



FORMER JOHN LEWIS DEPOT, LETCOMBE STREET, READING
(ALSO KNOWN AS JLP MILL LANE)

BIODIVERSITY NET GAIN ASSESSMENT

AUGUST 2024

AECOM

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1. Introduction

AECOM was commissioned by John Lewis Partnership BTR Ltd (hereafter referred to as the 'Applicant') to undertake a Biodiversity Net Gain (BNG) assessment to inform the planning application for the demolition of an existing warehouse, and development of up to 215 build-to-rent residential dwellings (hereafter referred to as the 'Proposed Development') at Letcombe Street, Reading (hereafter referred to as the 'Site'). The Central Ordnance Survey National Grid Reference for the Site is SU 71694 73094. The Applicant's core principle in approach to design has been to increase biodiversity on the Site through additional landscaping, represented through a Biodiverse brown roof, community garden and residential garden. Further information can be found in the Landscape Strategy.

The BNG assessment has been undertaken to quantify the overall effect of the Proposed Development upon the Site's biodiversity value. This is achieved by comparing the Site's baseline habitat value with that of the Proposed Development. Calculations consider the level of proposed habitat loss, retention, enhancement and/or creation delivered by the Proposed Development and are measured using the Statutory Biodiversity Metric¹ in accordance with associated guidance documents² and good practice principles³. The report sets out the results of the BNG assessment including the methodology in Section 2, the results in Section 3 and the conclusions in Section 4.

1.1 Site Description

The Site, indicated by the red line boundary on the 'Baseline Habitat Plan' (Appendix A), is approximately 0.44 ha in size and comprises of hardstanding with introduced shrubs and 10 small urban trees.

The Site is by Mill Lane and the A329 to the north, Letcombe Street to the south-west and Crossland Road to the south-east, from which the Site is accessed. The Site is approximately 100 m south of the River Kennet.

1.2 Proposed Development

The Proposed Development (presented in the 'Post-Development Plan' in Appendix B) involves the development of a large residential complex integrated amongst hardstanding and green infrastructure features, including amenity grassland, ground level planters, introduced shrubs, brown roofing and two hedgerow types; non-native ornamental and species rich native hedgerows.

1.3 Policy context

1.3.1 National Legislation

Government policy states that *"planning decisions should minimise impacts on and provide net gain for biodiversity"*⁴. As of 12 February 2024, BNG is mandatory under Schedule 7A of the Town and Country Planning Act 1990⁵ (as inserted by Schedule 14 of the Environment Act 2021⁶). This requires all relevant developments to achieve a minimum 10% net gain in biodiversity units relative to the Site's baseline biodiversity value.

1.3.2 Local Planning Policy

The Reading Borough Council Local Plan⁷ (2019) includes the Policy EN12: Biodiversity and the Green Network, which states:

"On all sites, development should not result in a net loss of biodiversity and geodiversity and should provide a net gain for biodiversity wherever possible. Development should:

- Protect and wherever possible enhance features of biodiversity interest on and adjacent to the application site, incorporating and integrating them into development proposals wherever practicable; and*

¹ DEFRA (2023). [The Statutory Biodiversity Metric](#)

² DEFRA (2024). [Statutory biodiversity metric: user guide and habitat condition assessment appendix.](#)

³ CIEEM, IEMA & ciria (2019). [Biodiversity Net Gain: Good Practice Principles for Development, A Practical Guide](#)

⁴ UK Government (2023). [National Planning Policy Framework](#)

⁵ UK Government (1990). [Town and Country Planning Act](#)

⁶ UK Government (2024). [Environment Act – Schedule 14.](#)

⁷ Reading Borough Council (2019). Reading Borough Local Plan 2019-2036.

- *Provide new tree planting, wildlife friendly landscaping and ecological enhancements (such as wildlife ponds, bird and bat boxes) wherever practicable.*

In exceptional circumstances where the need for development clearly outweighs the need to protect the value of the site, and it is demonstrated that the impacts cannot be:

1) avoided;

2) mitigated or;

3) compensated for on-site; then new development will provide off-site compensation to ensure that there is “no net loss” of biodiversity. Provision of off-site compensation shall be calculated in accordance with nationally or locally recognised guidance and metrics. It should not replace existing alternative habitats, and should be provided prior to development.”

1.3.3 Minimum BNG Requirement

Therefore, at a minimum, the Proposed Development will be seeking to achieve a $\geq 10\%$ net gain in biodiversity to align with mandatory government policy and the guidance set out in the Reading Borough Council Local Plan⁷.

2. Methodology

2.1 Statutory Biodiversity Metric

A BNG assessment involves making a comparison between the biodiversity value of habitats present within the Site prior to development (i.e., the ‘baseline’) and the predicted biodiversity value of habitats following the completion of the development (i.e., ‘post-development’). The comparison is made in terms of ‘biodiversity units’, with a ‘biodiversity metric’ providing the mechanism to allow biodiversity values to be calculated and compared.

The Statutory Biodiversity Metric¹ (hereafter referred to as the ‘Metric’) calculates the overall loss or gain of biodiversity of development projects by assessing the distinctiveness (i.e., type of habitat and its value), condition, extent, and strategic significance of habitats on site pre- and post-development, including both permanent and temporary land-take areas. To achieve a BNG, the biodiversity unit score must have a post-development score higher than the baseline score.

When calculating the post-development biodiversity units, the Metric includes a series of standard ‘risk multipliers’ to account for the inherent risk of creating and restoring habitats, the time taken to establish habitats and the location of the mitigation in relation to the habitats lost on site. The risk multipliers have the effect of reducing the value of the proposed habitats, which means larger areas, habitats of higher distinctiveness, and/or conditions are required to mitigate losses and achieve net gain.

The Metric is guided by the following set of rules set out in Table 1. If these rules are not followed, BNG as defined by the Environment Act⁶ cannot be justified.

Table 1. Biodiversity Metric Rules

Rule	Explanation
Rule 1 – Trading rules	The trading rules are rules that try to prevent the ‘trading down’ of habitat distinctiveness. Under the trading rules, losses of habitat are to be compensated for on a “like for like” or “like for better” basis.
Rule 2 – The requirement to deliver at least a 10% net gain applies to each type of unit present on the Site	The Metric assesses and generates separate outputs for area-based habitat (measured in habitat units) and linear based habitats, including hedgerows (measured in hedgerow units) and watercourses (measured in watercourse units). To claim a net gain in biodiversity, there must be an increase across all habitats, hedgerow and river units, the units cannot be summed to give an overall biodiversity unit value i.e., an increase in habitat and hedgerow units cannot be used to offset a loss in watercourse units.

Rule 3 – Use of Biodiversity Metric Assessment must use the latest version of the Metric released by Natural England.

Rule 4 – Exceptional circumstances required LPA engagement In exceptional ecological circumstances, deviation from the Metric methodology may be permitted by the relevant planning authority.

The information required to undertake the BNG calculation is described below.

2.1.1 Baseline Data

Phase 1 Habitat data collected by AECOM in January 2024⁸ (hereafter referred to as the ‘baseline’) have been utilised to determine the Site’s baseline area-based habitats (no hedgerow or watercourse habitats were present). The baseline habitats were converted from standard Phase 1 Habitat types⁹ to UKHab Classification categories¹⁰ (Appendix C.1) before being digitised in Geographic Information System (GIS) to provide area measurements of each habitat type.

All baseline habitats defined within the Site were assigned a condition using the condition assessment criteria outlined in the Metric guidance documents², by a qualified ecologist. Further justifications of habitat condition scores are provided in Appendix D. The data was aggregated and entered into the Metric to calculate the baseline biodiversity units.

2.1.2 Post-Development Data

The General Arrangement Plan¹¹ has been used to determine the extent and type of habitats to be retained and created post-development. Habitats in the General Arrangement Plan¹¹ were converted to UKHab Classification categories¹⁰ (Appendix C.2) before being digitised into GIS to produce the ‘Post-Development Plan’ (Appendix B). Target condition scores for the proposed habitats were selected in accordance with the Metric guidance documents² using professional judgement to ensure the condition scores selected were realistic. The data was utilised to predict the post development biodiversity units.

2.1.3 Strategic Significance

The Metric requires that the strategic significance (hereafter referred to as ‘SS’) of all baseline and post-development habitats be defined. SS refers to strategic locations for local biodiversity and nature improvements, identified within local planning policies. The process of how the SS of a habitat is assessed is shown in Table 2 (further justification is provided in Appendix E).

Table 2. Strategic Significance Guidance

SS Category	Description
High	Where there is a published Local Nature Recovery Strategy¹² (LNRS) assign ‘High’ SS if: - The location of the habitat parcel has been mapped in the Local Habitat Map as an area where a potential measure has been proposed to help deliver the priorities of that LNRS; and, - The Proposed Development is consistent with the potential measure proposed for that location. OR Where there is no published LNRS, but the habitat type is mapped and described as locally ecologically important within a specific location within documents specified by the relevant planning authority. If the Proposed Development is proposed to contribute towards priorities or measures set out in the LNRS (or alternative strategy), assign ‘Low’ SS to the baseline habitat and ‘High’ SS to the proposed habitat.

⁸ AECOM (2024). Preliminary Ecological Appraisal Report.

⁹ JNCC (2016). [Handbook for Phase 1 habitat survey - a technique for environmental audit.](#)

¹⁰ UKHab Ltd (2018 – 2023). [UK Habitat Classification.](#)

¹¹ Camlins (2024). General Arrangement Plan. Drawing Number: SY743-000-0001.

¹² Gov.uk (2023). [Local nature recovery strategies: responsible authorities.](#)

Medium	This category cannot be applied where the LNRS is published, or where the habitat and location is included within other strategic documents specified by the relevant planning authority. Using professional judgement, assign 'Medium' SS if: • It can be explained how the habitat type is ecologically important within a specific location; and/or, • It can be demonstrated the importance of that habitat in providing ecological linkage to other strategically significant locations.
Low	Where the definitions for 'High' and 'Medium' strategic significance are not met. If the Proposed Development falls within a plan area, but either of the baseline or post-development habitats do not contribute to specific actions and priorities outlined in these plans, 'Low' SS should be assigned.

As part of this assessment, the following relevant documents were reviewed to determine the SS of the habitats on the Site:

- AECOM Preliminary Ecological Appraisal⁸
- Reading Borough Local Plan⁷
- Reading Borough Biodiversity Action Plan (BAP)¹³
- MAGIC Maps¹⁴

2.1.4 BNG Good Practice Principles for Development

Justification for how the BNG Good Practice Principles³ have been applied during this net gain assessment is provided in Appendix F.

2.1.5 Assumptions

In undertaking the calculation, the following assumptions have been made:

- The results of this assessment assume that all post-development habitats proposed to be created will be maintained for at least 30 years, in accordance with government guidelines¹⁵.
- It has been proposed that a brown roof will be created as part of the Proposed Development. As the Metric does not include a category for brown roof, this has been captured as a 'Low' distinctiveness green roof habitat: Green roof – Other green roofs.

2.1.6 Limitations

The following limitations also apply:

- The Phase 1 habitat data⁸ was collected in January 2024, outside of the flowering season. This was deemed not to be a significant limitation to the BNG assessment as all habitats were still recognisable and able to be accurately classified.
- The total Site area for post-development habitats (the sum of retained and created habitats) differs slightly to the baseline total Site area (0.43 ha post-development compared to 0.44 ha at baseline). This is due to rounding within the Metric and is not deemed to have any impact on the results of the assessment.
- All habitat areas and lengths have been measured manually using ArcGIS based on the Phase 1 Habitat Plan and the Landscape Plan¹¹, as such habitat areas are approximations only.

¹³ Reading Borough Council (2021) [Reading Biodiversity Action Plan](#).

¹⁴ DEFRA (2024) [MAGIC](#).

¹⁵ DEFRA (2024). [Understanding Biodiversity Net Gain](#).

3. Results

3.1 Baseline Habitats

The Site covers a total area of 0.44 ha. The habitats identified on Site vary in ecological value, ranging from 'Very Low' to 'Medium' distinctiveness. The most dominant habitat on site is Urban – Developed land; sealed surface. Ten small sized Individual tree – Urban trees are also present. The 'Baseline Habitat Plan' is provided in Appendix A. Detailed descriptions of each baseline habitat are present in Appendix G.

3.1.1 Baseline Habitats - SS

As outlined in Section 2.1.3, SS has been assigned to all baseline habitats present within the Site:

- 'Medium' SS has been assigned to habitats Individual tree – Urban trees, due to the PEA⁸ report identifying them as having potential to support roosting bats.
- 'Low' SS has been assigned to Urban – Developed land; sealed surface and Urban – Introduced shrub, as they are not considered local priority habitats and have low ecological value and habitat connectivity potential.

3.1.2 Baseline Habitat Units

The baseline biodiversity value for the Site was calculated as 0.30 units for area-based habitats (Table 3).

Table 3. Baseline Area-Based Habitats

Broad Habitat	Habitat type	Area (ha)	Distinctiveness	Condition	SS	Habitat Units	Habitat Reference
Urban	Developed land; sealed surface	0.38	V.Low	N/A - Other	Low	0.00	N/A
Urban	Introduced shrub	0.06	Low	Condition Assessment N/A	Low	0.12	N/A
Individual trees	Urban tree	0.04	Medium	Poor	Medium	0.18	N/A
Total	-	0.44*	-	-	-	0.30	-

*'Individual tree - Urban Tree' areas are excluded from total area to prevent double counting of area; however, the unit contributions are included within the habitat unit total.

3.2 Post-Development Habitats

A large residential complex will be developed on Site, integrated amongst a variety of green infrastructure features, replacing the large area of hardstanding located in the centre of the Site and strips of introduced shrubs along the northwest and southeast site perimeters.

The General Arrangement Plan¹¹ includes the retention of Urban - Developed land; sealed surface. Area-based habitats proposed to be created include Urban - Developed land; sealed surface, Urban - Built linear features, Urban - Ground level planters, Urban - Introduced shrub, and Urban – Other green roof. A total of 47 small Individual tree – Urban trees are also proposed to be planted. Hedgerow habitats proposed to be created include Non-native and ornamental hedgerow and Species-rich native hedgerow. The habitats identified on Site post-development vary in ecological value, ranging from 'Very Low' to 'Medium' distinctiveness. All post-development habitats are shown on the 'Post-Development Habitat Plan' in Appendix B.

3.2.1 Post-Development Habitats - SS

As outlined in Section 2.1.3, SS has been assigned to all post-development habitats proposed within the General Arrangement Plan¹¹. 'Low' SS has been assigned to all habitats proposed to be created due to them not meeting the requirements for 'Medium' or 'High' SS as described within Table 2.

3.2.2 Retained Habitats

Habitats that are due to be retained within the Proposed Development are detailed in Table 4. In total, 0.13 ha of area-based habitats are due to be retained with a biodiversity unit value of 0.00 habitat units.

Table 4. Retained Area-Based Habitats

Broad Habitat	Habitat type	Area (ha)	Distinctiveness	Condition	SS	Habitat Units	Habitat Reference
Urban	Developed land; sealed surface	0.13	V.Low	N/A - Other	Low	0.00	N/A
Total	-	0.13	-	-	-	0.00	-

3.2.3 Created Habitats

Habitats that are due to be created within the Proposed Development are detailed in Table 5 and 6. In total, 0.30 ha of area-based habitats and 0.13 km of hedgerow habitats are proposed to be created, this resulting in biodiversity unit value of 1.12 habitat units and 0.16 hedgerow units respectively. The high-level management prescriptions required for the created habitats to reach their target condition in the specified timeframe are provided in Appendix H.

Table 5. Created Area-Based Habitats

Broad Habitat	Habitat type	Area (ha)	Distinctiveness	Target Condition	SS	Time to target condition (yrs)	Habitat Units
Grassland	Modified grassland	0.01	Low	Poor	Low	1	0.01
Urban	Built linear features	0.00	V.Low	N/A - Other	Low	0	0.00
Urban	Developed land; sealed surface	0.02	V.Low	N/A - Other	Low	0	0.00
Urban	Ground level planters	0.07	Low	Condition Assessment N/A	Low	1	0.14
Urban	Introduced shrub	0.00	Low	Condition Assessment N/A	Low	1	0.00
Urban	Other green roof	0.20	Low	Condition Assessment N/A	Low	1	0.39
Individual trees	Urban tree	0.19	Medium	Moderate	Low	27	0.59
Total		0.30*	-	-	-	-	1.12

*'Individual tree - Urban Tree' areas are excluded from total area to prevent double counting of area; however, the unit contributions are included within the habitat unit total.

Table 6. Created Hedgerow Habitats

Habitat type	Length (km)	Distinctiveness	Target Condition	SS	Time to target condition (yrs)	Hedgerow Units
Non-native and ornamental hedgerow	0.10	V.Low	Poor	Low	1	0.09
Native hedgerow	0.04	Low	Poor	Low	1	0.07
Total	0.14	-	-	-	-	0.16

3.3 Summary of Results

All baseline habitats and habitats created and retained are present within the accompanying Metric assessment for the Proposed Development (Appendix I).

A summary of the results is shown in Table 7. Based on the final General Arrangement Plan¹¹, the Proposed Development is predicted to result in a net gain of 0.82 habitat units (+272.10%) and a net gain of 0.16 hedgerow units.

Table 7. Summary of Results

Habitat Type	Baseline	Post-Development	Total Net Unit Change	Total Net % Change
Area-Based Units	0.30	1.12	+0.82	272.10%
Hedgerow Units	0.00	0.16	+0.16	N/A ¹⁶

3.3.1 Trading Rules

3.3.1.1 Area-Based Habitats

For area-based habitats, the trading rules within the Metric are currently satisfied for each distinctiveness level (see Table 8).

Table 8. Trading Rules – Area-Based Habitats

Broad Habitat	Habitat Type	Distinctiveness Group	Trading Rule	Unit Change per habitat	Unit change per habitat group	Trading Satisfied?
Individual Trees	Urban Tree	Medium	Same broad habitat or a higher distinctiveness habitat required	+0.41	+0.41	Yes
Grassland	Modified Grassland	Low	Same distinctiveness or better habitat required	+0.01	+0.42	Yes
Urban	Ground Level Planters			+0.14		
Urban	Other Green Roof			+0.39		
Urban	Introduced Shrub			-0.12		
Total	-	-	-	+0.82	+0.82	-

3.3.1.2 Hedgerow Habitats

For hedgerow habitats, the trading rules within the Metric are currently satisfied for each distinctiveness level (see Table 9).

Table 9. Trading Rules – Hedgerow Habitats

Habitat Group	Distinctiveness Group	Trading Rule	Unit Change per habitat	Trading Satisfied?
Species-rich native hedgerow	Medium	Same distinctiveness or better habitat required	+0.07	Yes
Non-native and ornamental hedgerow	Very Low	Same distinctiveness or better habitat required	+0.09	Yes
Total	-	-	+0.16	-

¹⁶ Total % BNG for hedgerows is N/A on the basis that there were no baseline hedgerow habitats (BNG unit score of zero), therefore a percentage increase score cannot be calculated.

4. Conclusion

Based on the current plans for the Site, the Proposed Development is predicted to result in a net gain of 272.10% for area-based habitat units and a net gain of 0.16 for hedgerow habitat units, whilst also satisfying trading rules. The Proposed Development therefore exceeds the minimum target of +10% BNG for each habitat type, as required under Schedule 7A of the Town and Country Planning Act 1990⁵ (as inserted by Schedule 14 of the Environment Act 2024⁶).

The outputs of the Metric¹ are dependent on all retained and enhanced habitats meeting the target conditions, subject to the criteria outlined within Metric guidance documents². Habitats would need to be managed and monitored for a minimum of 30 years to ensure correct establishment and growth, and remedial action would need to be taken if this does not proceed as expected, otherwise the target conditions used in the calculations may not be met and the predicted biodiversity units might not be achieved.

Appendix A Baseline Habitat Plan



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LEGEND

Site Boundary

Urban tree

Urban - Developed land; sealed
surface

Urban - Introduced shrub

Baseline UK Habitat Type

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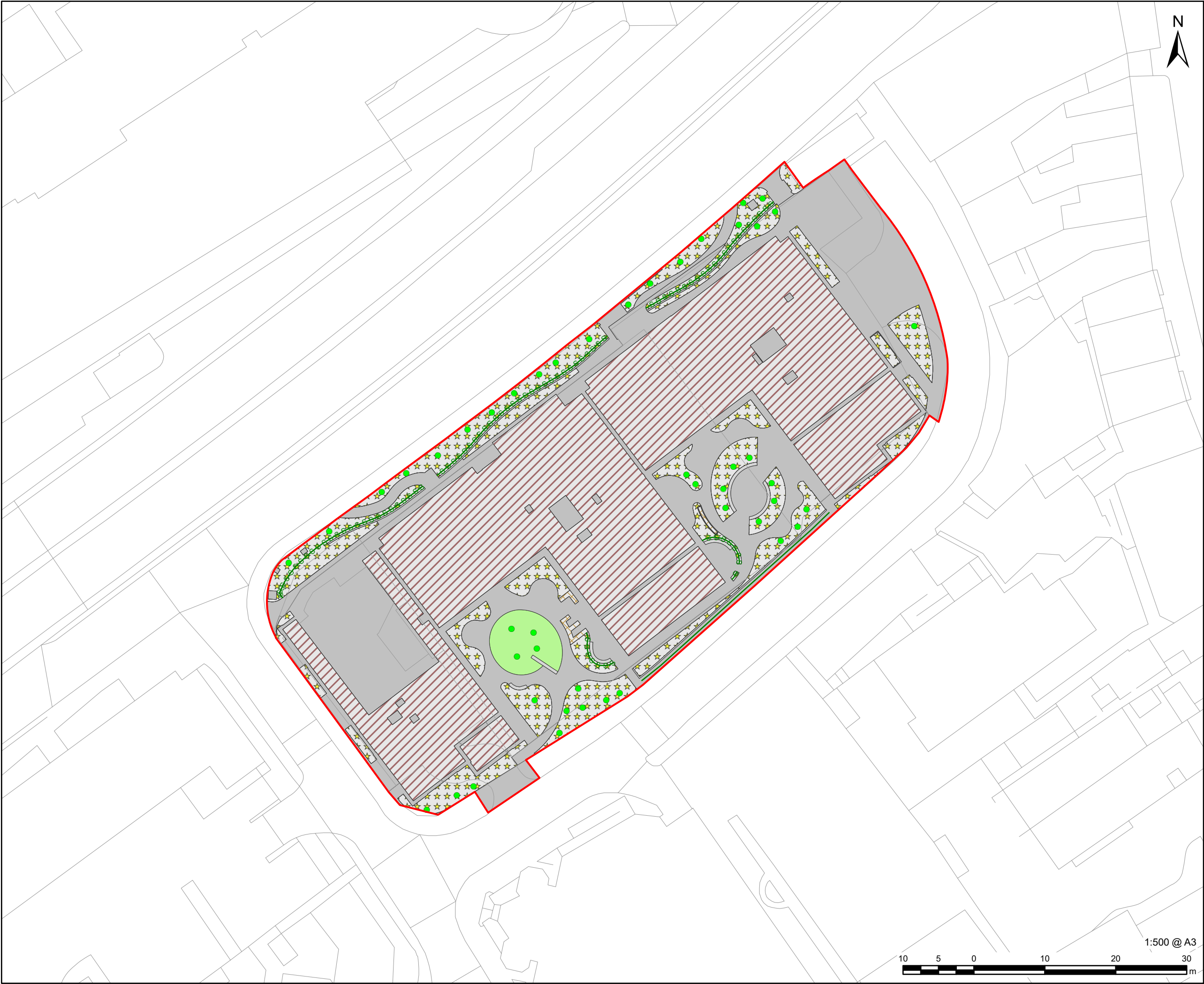
ISSUE PURPOSE
FINAL

PROJECT NUMBER
60722751

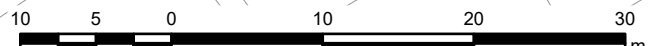
FIGURE TITLE
Baseline Biodiversity Net Gain Habitat
Plan

FIGURE NUMBER
Appendix A

Appendix B Post-Development Habitat Plan



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Lane)

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LEGEND

- Site Boundary
- Urban tree
- Non-native and ornamental hedgerow
- Native hedgerow
- Grassland - Modified grassland
- Urban - Built linear features
- Urban - Developed land; sealed surface
- Urban - Ground level planters
- Urban - Introduced shrub
- Urban - Other green roof

NOTES

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ISSUE PURPOSE

FINAL

PROJECT NUMBER

60722751

FIGURE TITLE

Post-Development Biodiversity Net
Gain Habitat Plan

FIGURE NUMBER

Appendix B

Appendix C Habitat Classification Conversions

C.1 Phase 1 Habitat to UKHab Conversion

Phase 1 Habitat Classification	UKHab Classification
Scattered trees	Individual trees – Urban tree
Hardstanding/buildings	Urban – Developed land; sealed surface
Introduced shrub	Urban – Introduced shrub

C.2 Post-Development Plan Landscape to UKHab Conversion

Post-Development Plan Landscape Classification	UKHab Classification
Proposed Trees	Individual trees – Urban tree
Hedge – mixed native species	Native hedgerow
Hedge evergreen, yew	Ornamental hedgerow
Planting beds- medium height shrubs and perennials	Urban – Ground level planters
Planting beds – low height shrubs and perennials	Urban – Ground level planters
Grassed area, generally mounded	Grassland – Modified grassland
Small set paving	Urban – Developed land; sealed surface
Pedestrian parking to Highway Authority Standard	Urban – Developed land; sealed surface
Vehicle block paving to Highway Authority Standard	Urban – Developed land; sealed surface
Resin bound aggregate surfacing	Urban – Developed land; sealed surface
Small unit concrete sett decorative surface	Urban – Developed land; sealed surface
Pre-cast concrete steps	Urban – Developed land; sealed surface
Raised growing beds	Urban – Introduced shrub

Appendix D Condition Assessment Rationale

All condition assessment data were collected during the condition assessment survey undertaken by AECOM in January 2024 using Metric condition criteria and assessor professional judgement.

Habitat type	Habitat reference	Habitat condition sheet	Condition criteria passed	Condition
Individual trees – Urban tree	T1, T7, T8	9. Individual Trees	E, F	Poor
Individual trees – Urban tree	T2, T3, T4, T5, T6, T9	9. Individual Trees	F	Poor

Appendix E Strategic Significance Rationale

Source	Strategic Significance Information
Reading Borough Local Plan (2019) ⁷	Biodiversity Opportunity Areas are focus areas identified by the Berkshire Nature Conservation Forum and agreed by the South East England Biodiversity Forum (SEEBF), where biodiversity improvements are likely to have the most beneficial results at a strategic scale. Two BOAs cross into Reading Borough – the West Reading Woodlands and LNRs, and the Kennet Valley East (see Figure 4.4). The BOA designation identifies priorities for enhancement. The BOA map has been reviewed and the Site does not fall within a BOA. <u>Application to assessment</u> No impact on SS score of habitats
Reading Borough Biodiversity Action Plan ¹³	The Reading BAP focuses on themes rather than habitats and species. Therefore, no local priority habitats are identified within the BAP. <u>Application to assessment</u> No impact on SS score of habitats
MAGIC Maps ¹⁴	MAGIC Maps illustrates priority habitats within the UK. The interactive map was reviewed, and no priority habitats were identified onsite. <u>Application to assessment</u> No impact on SS score of habitats.
AECOM Preliminary Ecological Appraisal ⁸	The PEA highlights any habitats that have the possibility of supporting protected species. The PEA was reviewed and Individual trees – Urban tree were identified as having potential for roosting bats. <u>Application to assessment</u> 'Medium' SS assigned to baseline Individual trees – Urban tree.

Appendix F BNG Good Practice Principles for Development

Principle	How has this been applied in the assessment
Principle 1: Apply the Mitigation Hierarchy	Avoiding loss of habitats was not possible for the Proposed Development, however impacts on biodiversity have been minimised through the design proposing to restore habitats which will be lost, for example, Individual trees – urban trees and Urban – Introduced shrub.
Principle 2: Avoid losing biodiversity that cannot be offset by gains elsewhere	There are no irreplaceable habitats on Site.
Principle 3: Be inclusive and equitable	Discussions were held with the ecology, arboriculture and landscape design teams to ensure the design would satisfy all requirements and provide the best solutions for biodiversity.
Principle 4: Address risks	Realistic habitats have been considered to ensure long-term viability in a location which will see high residential footfall. This is reflected in the types of habitats chosen to meet net gain and the target conditions selected, for example, the inclusion of urban habitats such as Individual trees – urban trees, Urban – ground level planters and Urban – Other green roof.
Principle 5: Make a measurable Net Gain contribution	The Proposed Development will achieve +272.10% BNG for area-based habitats and +0.16 hedgerow units, whilst also satisfying all trading rules, therefore surpassing the requirement for +10% BNG.
Principle 6: Achieve the best outcomes for biodiversity	The best outcomes for biodiversity will be achieved through the provision of a more diverse range of habitats post-development as compared to the baseline. Furthermore, the creation of Individual trees – Urban trees and hedgerow habitats may provide habitats for protected species in future.
Principle 7: Be additional	The Proposed Development demonstrated additionality through achieving +272.10% BNG for area-based habitats, and +0.16 hedgerow units. Furthermore, as ten Individual trees – Urban trees are proposed to be lost, the Proposed Development will provide 47 Individual tree – Urban trees in replacement.
Principle 8: Create a net gain legacy	The Proposed Development will achieve net gain legacy through the achievement of +272.10% for area-based habitats, in a space which may be enjoyed by the public.
Principle 9: Optimise sustainability	The habitats proposed to be created will create a more biodiverse set of habitats across the Site, when compared to the baseline habitats currently present. The provision of additional 'Individual trees – Urban tree' has the wider benefit

of helping with cooling urban areas. Furthermore, green infrastructure helps to reduce the temperatures in urban environments.

Principle 10: Be transparent

The results of the BNG assessment have been communicated clearly within this report..

Appendix G Baseline Habitat Descriptions

Habitat type (UKHab)	Habitat description
Individual trees – Urban tree	There are nine individual trees Chanticleer pear (<i>Pyrus calleryana</i> 'Chanticleer') forming a line of urban trees along the northern side of the Site. Three of these trees have dense plant growth from climbing shrubs growing around the trunks. A single sycamore (<i>Acer pseudoplatanus</i>) tree is present along the southern border of the Site.
Urban – Introduced shrub	There are five distinct areas of introduced shrub on the site. Areas of introduced shrub line the perimeter of the Site, mainly the north and south façades. To the north the shrub is quite dense and includes a line of nine trees. The shrub here spills over onto the pedestrian footpath. The introduced shrub to the south of the Site is mainly behind boundary fencing, not spilling over as much into the pedestrian footpath. There is one young sycamore tree on this side. The vegetation is lower on this side, with areas of ruderal vegetation growing between the shrubs. There are five blocks of introduced shrub. Dominant species include firethorn (<i>Pyracantha coccinea</i>), Portugal laurel (<i>Prunus lusitanica</i>), cherry laurel (<i>Prunus laurocerasus</i>) and buddleia (<i>Buddleia davidii</i>).

Appendix H Habitat Management Required to Achieve Target Condition

Habitat type	Target condition and condition criteria	Associated habitat management requirements	Condition score
Individual tree – Urban tree	Target condition is 'Moderate' in 27 years. The condition criteria are as follows. Passes 3/4 of 6 criteria. The condition criteria for these urban trees are as follows: A. More than 70% of trees are native species. Pass. B. Tree canopy is predominantly continuous with gaps in canopy cover making up <10% of total area and no individual gap being >5 m wide. Pass. C. More than 50% of trees are mature or veteran. Fail. D. There is little or no evidence of an adverse impact on tree health by anthropogenic activities such as vandalism or herbicide use. There is no current regular pruning regime, so the trees retain >75% of expected canopy for their age range and height. Pass. E. Management regime has encouraged micro habitat sites for birds, mammals and insects e.g. presence of deadwood, cavities or loose bark etc. Fail. F. Trees are immediately adjacent to other vegetation, and tree canopies are oversailing vegetation beneath. Fail/Pass..	To meet target condition, it will be necessary to: • Plant native species. • Ensure the tree canopy is predominantly continuous. • Ensure tree health is protected from negative anthropogenic activities.	Moderate
Grassland – Modified Grassland	Target condition is 'Poor' in 1 year. The condition criteria are as follows. Passes 4 of 7 criteria, fails essential criteria 1. The condition criteria for modified grassland is as follows: A. There are 6-8 vascular plant species per m² present, including at least 2 forbs. Fail. B. Sward height is varied (at least 20% of the sward is less than 7 cm and at least 20% is more than 7 cm) creating microclimates which provide opportunities for vertebrates and invertebrates to live and breed. Fail. C. Some scattered scrub (including bramble <i>Rubus fruticosus agg.</i>) may be present, but scrub accounts for less than 20% of total grassland area. Pass. D. Physical damage is evident in less than 5% of total grassland area. Examples of physical damage include excessive poaching, damage from machinery use or storage, erosion caused by high levels of access, or any other damaging management activities. Fail. E. Cover of bare ground is between 1% and 10%, including localised areas (for example, a concentration of rabbit warrens). Pass. F. Cover of bracken <i>Pteridium aquilinum</i> is less than 20%. Pass. G. There is an absence of invasive non-native plant species (as listed on Schedule 9 of WCA). Pass.	To meet target condition, it will be necessary to: • Ensure scrub accounts for less than 20% of the grassland. • Maintain cover of bare ground between 1% and 10%. • Retain less than 20% bracken cover. • Ensure invasive non-native plant species are not present.	Poor

Appendix I Metric Calculation

Metric to be included as an attachment.

