



ECOLOGYSOLUTIONS

Part of the ES Group

BRUNEL RETAIL PARK,
READING

Biodiversity Net Gain Report

COPYRIGHT

The copyright of this document
remains with Ecology Solutions
The contents of this document
therefore must not be copied or
reproduced in whole or in part
for any purpose without the
written consent of Ecology Solutions.

CONTENTS

1	INTRODUCTION	1
2	BIODIVERSITY METRIC 4.0	2
3	RESULTS AND DISCUSSION OF METRIC	3
4	EVALUATION	7
5	LEGISLATION AND POLICY CONTEXT	10
6	SUMMARY AND CONCLUSIONS	12

PLANS

PLAN ECO1	Site Location
PLAN ECO2	Baseline Habitats
PLAN ECO3	Post-Development Habitats

APPENDICES

APPENDIX 1	Encon Associates Landscaping Scheme (Drawing Number: A6103 03 Rev B)
APPENDIX 2	Defra Metric 4.0 (Provided Separately)

1. INTRODUCTION

1.1. Background & Proposals

- 1.1.1. Ecology Solutions was commissioned by Quod, to undertake a Biodiversity Net Gain (BNG) assessment of the land at Brunel Retail Park, Reading (see Plan ECO1), hereafter referred to as the site.
- 1.1.2. The site will be assessed through the application of the Biodiversity Metric 4.0 Calculation Tool.
- 1.1.3. The site is subject to a planning application for the construction of a new self-storage unit, with associated access and car parking. Following submission of the planning application Reading Borough Council (RBC) requested confirmation that the proposed scheme delivers a biodiversity net gain.

1.2. Site Characteristics

- 1.2.1. The 0.6 ha site is located in Brunel Retail Park, off Rose Kiln Lane in Reading. The site is set within an urban landscape, with commercial/light industrial units on all sides.
- 1.2.2. The site is an extensive area of hardstanding, with commercial buildings and associated car parking area. The habitats currently present on site include amenity grassland, amenity planting, an ornamental hedge close to Rose Kiln Lane, and two native trees.

1.3. Biodiversity Net Gain Report

- 1.3.1. This document assesses the level of Biodiversity Net Gain within the site. This report has been prepared with due consideration to the guidance published by the Chartered Institute of Ecology and Environmental Management (CIEEM)¹² in relation to Biodiversity Net Gain. This assessment is based on the results of the habitat survey completed by Ecology Solutions in October 2020, as well as recent satellite imagery of the site.

¹ CIEEM (2019). *Biodiversity Net Gain. Good Practice Principles for Development, A Practical Guide.*

² CIEEM, CIRIA, IEMA (2016). *Biodiversity Net Gain: Good Practice Principles for Development.*

2. BIODIVERSITY METRIC 4.0

- 2.1. The Biodiversity Metric 4.0 was released on 24 March 2023 and uses habitat features as a proxy measure for capturing the value and importance of nature. It uses calculations to assess the importance of each habitat based on its size, ecological condition and location.
- 2.2. Measurements for habitats pre-development were calculated using QGIS and Google Earth as well as information gathered from the habitat survey carried out by Ecology Solutions in October 2020. The Biodiversity Metric 4.0 Technical Supplements³ as well as professional judgement was used to inform the habitats condition criteria, as well as any connectivity score.
- 2.3. Measurements for the proposed landscaping have been completed using QGIS with reference to Encon Associates Landscaping Scheme (Appendix 1).

³ Natural England (2023). *The Biodiversity Metric 4.0, Technical Annexes 1 and 2*, Natural England Joint Publication JP039

3. RESULTS AND DISCUSSION OF METRIC

3.1. This section should be read in conjunction with the Biodiversity Metric calculation tool which has been provided separately.

3.2. Baseline Habitat (Pre-Development)

3.2.1. Table 3.1 below summarises the habitats present onsite (see Plan ECO2). A baseline total of 0.38 habitat units and 0.05 hedgerow units are present pre-development.

3.2.2. Habitats were classified based on their conformity to UK habitat classifications⁴ and condition assessments were completed for each habitat, hedgerow and ditch identified within the site. The Biodiversity Technical Supplement⁵ as well as professional judgment was used to inform the habitats' condition criteria.

⁴ Butcher, B., Carey, P., Edmonds, R., Norton, L. and Treweek, J. (2023). *UK Habitat Classification Version 2.0* at <http://ukhab.org>.

⁵ Natural England (2023). *The Biodiversity Metric 4.0, Technical Annexes 1 and 2*, Natural England Joint Publication JP039.

Baseline Habitats					
Baseline habitat	Baseline Biodiversity Units	Condition and Justifications	Ecological Features	Impact	After Works
Developed Land; sealed surface	0	N/A	Area comprises of commercial buildings and associated car park area.	The building will be lost as part of the proposals.	N/A
Modified grassland	0.03	Poor; sward height is not varied and physical damage is evident from mowing and trampling. Fewer than 6 vascular plant species are present per m ² .	Amenity grassland verge alongside Rose Kiln Lane.	This grassland will be cleared ready for the new development.	0.03 units lost
Introduced shrub	0.02	N/A	There are small areas of amenity planting in the northeast corner of the site and in the current car park area.	Some areas of amenity planting in the car park will be removed as part of the development. The small area of planting in the northeast of the site will be retained.	0.01 units lost 0.01 units retained
Urban Trees	0.33	Moderate; there are no natural ecological niches present on the existing trees. Less than 50% of the trees are said to be mature.	One mature medium tree is located within the northwest corner of the site. A small semi-mature tree is also present within the car park area.	The small tree will be removed during development. The medium tree will be retained.	0.03 units lost 0.30 units retained
Baseline Hedgerows					
Baseline habitat	Baseline Hedgerow Units	Condition and Justifications	Ecological Features	Impact	After Works
Non-native and ornamental hedgerow	0.05	No assessment required – condition fixed at poor	There is an ornamental hedgerow along the northern boundary of the site.	Hedgerow will be removed during development.	0.05 units lost

Table 3.1 Summary of Baseline Habitats.

3.3. Post-Development

- 3.3.1. Table 3.2 below summarises the habitats that are proposed onsite post development and are illustrated in Plan ECO3 and Appendix 1.
- 3.3.2. The landscape strategy includes the creation of a variety of species-rich habitats including neutral grassland, shrub planting, and native hedge planting in addition to urban trees.
- 3.3.1. Overall, the site has a baseline of 0.38 habitat units and 0.05 hedgerow units, and the proposed scheme would result in 0.57 habitat units and 0.35 hedgerow units. This results in an increase of 49.32% (+0.19 habitat units) from pre-development to post development.
- 3.3.2. The targeted conditions for proposed habitats will be achieved through appropriate management undertaken during the operational phase of the proposals. This will ensure that the proposed habitats continue to offer biodiversity benefit in the future.

Trading Rules

- 3.3.3. The proposed development is set to satisfy all trading rules by providing a betterment of habitats over the baseline position.

Created Habitats				
Proposed Habitat	Landscape Plan Habitat	Target Condition	Biodiversity Units Delivered	Target Condition Notes
Other neutral grassland	Hedgerow Understorey Flora Mix	Moderate	0.08	An understorey flora mix will be planted underneath the new native hedge to be planted along the northern boundary of the site. HE1 (Hedgerow Mixture) by Emorsgate Seeds (or similar) will contain 18 wildflower species and is selected to encourage invertebrates. These areas are likely to achieve a 'Moderate' condition when managed according to the landscape plan.
Introduced Shrub	Shrub Planting	N/A	0.03	Introduced shrubs will be managed for their amenity value and as such will provide localised opportunities for wildlife.
Urban Tree	New Specimen Tree Planting and New Specimen Semi-Mature Tree	Moderate	0.15	A total of 4 new trees (three small and one medium) will be planted on site, as per the landscape plan. The three small trees will be standard root balled Field Maple <i>Acer campestre</i> and Rowan <i>Sorbus aucuparia</i>. The proposed semi-Mature tree will be a root balled London Plane <i>Platanus x hispanica</i>. The newly planted trees are largely associated with the introduced shrub and native hedgerow in the northeast of the site. They are likely to achieve a target condition of 'Moderate'. New trees are native species suited for urban environments; all trees will support ecological niches and feeding resources for local wildlife.
Developed Land; Sealed Surface	N/A	N/A	0.00	This area includes the proposed building and associated hardstanding infrastructure. No condition is applicable.
Created Hedgerows				
Proposed Habitat	Landscape Plan Habitat	Target Condition	Biodiversity Units Delivered	Target Condition Notes
Native Hedgerow with Trees	Native Hedge Planting	Moderate	0.35	A native hedge will be planted on the northern boundary of the site and will be planted with seven different species including Field Maple, Hawthorn <i>Crataegus monogyna</i> , Blackthorn <i>Prunus spinosa</i> , Hazel <i>Corylus avellana</i> , Goat Willow <i>Salix caprea</i> , Wild Cherry <i>Prunus avium</i> and Dog Rose <i>Rosa canina</i> . The hedgerow and trees will also provide nesting and foraging opportunities for birds and provide linear features for navigating and foraging bats.

Table 3.2. Summary of post-development habitats and hedgerow

4. EVALUATION

4.1. The Principles of Evaluation

Biodiversity Net Gain – Good Practice Principle for Development

- 4.1.1. CIRIA, CIEEM and IEMA have developed principles of good practice to achieve Biodiversity Net Gain. These principles provide a framework that helps improve the UK's biodiversity by contributing towards strategic priorities to conserve and enhance nature through sustainable development. There are ten principles in total, and all principles must be applied together as one approach. The ten principles are set out below.
- 4.1.2. **Principle 1. Apply Mitigation Hierarchy.** Do everything possible to first avoid and then minimise impacts on biodiversity. Only as a last resort, and in agreement with external decision makers where possible, compensate for losses that cannot be avoided. If compensation for losses within the development footprint is not possible or does not generate the most benefits for nature conservation, then offset biodiversity losses by gains elsewhere.
- 4.1.3. **Principle 2. Avoid losing biodiversity that cannot be offset by gains elsewhere.** Avoid impacts on irreplaceable biodiversity; these impacts cannot be offset to achieve no net loss or net gain.
- 4.1.4. **Principle 3. Be inclusive and equitable.** Engage stakeholders early, and involve them in designing, implementing, monitoring and evaluation the approach to net gain. Achieve Net Gain in partnership with stakeholders where possible and share the benefits fairly among stakeholders.
- 4.1.5. **Principle 4. Address risks.** Mitigate difficulty, uncertainty and other risks to achieving Net Gain. Apply well accepted ways to add contingency when calculating biodiversity losses and gains in order to account for any remaining risks, as well as to compensate for the time between the losses occurring and the gains being fully realised.
- 4.1.6. **Principle 5. Make a measurable net gain contribution.** Achieve a measurable, overall gain for biodiversity and the services ecosystems provide while directly contributing towards nature conservation priorities.
- 4.1.7. **Principle 6. Achieve the best outcomes for biodiversity.** Achieve the best outcomes for biodiversity by using robust, credible evidence and local knowledge to make clearly-justified choices when:
- Delivering compensation that is ecologically equivalent in type, amount and condition, and that accounts for the location and timing of biodiversity losses.
 - Compensating for losses of one type of biodiversity by providing a different type that delivers greater benefits for nature conservation.
 - Achieving net gain locally to the development while also contributing towards nature conservation priorities at local, regional and national levels.
 - Enhancing existing or creating new habitat.

- Enhancing ecological connectivity by creating more, bigger, better and joined areas for biodiversity.

4.1.8. **Principle 7. Be additional.** Achieve nature conservation outcomes that demonstrably exceed existing obligations (i.e. do not deliver something that would occur anyway).

4.1.9. **Principle 8. Create a net gain legacy.** Ensure net gain generates long-term benefits by:

- Engaging stakeholders and jointly agreeing practical solutions that secure net gain in perpetuity.
- Planning for adaptive management and securing dedicated funding for long-term management.
- Designing net gain for biodiversity to be resilient to external factors, especially climate change.
- Mitigating risks from other land uses.
- Avoiding displacing harmful activities from one location to another.
- Supporting local-level management of net gain activities.

4.1.10. **Principle 9. Optimise sustainability.** Prioritise Biodiversity Net Gain and, where possible, optimise the wider environmental benefits for a sustainable society and economy.

4.1.11. **Principle 10. Be transparent.** Communicate all net gain activities in a transparent and timely manner, sharing the learning with all stakeholders.

Lawton's Principle

4.1.12. Principles for enhancing England's wildlife sites were developed as part of the Lawton Review⁶. Across the UK, these principles can be used to design Biodiversity Net Gain activities to boost wildlife sites. They are:

- Improving the quality of wildlife sites;
- Increasing the size of the wildlife sites;
- Enhancing connections between, or joining up wildlife sites;
- Creating new wildlife sites; and
- Reducing pressure on wildlife sites.

4.2. Post-Development Evaluation

4.2.1. The site's contribution to Biodiversity Net Gain has been assessed with due regard to the principles outlined and discussed above.

4.2.2. Overall, when based against the Biodiversity Metric version 4.0, the site delivers significantly in excess of the recommended 10% net gain as stated in the Environment Act. The proposals make some provision for biodiversity onsite through new landscaping and shall ensure net gains are secured and that the proposed scheme is compliant with the NPPF and local policy together with emerging legislation.

⁶ Department for Environment, Food and Rural Affairs (2010). *Making Space for Nature: A Review of England's Wildlife Sites*, DEFRA.

- 4.2.3. The proposed development will provide a betterment from the existing baseline, with new ecological opportunities for a range of species and groups.
- 4.2.4. The site will deliver net gains for biodiversity through the provision of new habitats including neutral grassland, shrub planting, a new native species hedgerow and urban tree planting (see summary in Table 4.1 below). The new landscape planting will offer opportunities for wildlife, alongside additional species provisions such as wildlife boxes that are not taken account of within the Biodiversity Metric.

Site Baseline	Habitat Units	0.38
	Hedgerow Units	0.05
	River Units	0.00
Post-intervention	Habitat units	0.57
	Hedgerow Units	0.35
	River Units	0.00
Total Net Unit Change	Habitat units	0.19
	Hedgerow Units	0.30
	River Units	0.00
Total net Percentage Gain	Habitat Units	49.32%
	Hedgerow units	608.86%
	River Units	0%

Table 4.1. Summary of Biodiversity Net Gain results.

5. LEGISLATION AND POLICY CONTEXT

- 5.1. The planning policy framework that relates to Biodiversity Net Gains at the site is issued nationally through the National Planning Policy Framework (NPPF) and locally through the planning policies of the Reading Borough Local Plan.

5.2. National Policy

National Planning Policy Framework (September 2023)

- 5.2.1. Guidance on national policy for Biodiversity Net Gain is provided by the NPPF, published in March 2012, revised on 24 July 2018, 19 February 2019, 20 July 2021 and again on 5 September 2023. The following sections of the policy relate to Biodiversity Net Gain:
- 5.2.2. Paragraph 174(d) states that planning policies and decisions 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 future pressures.
- 5.2.3. Paragraph 179(b) states that to protect and enhance biodiversity and geodiversity, plans should promote the conservation, restoration and enhancement of priority habitats, ecological networks and the protection and recovery of priority species; and identify and pursue opportunities for securing measurable net gains for biodiversity.
- 5.2.4. Paragraph 180(d) states that when determining planning application, local planning authorities should apply the following principle: development whose primary objective is to conserve or enhance biodiversity should be supported; while opportunities to incorporate biodiversity improvements in and around developments should be encouraged, especially where this can secure measurable net gains for biodiversity.

5.3. Local Policy

Reading Borough Local Plan (adopted 2019).

- 5.3.1. The extant adopted local plan has a policy relating to Biodiversity Net Gain as summarised below.
- 5.3.2. **Policy EN12: Biodiversity and the Green Network.** With regards to biodiversity, this policy states that on all sites, development should not result in a net loss of biodiversity and should provide a net gain wherever possible. The policy goes on to state that a 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
 - Provide new tree planting, wildlife friendly landscaping and ecological enhancements (such as wildlife ponds, bird and bat boxes) wherever practicable.

- 5.3.3. The policy goes on to say that 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.

5.4. **Environment Act 2021**

- 5.4.1. On 15 October 2019, the government introduced a new Bill to Parliament; The Environment Bill. This Bill was given Royal Assent on 9 November 2021, thereby passing the Environment Act 2021. This legislation will help ensure that England maintains and improves its environmental protection. The Act details a legal requirement for all developments to ensure that a minimum of 10% net gain in Biodiversity is delivered. While Section 6 of the Environment Act states that a Biodiversity Net Gain is required for new developments, this is not a mandatory requirement until such time as the Secretary of State adopts a regulation determining it so. This secondary regulation is now expected in January 2024.

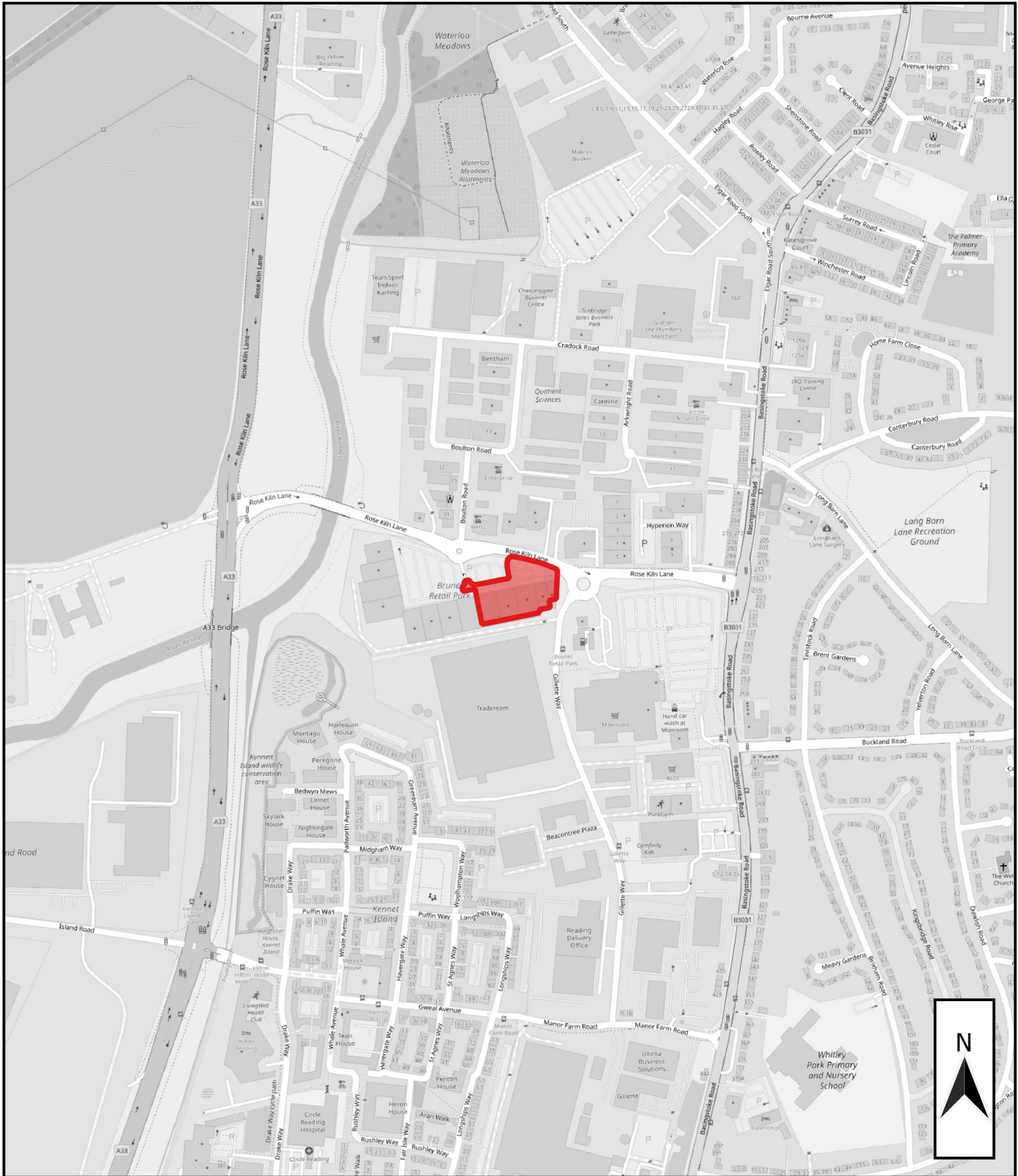
6. SUMMARY AND CONCLUSIONS

- 6.1.1. Ecology Solutions was commissioned by Quod, to undertake a Biodiversity Net Gain assessment of the land at Brunel Retail Park, Reading.
- 6.1.2. The site is subject to a planning application for the construction of a self-storage unit with associated access and car parking. A planning application is currently before Reading Borough Council for determination.
- 6.1.3. The site is an extensive area of hardstanding, with commercial buildings and associated car parking area. The site currently includes areas of amenity grassland, amenity planting, an ornamental hedge close to Rose Kiln Lane and two native trees.
- 6.1.4. The Biodiversity Metric 4.0 was used to calculate the pre-development baseline units, established using figures from QGIS, together with information gathered from the habitat survey complete by Ecology Solutions in October 2020.
- 6.1.5. The site has a current baseline of 0.38 habitat units. The post development habitat provision shall allow for 0.57 habitat units to be delivered. A total net gain of 49.32% (0.19 units) shall be provided as part of the development proposals.
- 6.1.6. Overall, when based against the Biodiversity Metric version 4.0, the site will deliver significantly greater gains than the recommended 10% net gain as stated in the Environment Act, albeit with further regulations required prior to this threshold becoming a mandatory requirement. As such, the scheme is fully compliant with the NPPF, local and regional policy and emerging legislation.

PLANS

PLAN ECO1

Site Location

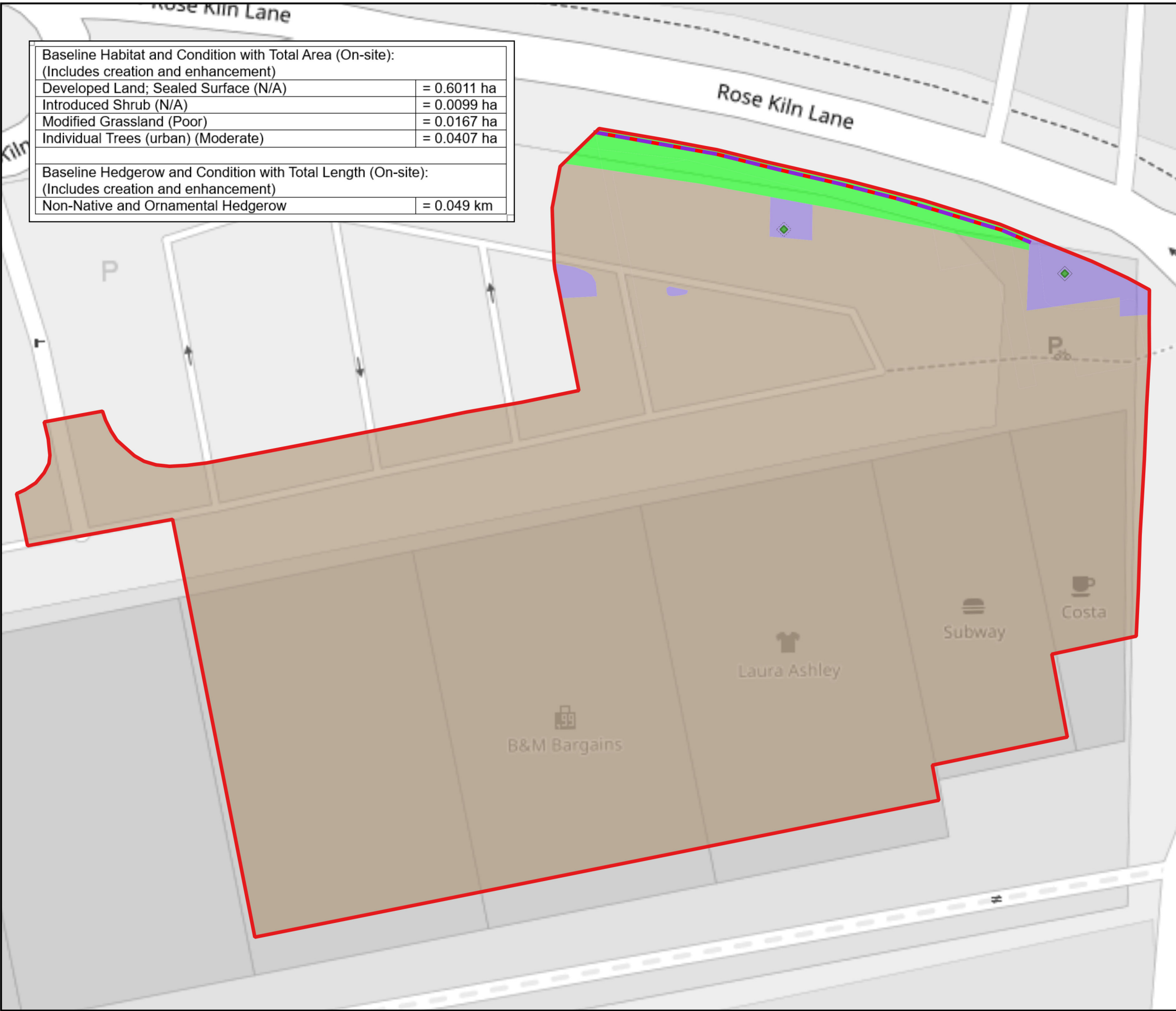


KEY: SITE LOCATION	 ECOLOGY SOLUTIONS Part of the ES Group Cokenach Estate Barkway Royston Hertfordshire SG8 8DL +44(0)1763 848084 east@ecologysolutions.co.uk ecologysolutions.co.uk	
	9352: BRUNEL RETAIL PARK, READING	
	PLAN ECO1: SITE LOCATION	Rev: A Oct 2023

PLAN ECO2

Baseline Habitats

Baseline Habitat and Condition with Total Area (On-site): (Includes creation and enhancement)	
Developed Land; Sealed Surface (N/A)	= 0.6011 ha
Introduced Shrub (N/A)	= 0.0099 ha
Modified Grassland (Poor)	= 0.0167 ha
Individual Trees (urban) (Moderate)	= 0.0407 ha
Baseline Hedgerow and Condition with Total Length (On-site): (Includes creation and enhancement)	
Non-Native and Ornamental Hedgerow	= 0.049 km



KEY:

SITE BOUNDARY

HABITATS

DEVELOPED LAND; SEALED SURFACE

INTRODUCED SHRUB

MODIFIED GRASSLAND

HEDGEROWS

NON-NATIVE AND ORNAMENTAL HEDGEROW

INDIVIDUAL TREES

EXISTING SMALL URBAN TREE

EXISTING MEDIUM URBAN TREE



ECOLOGY SOLUTIONS
Part of the ES Group

Cokenach Estate
Barkway | Royston
Hertfordshire | SG8 8DL

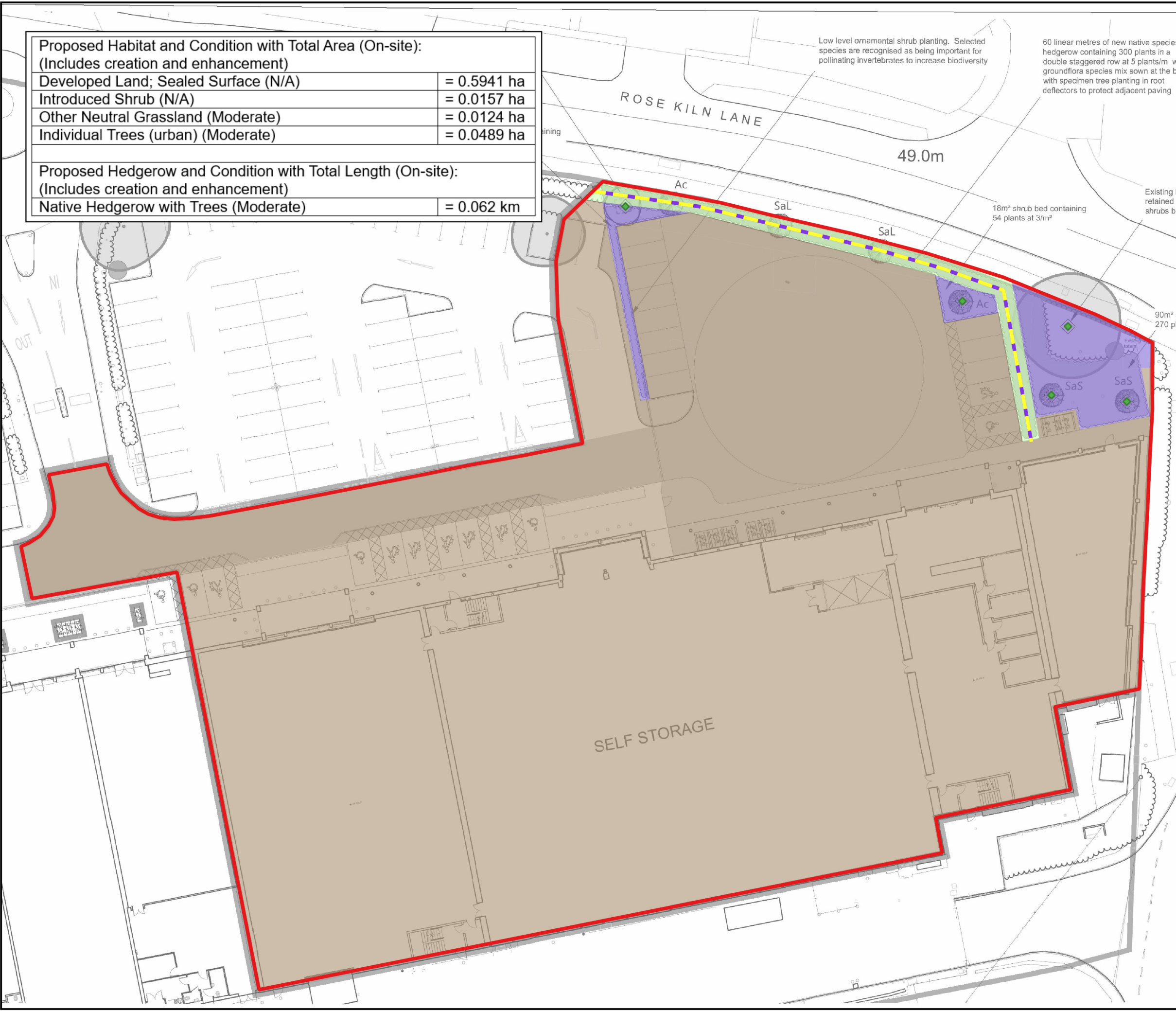
+44(0)1763 848084
east@ecologysolutions.co.uk
ecologysolutions.co.uk

9352: BRUNEL RETAIL PARK, READING	
PLAN ECO2: BASELINE HABITATS	Rev: A Oct 2023

PLAN ECO3

Post-Development Habitats

Based upon the Ordnance Survey map with permission of the Controller of Her Majesty's Stationery Office, © Crown Copyright. Ecology Solutions Ltd, Cokenach Estate, Barkway, Royston, Hertfordshire, SG8 8DL. 100044628



Proposed Habitat and Condition with Total Area (On-site): (Includes creation and enhancement)	
Developed Land; Sealed Surface (N/A)	= 0.5941 ha
Introduced Shrub (N/A)	= 0.0157 ha
Other Neutral Grassland (Moderate)	= 0.0124 ha
Individual Trees (urban) (Moderate)	= 0.0489 ha
Proposed Hedgerow and Condition with Total Length (On-site): (Includes creation and enhancement)	
Native Hedgerow with Trees (Moderate)	= 0.062 km

KEY:

SITE BOUNDARY

HABITATS

DEVELOPED LAND; SEALED SURFACE

INTRODUCED SHRUB

OTHER NEUTRAL GRASSLAND

HEDGEROWS

NATIVE HEDGEROW WITH TREES

INDIVIDUAL TREES

PROPOSED SMALL URBAN TREE

PROPOSED MEDIUM URBAN TREE



ECOLOGY SOLUTIONS
Part of the ES Group

Cokenach Estate
Barkway | Royston
Hertfordshire | SG8 8DL

+44(0)1763 848084
east@ecologysolutions.co.uk
ecologysolutions.co.uk

9352: BRUNEL RETAIL PARK,
READING

PLAN ECO3:
POST-DEVELOPMENT HABITATS

Rev: A
Oct 2023

APPENDICES

APPENDIX 1

Encon Associates Landscaping Scheme (Drawing
Number: A6103 03 Rev B)

KEY TO LANDSCAPE PROPOSALS

Existing Vegetation

- Existing Trees Retained**
- Existing trees to be retained and protected as per BS5837 Tree Survey Report (Encon Associates, June 2023)
- Existing Trees Removed**
- Existing trees to be removed as per BS5837 Tree Survey Report (Encon Associates, June 2023)
- Existing Vegetation**
- Existing areas of vegetation to be retained

Proposed Planting Details & Specification

All areas of new landscaping to have the existing topsoil and subsoil decompacted by hand digging or rotovator. If any imported topsoil is required it should be placed to a depth of 200mm minimum in grass areas and 400mm minimum in tree and shrub planting areas. Planting should take place during the dormant planting season ie October to March and seeding between late summer to mid-autumn.

Creation of soft landscape areas to be in accordance with BS3882:2015 Topsoil to ensure suitable depths of soil (topsoil and subsoil) is provided for shrub and tree planting purposes.

Hedge Planting

Plants to be pit planted at densities indicated, to provide a dense, compact hedge buffer along the site boundary as follows:

Cultivate and grade hedging bed, bring top 300mm of soil to a fine tilth, including Enmag fertilizer applied and worked into to 100m, rake and bring to given levels, remove all stones and debris over 50mm, dig planting holes (average 300 x 300 x 300 deep), supply and plant specified shrubs and plants in densities specified, backfill with excavated material as above, water in and mulch with 75mm bark chippings 20-40mm size. Water and weed regularly for 12 months.

Native Hedge Planting (60 linear metres)

- Trees and shrubs to be pit planted at 5 plants per metre in a double staggered row. Plants to be 125-50cm bareroot nursery stock reduced by 30-50% immediately after planting.
- 30% Crateagus monogyna (Hawthorn)
20% Prunus spinosa (Blackthorn)
10% Acer campestre (Field Maple)
10% Corylus avellana (Hazel)
10% Salix caprea (Goat Willow)
10% Prunus avium (Wild Cherry)
10% Rosa canina (Dog Rose)

Hedgerow Ground Flora Species

Species selected to encourage butterflies, moths and insects including nectar rich species. HE1 (Hedgerow Mixture) by Emorsgate Seeds (or similar approved) to be planted at the base of the hedgerow. Mix contains 18 wildflower species suitable for establishing within hedges.

Shrub Planting

Areas of shrub planting for ecological enhancement to be planted in groups around the perimeter of the site. Cultivate and grade soil, bring top 150mm to a fine tilth prior to planting the following species with 75mm depth of bark mulch spread between plants.

Shrubs (130m²)

- Shrubs to be pit planted 3 per m². Planted to provide low maintenance, colourful, groundcover with ecological value. All plants to be 5 litre pot grown stock, planted in random groups of 5, 7 or 9 plants of same species throughout the planting bed.
- 10% Hebe 'Red Edge'
10% Prunus laurocerasus
10% Hebe pinguifolia 'Sutherlandii'
10% Sarcoocca hookeriana
10% Viburnum tinus laurustinus
10% Brachyglottis 'Sunshine'
10% Ceanothus 'Blue Mound'
10% Lavandula angustifolia
10% Salix lantana
10% Aesculus parviflora

Tree Planting

Standard specimen trees planted in locations indicated as per the following specification:

All trees to be planted within root barriers to protect adjacent paved surfacing from root damage

Root Barriers (7no.)

To protect paved surfaces from root heave. "RootDirector" product (or similar approved) to be utilised to divert roots downwards to a level where they can safely establish without surface damage. The following product by GreenBlue Urban is recommended as the most cost effective solution:

New Specimen Tree Planting (6 no.)

New specimen, none-cultivar, common trees to be planted around the site.

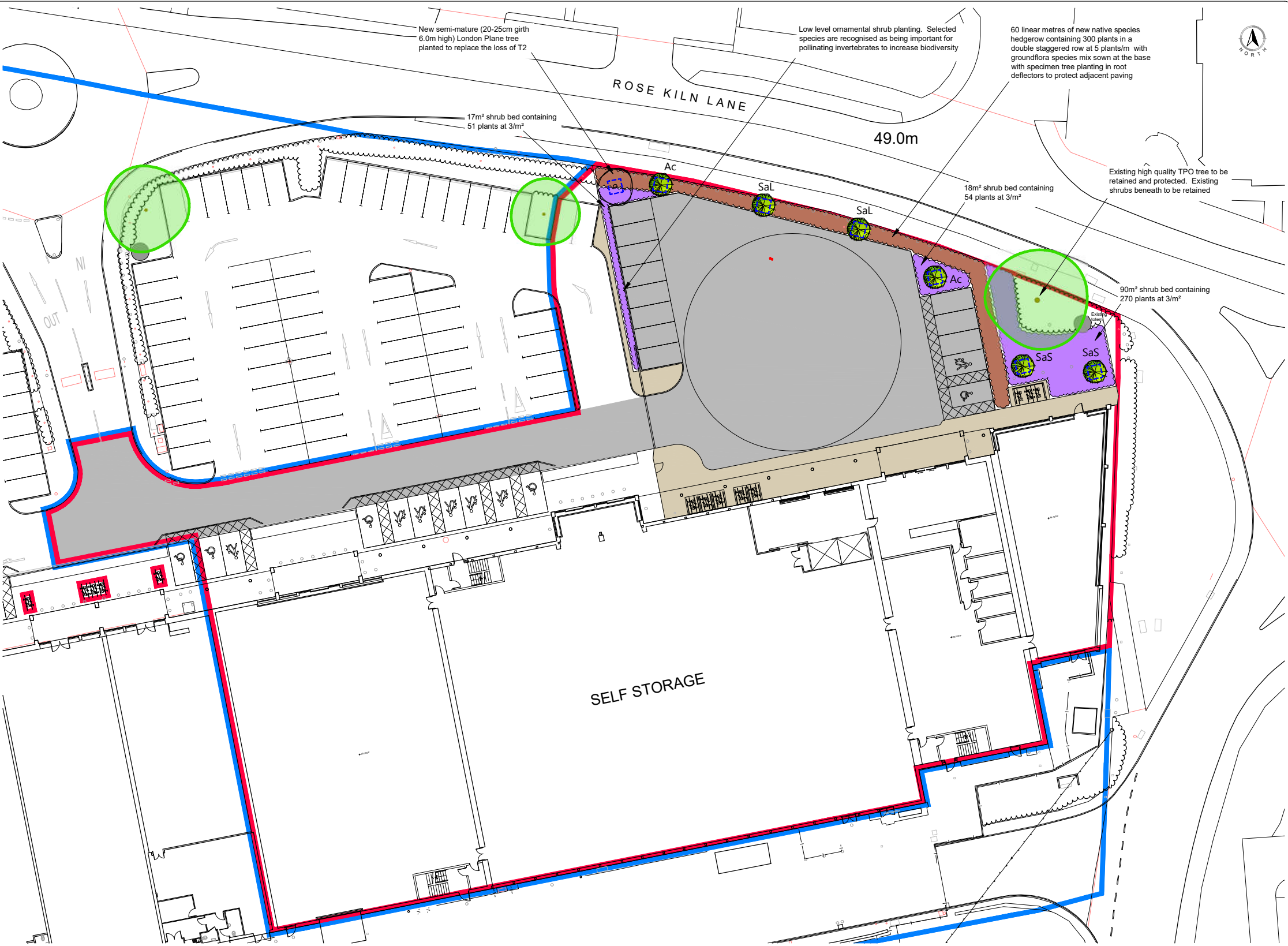
3.0-3.5m high, 12-14 cm girth Standard root balled trees (supplied by Majestic Trees or similar approved) to be pit planted including timber stake and rubber spacer to secure the tree in an upright position and bulky organic compost backfill planted in locations shown

- 2 x Acer campestre (Field Maple) - Ac
2 x Sorbus aucuparia (Rowan) - SaS
2 x Sorbus aria (Whitebeam) - SaL

New Specimen Semi-Mature Tree (1 no.)

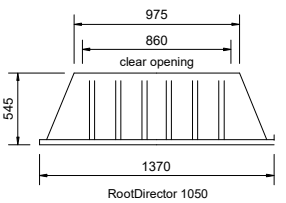
4.5-6.0m high, 20-25 cm girth Semi-mature root balled trees (supplied by Majestic Trees or similar approved) to be pit planted as per specification above

- 1 x Platanus x hispanica (London Plane) - Ph



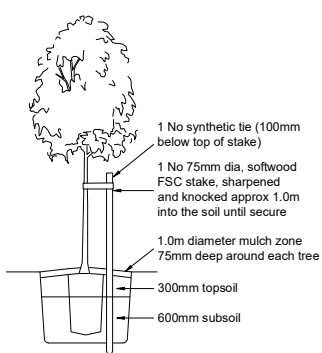
Root Barriers

RootDirector 1050 to prevent root damage to adjacent paved areas



Tree Pits & Support

Excavate tree pit to provide 5m³ of rooting volume (2.4m x 2.4m x 0.9m)



Paving

All areas of hardstanding and paving to be constructed as per Architect/Engineers specifications (see separate drawings for details)

- Access Road, Car Parking and Service Yard**
- Refer the Structural Engineers Spec for details
- Pedestrian Circulation**
- Refer the Structural Engineers Spec for details

© Encon Associates - DISCLAIMER:

- This drawing is copyright and shall not be reproduced nor used for any other purpose without the written permission of Encon Associates - This drawing must be read in conjunction with all other related drawings and documentation - It is the contractors responsibility to ensure full compliance with the relevant Regulations - Until technical approval has been obtained from the relevant Authorities it should be understood that all drawings issued are PRELIMINARY and NOT for Construction - Should the contractor start site work prior to approval been given, it is entirely at his own risk - Do not scale from this drawing, use figured dimensions only - It is the contractors responsibility to check and verify all dimensions on site - Any discrepancies to be reported to Encon Associates immediately - All survey information is provided by the surveying company and Encon Associates cannot accept any liability for any discrepancies there in - All survey information to be verified on site by Contractor - For our Standard Terms and Conditions, please visit www.enconassociates.co.uk/terms - Alternatively, a hard copy can be posted to you

Notes:

Key to Tree Survey Plan

The RPA (Root Protection Area) ie the zone in which the root system is believed to be concentrated, has been calculated for each tree within the site boundary. The results can be found with the Tree Report.

This drawing is based on:

- Topographical survey drawing ref 11144 by Staf Surv dated 19/08/2020
- Site Plan As Proposed, reference 2418-P01-C by Mountford Pigott Architects, dated 06.04.2023
- Site visit by Encon Associates, 13.10.2020

Maintenance & Management Plan

All new planting areas are to be subject to a 12 month defects liability period with a further 4 year maintenance regime.

The general maintenance management will include 12 visits per year in order to provide the following:

- Comprehensive weed control
- Checking the condition of tree ensuring that all plants remain firmly in the ground in an upright position
- Weekly watering from April to October for the first 2 growing seasons. A minimum of 28 watering days for 7 months at 4 visits/month to water the trees.
- Pruning back of damaged/diseased growth
- Replacing dead and dying plants on a yearly basis to achieve a minimum 90% establishment rate

B	25.09.23	Updated in line with tree officer comments	MJB	LB
A	29.06.23	Updated in line with comments	MJB	LB

Rev	Date	Description	Drawn	Checked
-----	------	-------------	-------	---------

Client

MCTGF Trustee 1 Limited and MCTGF Trustee 2 Joint Trustee for Mayfair Capital

Project

Proposed Self Storage Development
Brunel Retail Park
Rose Kiln Lane, Reading

Title

Landscaping Scheme

Drawing Status
FOR PLANNING APPROVAL

Drawn	MJB	Checked	LB
-------	-----	---------	----

Date	27.06.23	Scale (A1)	1:250
------	----------	------------	-------

encon
associates
10 Chapel Lane
Arnold
Nottingham
NG5 7DR
T: 0115 987 55 99 E: enquiries@enconassociates.co.uk W: www.enconassociates.co.uk

Environmental Consultants to the Construction Industry
- BREEAM - Code for Sustainable Homes Assessors - Landscape Architecture - Transportation
- Life Cycle Costing - Energy Assessment - SAP - EPC - SBEM - Daylight Calculations

Job Number	Drawing Number	Rev
A6103	03	B

APPENDIX 2

Defra Metric 4.0 (Provided Separately)



ECOLOGYSOLUTIONS

Part of the ES Group

Ecology Solutions Limited | Cokenach Estate | Barkway | Royston | Hertfordshire | SG8 8DL

01763 848084 | east@ecologysolutions.co.uk | www.ecologysolutions.co.uk