

UoR Cycle Storage – Central Square

Biodiversity Net Gain Report

Prepared on behalf of

University of Reading

Final Report

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UoR Cycle Storage – Central Square

Biodiversity Net Gain Report

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UoR Cycle Storage – Central Square

Biodiversity Net Gain Report

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UoR Cycle Storage – Central Square

Biodiversity Net Gain Report

BIODIVERSITY GAIN VALIDATION STATEMENT

This Statement provides the minimum information required for Wokingham Borough Council to validate the planning application for the Proposals, as set out in Article 7 of the Town and Country Planning (Development Management Procedure) (England) Order 2015 (as amended by The Biodiversity Gain (Town and Country Planning) (Modifications and Amendments) (England) Regulations 2024).

EPR hereby confirms that the Applicant believes that planning permission, if granted, would be subject to the biodiversity gain condition.

The on-site and off-site pre-development biodiversity value is taken to be the date that the Application is submitted. No activities resulting in a loss of on-site biodiversity value (degradation) have taken place between 30 January 2020 and this date.

A completed Statutory Biodiversity Metric Calculation Tool (published on 12th February 2024) has been submitted with the Application as part of the Information for Biodiversity Net Gain Pack. This shows the calculations of the pre-development biodiversity value of the onsite habitat on the date of application. The baseline on-site biodiversity value is calculated as follows:

- 0.02 Area Habitat units
- 0 Hedgerow units
- 0 Watercourse units

Plans, drawn to an identified scale and showing the direction of North, are included within this document (**Maps 1 and 2**) showing the on-site habitat existing on the date of application, including any irreplaceable habitat if present.

UoR Cycle Storage – Central Square

Biodiversity Net Gain Report

1. INTRODUCTION

Scope

- 1.1 This Biodiversity Net Gain (BNG) report sets out the details of the Biodiversity Net Gain calculations completed for the Proposals, including:
- Assessment Methodology;
 - Summary of evidence underpinning Metric decisions;
 - Assumptions and Limitations;
 - Headline Results;
 - Summary of proposed significant on-site habitat enhancements;
 - Summary of proposed off-site habitat creation/enhancements;
 - Overview of proposed arrangements for BNG delivery and monitoring.
- 1.2 It is equivalent to the 'BNG Design Stage Report' recommended by the Chartered Institute of Ecology and Environmental Management (CIEEM) in their Biodiversity Net Gain Report & Audit Templates guidance document (CIEEM, 2021a).

Description of Site

- 1.3 The Site consists of 0.01ha of hardstanding and Portuguese Laurel *Prunus lusitanica* hedging immediately north of the Edith Morley building and west of Minghella Studios of the University of Reading Whiteknights Campus. A mature tree stands immediately north-west of the site boundary. The Root Protection Zone (RPZ) of this tree may encroach into the Site.
- 1.4 The Portuguese Laurel hedge was removed in May 2025 but has been included in the BNG report to ensure legal compliance with Schedule 14 of the Environment Act, which sets out the biodiversity gain condition for development, includes measures that allow planning authorities to recognise any habitat degradation since 30th January 2020 – the date the Environment Bill entered Parliament. Such measures include using aerial imagery and other datasets to determine onsite habitat features and their condition on 30th January 2020. When habitat degradation is present, planning authorities will consider the earlier habitat state as baseline for assessing on-site biodiversity value. Therefore, all existing habitat features noted during the baseline assessment must be included in the Statutory Biodiversity Metric to reflect the site's original ecological condition (DEFRA, 2024).

Description of Development

- 1.5 The Proposals comprise the construction of a cycle storage unit.

Legislation and Policy Context

- 1.6 A minimum 10% net gain in biodiversity, as measured by the Statutory Biodiversity Metric (DEFRA, 2024a,) is now a condition of most types of planning permission in England under the Environment Act 2021 and associated secondary legislation.
- 1.7 Guidance has clarified that where present on-site, the 10% gain requirement applies individually to three categories of habitat: 'Area Habitats', 'Hedgerows', and 'Watercourses'. This is measured in 'units' which can be delivered on-site, off-site, or a combination of both, and must be secured for a minimum of 30 years.
- 1.8 The National Planning Policy Framework (NPPF) (DLUHC, 2024) requires local plans to "identify and pursue opportunities for securing measurable net gains in biodiversity" and enhance the natural and local environment by "minimising impacts on and providing net gains for biodiversity".
- 1.9 Local Planning policy CP7 states that:

"Development:

A) Which may harm county designated sites (Local Wildlife Sites in Berkshire), whether directly or indirectly, or

B) Which may harm habitats or, species of principle importance in England for nature conservation, veteran trees or features of the landscape that are of major importance for wild flora and fauna (including wildlife and river corridors), whether directly or indirectly, or

C) That compromises the implementation of the national, regional, county and local biodiversity action plans

will be only permitted if it has been clearly demonstrated that the need for the proposal outweighs the need to safeguard the nature conservation importance, that no alternative site that would result in less or no harm is available which will meet the need, and:

i) Mitigation measures can be put in place to prevent damaging impacts; or

ii) Appropriate compensation measures to offset the scale and kind of losses are provided."

Guidance

- 1.10 The following guidance documents have informed the BNG assessment and overall approach:
- Defra's Biodiversity Gain Guidance, available at: <https://www.gov.uk/government/collections/biodiversity-net-gain>;
 - The Statutory Biodiversity Metric User Guide (DEFRA, 2024);
 - The UK Habitat Classification Version 2.0 (UKHab Ltd, 2023);
 - Biodiversity Net Gain. Good Practice Principles for Development – A Practical Guide (Baker et al., 2019);
 - Biodiversity Net Gain Report and Audit Templates (CIEEM, 2021a);

- Good Practice Requirements for Delivering Biodiversity Net Gain (On- and Off-Site) (CIEEM, 2021b); and
- BS8683:2021 Process for designing and implementing Biodiversity Net Gain – Specification (BSI, 2021).

2. ASSESSMENT METHODOLOGY

Metric Version and Assessors

- 2.1 The Statutory Biodiversity Metric and Condition Assessments published 12th February 2024 were used for this BNG assessment.
- 2.2 The calculations were carried out by Liam Mayle and reviewed by Barney Scott, both experienced ecologists and BNG practitioners.

Baseline Surveys

On-Site

- 2.3 Baseline habitats were determined from aerial imagery and confirmed during a site visit by Liam Mayle on 11th June 2025. Due to the nature of the habitats present, further condition assessments were not applicable.
- 2.4 Habitat mapping was undertaken according to the UK Habitat Classification v.2.0 methodology (UKHab Ltd, 2023) and translated into BNG habitat categories where necessary.
- 2.5 Following the surveys, each area or length of habitat was assigned an individual 'Habitat ID' and mapped in ESRI ArcGIS software (**Maps 1 and 2**).

Off-Site

- 2.6 The applicant owns land that can be used for Off-site gains, the exact location of which are yet to be determined and will need to be agreed with Wokingham Borough Council.

Post-Development Plans

On-Site

- 2.7 The following plans produced by other technical consultants, submitted for approval with the Application, were used as the basis for the post-development calculations (**Appendix 1**). These plans were imported into ArcGIS software and each line or polygon was assigned a BNG habitat type and target condition:
 - 484-ACG-XX-RF-DR-A-1053-Proposed Cycle Store-Central Square Site Plan

Metric Inputs

- 2.8 As set out in the Statutory Metric User Guide (DEFRA, 2024), one of the key principles of the Biodiversity Metric is that "this biodiversity metric is not a complex or comprehensive ecological model and is not a substitute for expert ecological advice".
- 2.9 When completing a Metric, the assessor must therefore make a number of decisions based on available evidence (such as ecological survey data), professional judgement, and ecological expertise. The User Guide (DEFRA, 2024) also states that "Evidence for metric decisions should be provided and signposted within the 'User Comments' column of the biodiversity metric tool".

- 2.10 To ensure that the Metric Calculation Tool remains as user-friendly as possible, the following paragraphs expand upon the User Comments to provide more detail on the decisions behind the data entered into the Metric, where this is considered necessary and proportionate.

On-Site Habitat Type and Condition

Target Conditions

- 2.11 Target habitat conditions have been predicted with reference to the relevant Condition Assessment sheet (DEFRA, 2024b), with full details and justifications set out in the separate spreadsheet submitted with the Application.
- 2.12 The Target Conditions are considered to be realistic and achievable, and will be delivered and maintained through the implementation of the Habitat Management and Monitoring Plan to be submitted alongside the Biodiversity Gain Plan to discharge the general biodiversity gain planning condition, should consent be granted.

Strategic Significance

- 2.13 The Wokingham Borough Council Core Strategy 2026 (adopted January 2010) and The Managing Development Delivery (MDD) local plan (adopted February 2014) were used to identify strategic significance. These documents refer to the need to retain and enhance woodland and hedgerow habitats.

Spatial Risk

- 2.14 All Off-Site habitats are within the Whiteknights Campus and fall within the same LPA boundary as the site.

Assumptions and Limitations

General Limitations of Metrics

- 2.15 As acknowledged in the User Guide (DEFRA, 2024), the Statutory Biodiversity Metric includes several inherent limitations. Extracts are provided below:

The use of this biodiversity metric does not override existing biodiversity protections, statutory obligations, policy requirements, ecological mitigation hierarchy or any other requirements. This includes consenting or licensing processes, for example woodlands.” (Principle 2).

“This biodiversity metric is not a complex or comprehensive ecological model and is not a substitute for expert ecological advice.” (Principle 4)

This biodiversity metric is designed to inform decisions in conjunction with locally relevant evidence, expert input, or guidance.” (Principle 6)

- 2.16 In relation to Principle 2, protected and valued species are considered in detail as part of the EIA/EcIA. This also includes avoiding and mitigating impacts and promoting enhancements such as the provision of wildlife boxes, the latter of which should also be taken into account when assessing the overall BNG that can be delivered by the Proposals.

3. SUMMARY OF RESULTS

Introduction

- 3.1 The following should be read with reference to **Maps 1 and 2** and the completed Metric Calculation Tool (particularly the Assessor Comments column) and Condition Assessment spreadsheets submitted separately with the Application.

Description of Baseline

- 3.2 The total number of on-site baseline units is calculated as follows:
- Area Habitats: 0.01 units
 - Hedgerows: 0 unit
 - Watercourses: 0 units
- 3.3 The Site is consists of sealed surface and introduced shrub. A mature tree stands immediately north-west of the site boundary, and it's Root Protection Zone (RPZ) of this tree may encroach into the Site.
- 3.4 The total number of off-site baseline units is calculated as follows:
- Area Habitats: 0.02 units
 - Hedgerows: 0 units
 - Watercourses: 0 units

The BNG Hierarchy

- 3.5 The Proposals were designed with ecological input from an early stage and due consideration has been given to the BNG Hierarchy throughout the masterplanning process.
- 3.6 The BNG Hierarchy, as set out in Article 37A of the Town and Country Planning (Development Management Procedure) (England) Order 2015 (as amended) requires developers to take the following steps in relation to BNG:
- Avoidance of adverse effects to on-site habitats of 'Medium' distinctiveness and above;
 - Insofar as they cannot be avoided, mitigating those effects;
 - Insofar as they cannot be mitigated; compensating for those effects by prioritising in order, where possible:
 - 1) Enhancement of existing on-site habitats;
 - 2) Creation of new on-site habitats;
 - 3) Allocation of registered off-site gains; and finally
 - 4) Purchase of national off-site biodiversity credits.
- 3.7 **Table 3.1** sets out a summary of how the BNG Hierarchy has been applied by the Proposals.

Table 3.1: Application of the BNG Hierarchy

Action	Evidence of application
Impact Avoidance:	N/A
Mitigation:	N/A
Compensation:	
Habitat enhancements (on-site)	N/A
Habitat creation (on-site)	N/A
Off-site gains allocated to Application	Enhancement of grassland area on land owned determined by Applicant (location yet to be determined) to achieve Moderate condition.
Purchase of Biodiversity Credits	N/A

Headline Results

3.8 As set out in the Metric Calculation Tool submitted with the Application, the Proposals are predicted to deliver the following net gains, with all Trading Rules met:

- +0.02 area habitat units, or 14.87%

3.9 Gains will be delivered offsite and will achieve the target of 10% net gain and satisfy the metric's trading rules.

Off-Site Proposals to Deliver Net Gain

3.10 To satisfy the metric's trading rules, the loss of On- Site introduced shrub must be compensated for with the same broad habitat or a better habitat type, grasslands. To achieve this, a minimum of 0.02 Area Habitat Units will need to be delivered through the enhancement of grassland habitat. Therefore, 0,0027ha neutral grassland within Whiteknights Campus, will be enhanced from Poor to Moderate condition.

4. PROPOSALS FOR DELIVERY AND MONITORING

Delivery

On-Site

- 4.1 No gains will be delivered onsite.

Off-Site

- 4.2 Off-Site gains will be delivered on land owned by the Applicant. A Habitat Management and Monitoring Plan (HMMP) will set out the proposed details of how the target habitat types and conditions required to achieve the BNG results reported in Section 3 will be achieved. This will be through a combination of habitat creation and enhancement measures, followed by ongoing management for a minimum period of 30 years for the 'significant' off-site enhancements described in Section 3.
- 4.3 Should planning consent be granted, the HMMP will be submitted to Wokingham Borough Council alongside a Biodiversity Gain Plan to discharge the biodiversity gain planning condition. The mechanism for securing the delivery of significant on-site enhancements is to be agreed with Wokingham Borough Council, but could take the form of a planning condition, planning obligation or conservation covenant.

Monitoring

- 4.4 The successful establishment of newly created habitats, and progress of all habitats towards their post-development Target Conditions, will need to be regularly monitored to ensure that the predicted BNG will be realised on the ground.

Conclusion

- 4.5 This Technical Report has set out the methodology and results of the Statutory Biodiversity Metric calculations completed for the Proposals, which predict a net gain in **+0.02 Area habitat unit (+14.87%)**.
- 4.6 Net gains will be delivered through off-site habitat enhancement on land owned by the applicant.
- 4.7 Should planning consent be granted, full details of the arrangements for the delivery of minimum 10% BNG will be set out in a Biodiversity Gain Plan and final Habitat Management and Monitoring Plan and submitted to Wokingham Borough Council for approval.
- 4.8 It is therefore concluded that the Proposals as envisaged would comply with the statutory minimum requirements for 10% biodiversity net gain as a condition of planning permission in England under the Environment Act 2021 and Town and Country Planning (Development Management Procedure) (England) Order 2015 (as amended), as well as with the NPPF and local planning policy.

5. REFERENCES

The British Standards Institution (BSI) (2021). *BS 8683:2021 Process for designing and implementing Biodiversity Net Gain – Specification*. British Standards Limited, 2021.

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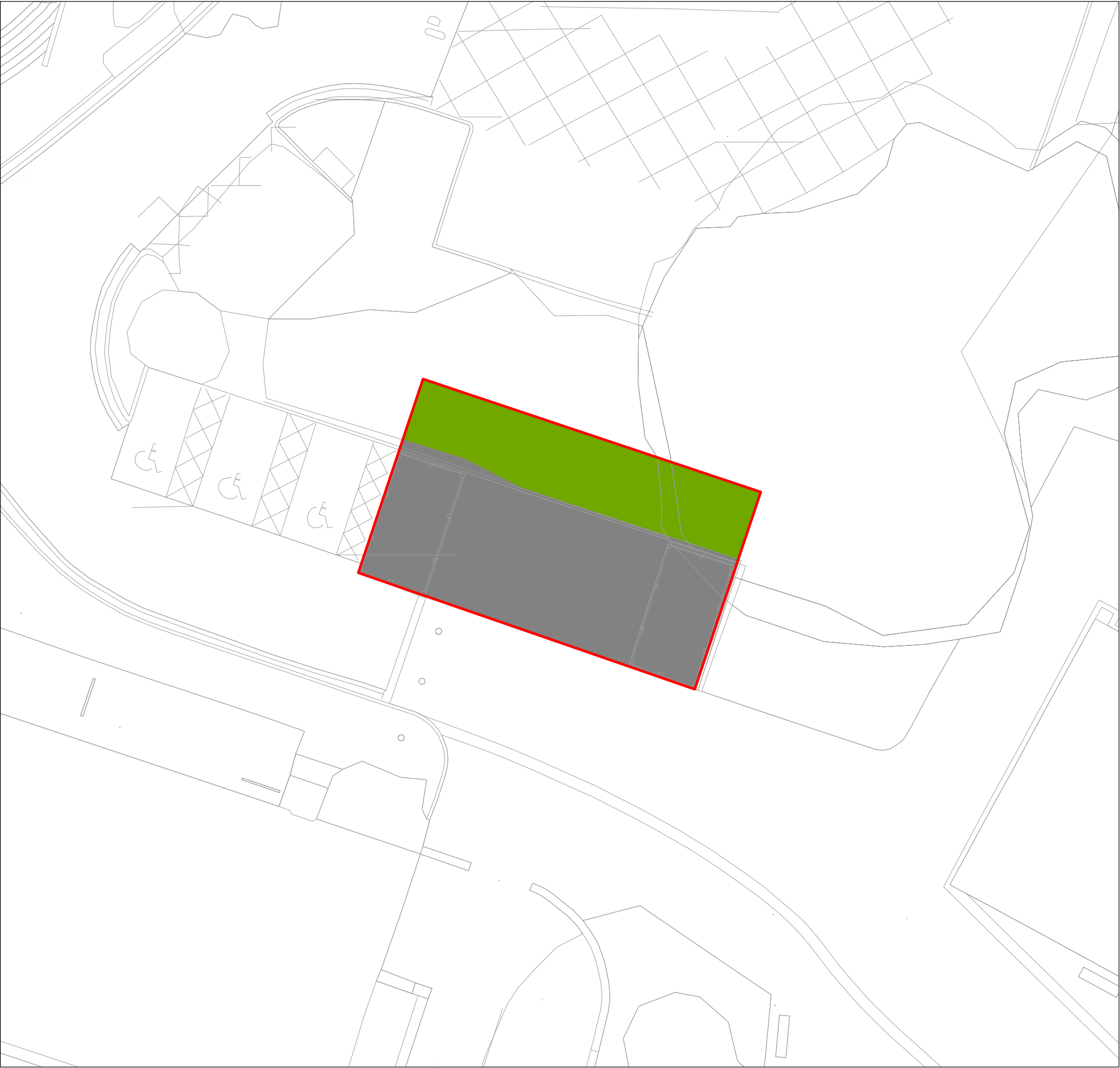
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UKHab Ltd (2023). *UK Habitat Classification Version 2.0*. Available at <http://ukhab.org>

Maps

MAPS

- | | |
|--------------|------------------------------|
| Map 1 | On-site BNG Baseline |
| Map 2 | On-site BNG Post-Development |



MAP X On-Site Baseline Habitats

- KEY
-  Site boundary
 -  Developed land; sealed surface
 -  Introduced shrub

SCALE: 1:150 at A3

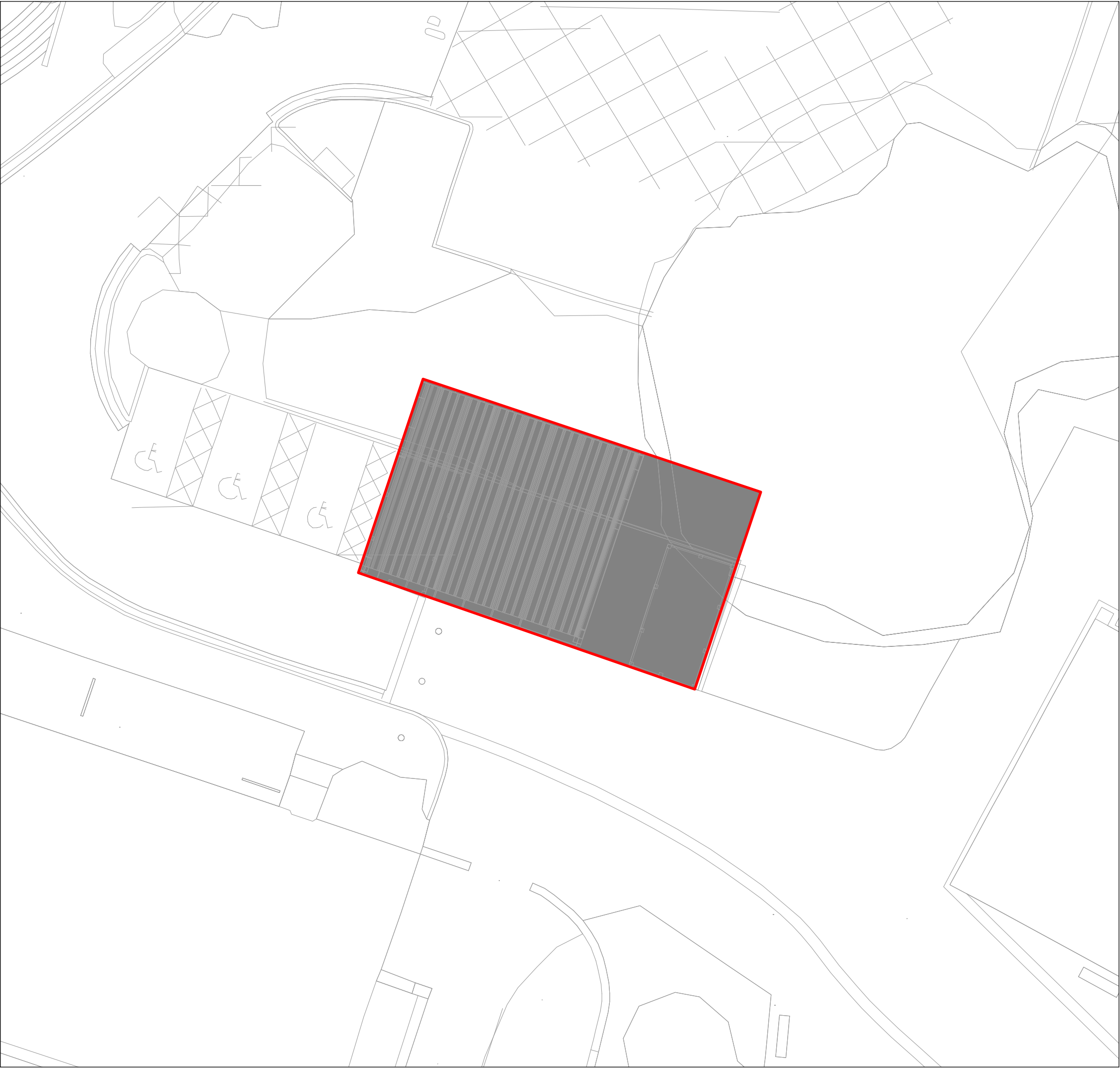
0 1 2 3 4 5 Metres



CLIENT: University of Reading

PROJECT: UoR - Cycle Storage

DATE: 11 June 2025



MAP X On-Site Post Development
Habitats

KEY

 Site boundary

Created

 Developed land; sealed surface

SCALE: 1:150 at A3
 0 1 2 3 4 5 Metres



CLIENT: University of Reading

PROJECT: UoR - Cycle Storage

DATE: 11 June 2025

Appendix 1

484-ACG-XX-RF-DR-A-1053-Proposed Cycle Store-Central Square
Site Plan



NOTES:

All dimensions to be checked on site.
Drawing to be read with all relevant Architectural, Interiors, Structural, M&E, Drainage/Public Health, Landscape, Civils and Interiors drawings and specifications. Any discrepancies between consultant's drawings to be reported to the Architect before any work commences.
The Contractor's attention is drawn to the Health & Safety matters identified in the Health & Safety plan as being potentially hazardous.
These items should not be considered as a full and final list.
The Work Package Contractor's normal Health & Safety obligations still apply when undertaking constructional operations both on and off site.
Ayre Chamberlain Gaunt take no responsibility for the location of legal boundaries indicated on this drawing and advise a separate drawing be completed by a specialist surveyor in order to establish exact boundaries.
DWG files provided for information only. Refer to PDF record.
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Site Boundary Line

Materials

- Proposed Central Square Cycle Store
- Relocated Bin Store
- Existing Car Park

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GAUNT

PROJECT
University of Reading
Whiteknights Campus

DRAWING TITLE
Proposed Cycle Store-Central
Square Site Plan

REV	DATE	DESCRIPTION
A	30/04/2025	ISSUED FOR PLANNING
B	16/05/2025	AMENDMENTS TO BIKE STORE DIMENSIONS AND LOCATION

REV.	VER.	APPROVED BY
PB	.01	DG

DRAWING NO.
project code - originator - volume - level - type - role - number
484-ACG-XX-RF-DR-A-1053

SUITABILITY
code description
D5 SUITABLE FOR PLANNING