undertaken in March 2021 and updated in April 2023 during which the existing habitats were mapped and assessed. This data was used for the baseline calculations. The habitat survey was conducted for the Ecological Appraisal and this Technical Note should be read in conjunction with this report².
- 1.14 Results are discussed in line with the soft landscaping scheme produced for the YASA (Zone B) shown as **Appendix A**.
- 1.15 For the overall development calculations, the Bicester Arc development area was calculated as being 100% created sealed surface to ensure the ‘eco park’ alone could achieve a net gain no matter what landscaping was provided within each phase of development. Therefore, this note describes the additionality provided by the landscaping designed within the YASA (Zone B) area (which is subtracted away from the sealed surface area) on top of the ‘eco park’.
- 1.16 This report then separates out the part of the ‘eco park’ which will be implemented as part of the YASA (Zone B) application to show that this RM application alone, does provide a significant

² FPCR 2023. Bicester Arc. Ecological Appraisal. Produced for Peverill Securities

biodiversity net gain in isolation, prior to occupation to fulfil condition 25. This is provided in a separate metric.

2.0 RESULTS & DISCUSSION

2.1 The entire Bicester Arc development footprint was previously mapped as sealed surface.

2.2 The YASA (Zone B) area covers 1.66 ha. Landscaping includes:

- 0.064 ha managed natural grassland (low species diversity modified grassland);
- 0.074 ha ornamental planting;
- 14 urban trees (0.057 ha); and
- 235m of native (beech *Fagus sylvatica*) hedgerow.

2.3 These areas of landscaping have been taken from the entire sealed surface area calculation for the whole development.

2.4 All habitats have been inputted as in poor condition as they are either non-native (ornamental planting), very low diversity (natural grassland and single species hedgerow) or unlikely to be managed with biodiversity in mind (urban trees and hedgerow).

Biodiversity Net Gain Calculations - Additionality

Eco Park Only

2.5 As discussed in the relevant technical note¹, the habitat losses, retention and creation for the 'eco park' will result in the site post-development having a biodiversity value of 35.04 habitat units and 9.42 hedgerow units, i.e., a gain of 2.52 habitat units and 1.31 hedgerow units.

2.6 This equates to a 7.76% net gain in habitat units and a 16.18% net gain in hedgerow units.

YASA (Zone B) Additionality

2.7 The additional landscaping now provided in YASA (Zone B) on top of the 'eco park' landscaping results in a site habitat value of 35.47 units and a hedgerow value of 9.87 units.

2.8 The overall site habitat net gain is now 9.07% and hedgerow net gain is 21.77%.

Biodiversity Net Gain Calculations - YASA (Zone B) in Isolation

2.9 To demonstrate that the YASA (Zone B) landscaping and the section of 'eco park' to be created in advance of the occupation of this phase can deliver a biodiversity net gain alone, these calculations have been provided in a separate metric. This is to ensure this phase can fulfil condition 25 of the outline consent without the requirement to establish the entire biodiversity scheme in full at this time.

2.10 Prior to the occupation of the YASA (Zone B) phase, the grassland and pond in the eastern portion of the 'eco park' will be created. This is the area of wildflower grassland and a pond 'behind' the scrub/ditch divide as is shown in **Appendix B**.

- 2.11 This equates to:
- 1.445 ha ‘other neutral grassland’ (in moderate condition);
 - 0.1056 ha ‘other neutral grassland’ – mown pathways (in poor condition); and
 - 0.172 ha of non-priority pond (in moderate condition).
- 2.12 The allocation of the conditions of these habitats are discussed in the Ecology Technical Note for the overall BNG calculations¹. The remainder of the ‘eco park’ area will be existing habitats (temporary grass ley and mixed scrub) retained.
- 2.13 The remainder of the site baseline outside of the YASA (Zone B) plot (1.66 ha) will be classed as ‘retained’ for these isolated calculations as only these plots are to be built out at the time.
- 2.14 Therefore, overall:
- 1.66 ha (YASA, Zone B) is lost and in its place 0.064 ha managed natural grassland, 0.074 ha ornamental planting, 1.522 ha sealed surface and 0.057 ha urban trees will be created as well as 0.235 km of native hedgerow.
 - 2.137 ha is lost (in ‘eco park’) and 1.445 ha neutral grassland (in moderate condition), 1.056 ha other neutral grassland (in poor condition) and 0.174 ha pond (in moderate condition) will be created.
- 2.15 The baseline values for the Site prior to any development were:
- 32.52 habitat units; and
 - 8.11 hedgerow units.
- 2.16 The isolation of the YASA (Zone B) development and the creation of the eastern portion of the ‘eco park’ results in a post development biodiversity value of:
- 40.69 habitat units; and
 - 8.57 hedgerow units.
- 2.17 This is a 25.13% gain in habitat units and a 5.71% change in hedgerow units.
- 2.18 Therefore, it can be demonstrated that this portion of the Bicester Arc development can be brought forwards with only the eastern portion of the ‘eco park’ implemented and still achieve a biodiversity net gain.
- 2.19 This gain is higher in isolation than the gain from the strategy for the entire development due to the retention of habitat in the remainder of the site (as opposed to calculation as all created sealed surface in the overall strategy) and the higher proportion of high value habitats being created. This does not override the overall biodiversity strategy and is simply produced to allow only a small part of the overall strategy to be implemented in advance of the YASA (Zone B) phase.
- 2.20 The remainder of the ‘eco park’ creation and enhancement of retained habitats will be implemented with the future phases and RM applications following the strategy set out for the entire scheme¹.



TREE PLANTING

	1. CLEAR STEM TREE SYMBOL QUANTITY 13 No. Planting Height 3.5m
	2. CLEAR STEM TREE SYMBOL QUANTITY 10 No. Planting Height 3.5m
	3. MULTI STEM TREE SYMBOL QUANTITY 18 No. Planting Height 2.5m

MOUNTAIN ASH ROWAN TREE
Sorbus aucuparia
Ultimate Height - 6m
Ultimate Spread - 4m

Canadian Red Maple
Acer Rubrum
Ultimate Height - 12m
Ultimate Spread - 8m

Himalayan Birch Tree
Betula Ultra Jacquemontii
Ultimate Height - 5m
Ultimate Spread - 5m

ORNAMENTAL PLANTING

NEW LANDSCAPED AREAS
Ornamental Native Planting

	Verbena 'Buenos Aires' <i>Verbena bonariensis</i> 1No. 5L pot / 5m ²		Mexican Feather Grass <i>Stipa tenuissima</i> 1No. 5L pot / 4m ²
	Agapanthus 'White African Lily' <i>Agapanthus africanus 'Albus'</i> 1No. 5L pot / 5m ²		Milk Parsley <i>Selinum wallichianum</i> 1No. 2L pot / 7m ²
	Lesser Calamint <i>Calamintha nepeta ssp. nepeta</i> 1No. 2L pot / 5m ²		Great Wood Rush <i>Luzula sylvatica</i> 1No. 5L pot / 5m ²
	Japanese Shield Fern <i>Dryopteris erythrosora</i> 1No. 3L pot / 8m ²		Lysimachia Ephemereum <i>Lysimachia ephemerum</i> 1No. 5L pot / 5m ²
	Tussock Grass <i>Deschampsia cespitosa 'Tussock'</i> 1No. 5L pot / 4m ²		Penstemon Beardtongue <i>Penstemon digitalis 'Husker Red'</i> 1No. 5L pot / 7m ²
	Cone Flower <i>Echinacea pallida 'Halle Doree'</i> 1No. 5L pot / 5m ²		Fountain Grass <i>Pennisetum alopecuroides 'Hainii'</i> 1No. 5L pot / 4m ²
	Burnet <i>Sanguisorba 'Tanna'</i> 1No. 2L pot / 8m ²		Mexican Bush Sage <i>Salvia leucantha</i> 1No. 5L pot / 5m ²

	SURFACE TYPE A - HIGH QUALITY PAVING		NEW CLEAR STEM TREE PLANTING		KNEE RAIL FENCE Timber
	SURFACE TYPE B - HIGH QUALITY PAVING Small Format Edging		NEW MULTI STEM TREE PLANTING		1.8m WELDMESH FENCE PPC Steel
	SURFACE TYPE C - CROSS SITE FOOTPATH Small Format Paving		MANAGED NATURAL GRASSLAND		1.35m STOCK PROOF FENCE Timber
	SURFACE TYPE D - SECONDARY FOOTPATHS Large Format Paving		NEW LANDSCAPED AREAS Ornamental Native Planting		
	SURFACE TYPE E - PERMEABLE CONCRETE PAVERS CHARCOAL COLOUR To Parking Areas		NEW HEDGEROW PLANTING		
	SURFACE TYPE F - NEW MACADAM Vehicle Areas		EXISTING LANDSCAPING		
	SURFACE TYPE G - NEW MACADAM Pedestrian Areas				

NEW HEDGEROW PLANTING

Beech Hedgerow
Fagus sylvatica
2No. 1m tall stems / linear m

MANAGED NATURAL GRASSLAND

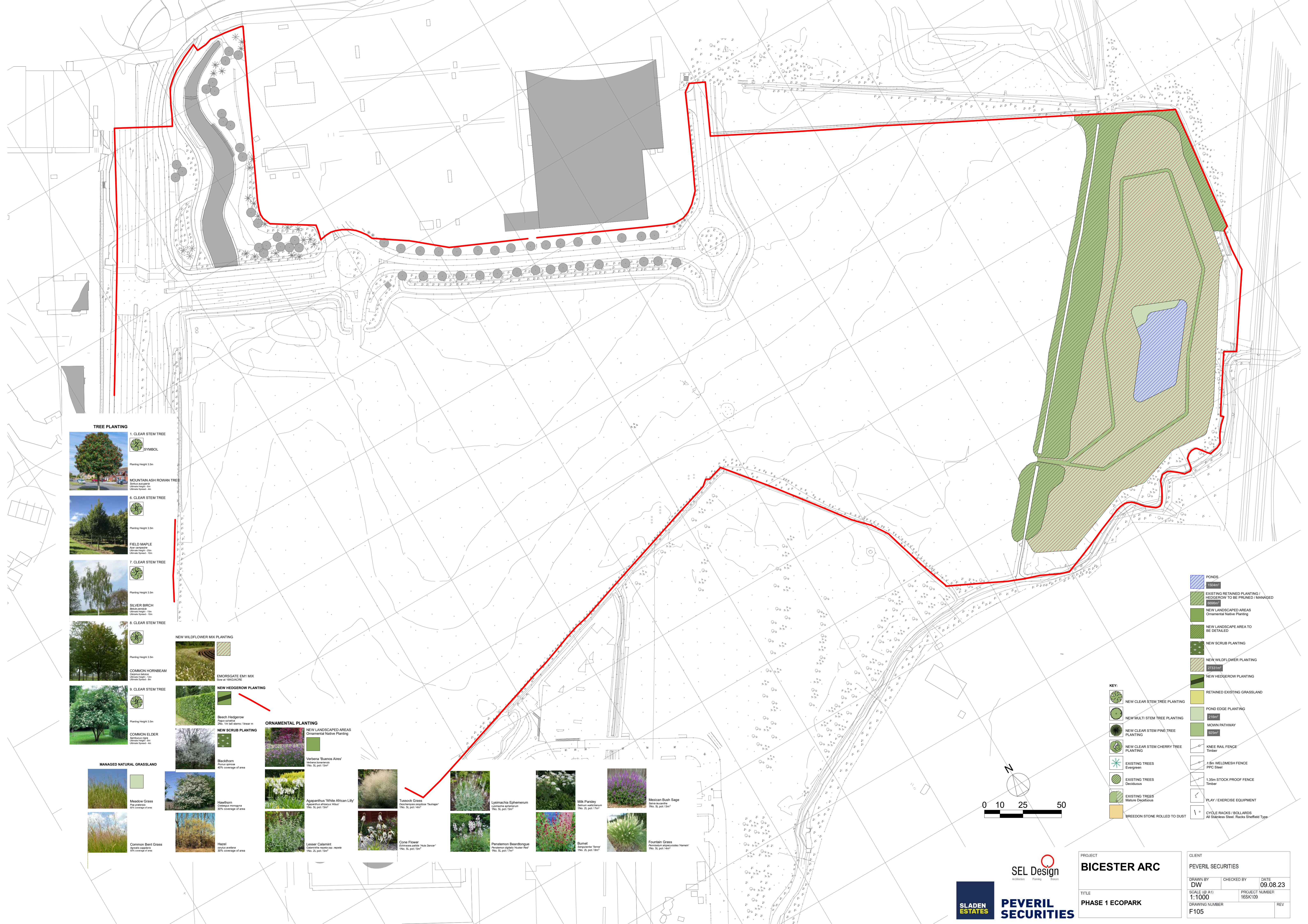
Meadow Grass
Poa polystris
50% coverage of area

Common Bent Grass
Agrostis capillaris
50% coverage of area




PROJECT BICESTER ARC
TITLE ZONE B LANDSCAPE PLAN


CLIENT Peveril Securities Ltd.		
DRAWN BY DW	CHECKED BY Checker	DATE 03.04.2023
SCALE (@ A1) 1 : 500	PROJECT NUMBER 16SK109	
DRAWING NUMBER D109	REV B	





TREE PLANTING

- 

1. CLEAR STEM TREE
Planting Height: 3.5m
- 

MOUNTAIN ASH ROWAN TREE
Planting Height: 3.5m
- 

6. CLEAR STEM TREE
Planting Height: 3.5m
- 

FIELD MAPLE
Planting Height: 3.5m
- 

7. CLEAR STEM TREE
Planting Height: 3.5m
- 


SILVER BIRCH
Planting Height: 3.5m
- 


8. CLEAR STEM TREE
Planting Height: 3.5m
- 


COMMON HORNBREAM
Planting Height: 3.5m
- 


9. CLEAR STEM TREE
Planting Height: 3.5m
- 

COMMON ELDER
Planting Height: 3.5m

- 

NEW WILDFLOWER MIX PLANTING
- 

EMORSGATE EM1 MIX
Sow at 18KG/ACRE
- 

NEW HEDGEROW PLANTING
- 

NEW SCRUB PLANTING


- ORNAMENTAL PLANTING**
- 

**NEW LANDSCAPED AREAS
Ornamental Native Planting**
 - 


Verbena 'Buena Vista'
No. 5L pot / 5m²
 - 


Agapanthus 'White African Lily'
No. 5L pot / 5m²
 - 


Lesser Calamint
No. 5L pot / 5m²

- 

Tussock Grass
No. 5L pot / 5m²
- 

Cone Flower
No. 5L pot / 5m²
- 

Lysimachia Ephemera
No. 5L pot / 5m²
- 


Penstemon Beardlongue
No. 5L pot / 5m²
- 


Milk Parsley
No. 2L pot / 7m²
- 


Burnet
No. 2L pot / 7m²
- 


Mexican Bush Sage
No. 6L pot / 5m²
- 

Fountain Grass
No. 6L pot / 4m²


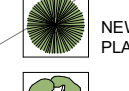







- MANAGED NATURAL GRASSLAND**
- 

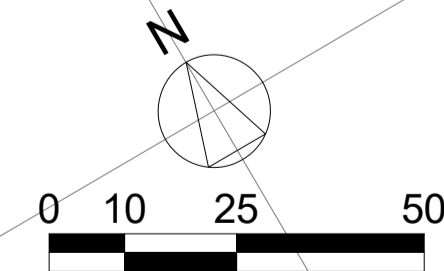
Meadow Grass
50% coverage of area
 - 



Common Bent Grass
50% coverage of area
 - 

Hawthorn
50% coverage of area
 - 

Hazel
50% coverage of area

- KEY:**
-  NEW CLEAR STEM TREE PLANTING
 -  NEW MULTI STEM TREE PLANTING
 -  NEW CLEAR STEM PINE TREE PLANTING
 -  NEW CLEAR STEM CHERRY TREE PLANTING
 -  EXISTING TREES Deciduous
 -  EXISTING TREES Mature Deciduous
 -  EXISTING TREES Evergreen
 -  EXISTING TREES Mature Deciduous
 -  BREEDON STONE ROLLED TO DUST



PROJECT
BICESTER ARC

CLIENT
PEVERIL SECURITIES

DRAWN BY
DW

CHECKED BY

DATE
09.08.23

TITLE
PHASE 1 ECOPARK

PROJECT NUMBER
16SK109

DRAWING NUMBER
F105

REV