



Brighter strategies
for greener projects



Client: Bridges Healthcare (Richmond) Limited

Project: Richmond Inn Hotel

Report: Biodiversity Impact Assessment

QUALITY ASSURANCE

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Figure A.1 Site Plan

1.0 EXECUTIVE SUMMARY

Greengage Environmental Ltd was commissioned to undertake a Biodiversity Impact Assessment by Bridges Healthcare (Richmond) Limited at a site at 50-56 Sheen Road in London Borough of Richmond Upon Thames (hereafter LB Richmond).

This document is a report of this survey and has been produced to support a planning submission for the site which seeks the partial demolition and extension of Richmond Inn for Class C2 visitor accommodation providing care and physiotherapy-led rehabilitation, highways works, car and cycle parking, refuse storage, landscaping and other associated works.

The assessment aimed to quantify the predicted change in ecological value of the site in light of the proposed development to assess compliance against local and national planning policy.

The survey area extends to approximately 0.1 ha and is centred on National Grid Reference TQ 183 750. The Site predominantly comprised hardstanding, buildings, introduced shrub and scattered trees.

The Site is in the centre of Richmond Upon Thames, surrounded immediately by residential housing and private gardens. Richmond Park lies approximately 1km to the south and the River Thames 800m west of the site.

Proposed habitat creation includes 0.0149ha urban tree, 0.0218ha extensive green roof, 0.0057ha façade-bound green wall, 0.0048ha other modified grassland, and 0.0466ha developed land; sealed surface.

The proposals stand to result in a net gain of 0.11 biodiversity units compared with pre-development value. This equivalent to a total net increase of 216.76% in **ecological value** for habitats.

Habitat enhancement recommendations have been given that have increased the ecological value of the scheme, and delivers above the Government's target of 10% biodiversity net gain.

Detail relating to the proposed ecological compensation and enhancement actions in relation to habitat creation and management could be provided within an Ecological Management Plan for the site which could be secured through planning condition. Should these recommendations be adhered to, the proposals stand to be compliant with legislation and current planning policy.

2.0 INTRODUCTION

Greengage was commissioned to undertake a Biodiversity Impact Assessment Bridges Healthcare (Richmond) Limited at 50-56 Sheen Road in London Borough of Richmond Upon Thames (hereafter LB Richmond).

This document is a report of this survey and has been produced to support a planning submission for the site which seeks the partial demolition and extension of Richmond Inn for Class C2 visitor accommodation providing care and physiotherapy-led rehabilitation, highways works, car and cycle parking, refuse storage, landscaping and other associated works

This survey aimed to establish change in ecological value of the site in light of the proposed development, taking into account direct and indirect impacts.

2.1 SITE DESCRIPTION

The survey area extends to approximately 0.1 ha and is centred on National Grid Reference TQ 183 750. The Site predominantly comprised hardstanding, buildings, introduced shrub and scattered trees.

Figure A.1 Site Plan



The Site is in the centre of Richmond Upon Thames, surrounded immediately by residential housing and private gardens. Richmond Park lies approximately 1km to the south and the River Thames 800m west of the site.

3.0 METHODOLOGY

3.1 DEFRA METRIC

To calculate the ecological value of the pre- and post-development site, the Natural England Metric 3.0 methodology was utilised, following best practice guidance from Natural England^{1,2}, and joint guidance from CIEEM, IEMA and CIRIA³.

This metric uses Biodiversity Units as a proxy for the ecological value of area of linear based habitats. The areas of each habitat parcel are measured, with each parcel assigned a 'Distinctiveness' and 'Condition' score. Distinctiveness is a default score for the habitat classification, representing its inherent ecological value, whereas condition refers to the state each parcel is in relative to predetermined set of criteria outlined in the supplementary Biodiversity Metric 3.0 guidance.

For post-development habitat areas, additional multipliers are applied taking into account the time taken to reach maturity and difficulty of creation of the habitats, and whether the habitat creation is in a strategically beneficial location.

An assessment of the predicted change in ecological value is undertaken comparing the Biodiversity Units and assessing percentage change. Changes in broader habitat types (for example, 'Urban', 'Woodland' and 'Grassland' habitats) are also tracked, and trading habitats is discouraged unless specifically targeted within a local strategy. Trading down of habitats is not permitted.

3.2 BASELINE CALCULATION

To calculate pre-development Biodiversity Units, data collected during a Preliminary Ecological Appraisal (PEA) undertaken by Greengage on 16th August 2021 was assessed (doc ref: 551829Sb06Sept21FV01_PEA). Areas of each habitat type were taken from the Phase 1 Habitat Map (Appendix A) and data relating to the condition of habitat parcels was collected in the field.

Additionally, to calculate the Biodiversity Units associated with trees on site, data tables from the BS5837 Tree Survey Report undertaken by Greengage on 2nd February 2022 were assessed (ref: 551829mc10Apr22FV01_AIA). Diameter Breast Height (DBH) of each tree were used to assign each tree a rating of 'small', 'medium' or 'large', in line with the Natural England BNG User Guide. The rating corresponds to an area value to be used. Default distinctiveness and condition scores are given.

3.3 PROPOSED DEVELOPMENT CALCULATIONS

The proposed development seeks the which seeks the partial demolition and extension of Richmond Inn for Class C2 visitor accommodation providing care and physiotherapy-led rehabilitation, highways works, car and cycle parking, refuse storage, landscaping and other associated works.

Drawings of the proposed development used for this assessment were:

- 888-Richmond Rehab Centre 888-101 (Appendix A)
- SY685-100-0100 General Arrangements (Appendix A)

Areas of each habitat type were measured from this plan and targeted condition scores used, taking into account the likely future use of each area.

3.4 COMPETENCIES

Jordan McNulty, who prepared this report, an undergraduate degree in Marine Biology (BSc Hons) and a Master's degree in Ecology, Evolution & Behaviour. Jordan has 1 seasons' experience assisting with ecological survey and assessment.

Mitch Cooke, who reviewed this report, has a degree in Ecology (Hons), an MSc in Environmental Assessment and Management, and is a Full member of CIEEM with over 35 years' experience in ecological survey and assessment. Mitch has set up and developed ecological and environmental teams for nearly 20 years and has undertaken and managed numerous ecological surveys and assessments. He is the Director at Greengage and manages the team..

This report was written by Jordan McNulty and reviewed and verified by Mitch Cooke who confirms in writing (see the QA sheet at the front of this report) that the report is in line with the following:

- Represents sound industry practice;
- Reports and recommends correctly, truthfully and objectively;
- Is appropriate given the local site conditions and scope of works proposed; and
- Avoids invalid, biased and exaggerated statements.

3.5 CONSTRAINTS

The assessment methodology does not incorporate ecological features beyond area and linear based habitats. The potential for the site to support protected species, for example, is not captured by this assessment. As such this report should be read in conjunction with all other ecological reports for the site. The mitigation hierarchy in relation to protected and notable habitats and species must be followed. This report should accordingly be read in conjunction with the PEA and any other appropriate protected species surveys.

The BNG assessment at this stage is predictive in nature. To ensure delivery of BNG, requirements outlined within this report must be adhered to, and a rigorous programme of monitoring and maintenance must be implemented.

3.6 EVALUATION AND DISCUSSION

Under these proposals, and in the absence of additional enhancement measures and habitat creation, the development stands to result in a net gain of 0.11 biodiversity units associated with area-based habitats from pre-development levels. This corresponds to a total net increase of 216.76% in ecological value for habitats. The current proposals also meet all of the habitat trading requirements provided within the Biodiversity Metric 3.0.

The proposals are therefore in compliance with local and national planning policy (see Appendix B) and exceeds the BNG Mandate which seeks a 10% uplift in biodiversity units.

The EMP should provide description of how habitats are to be created and managed for a period of at least 30 years

4.0 SUMMARY & CONCLUSION

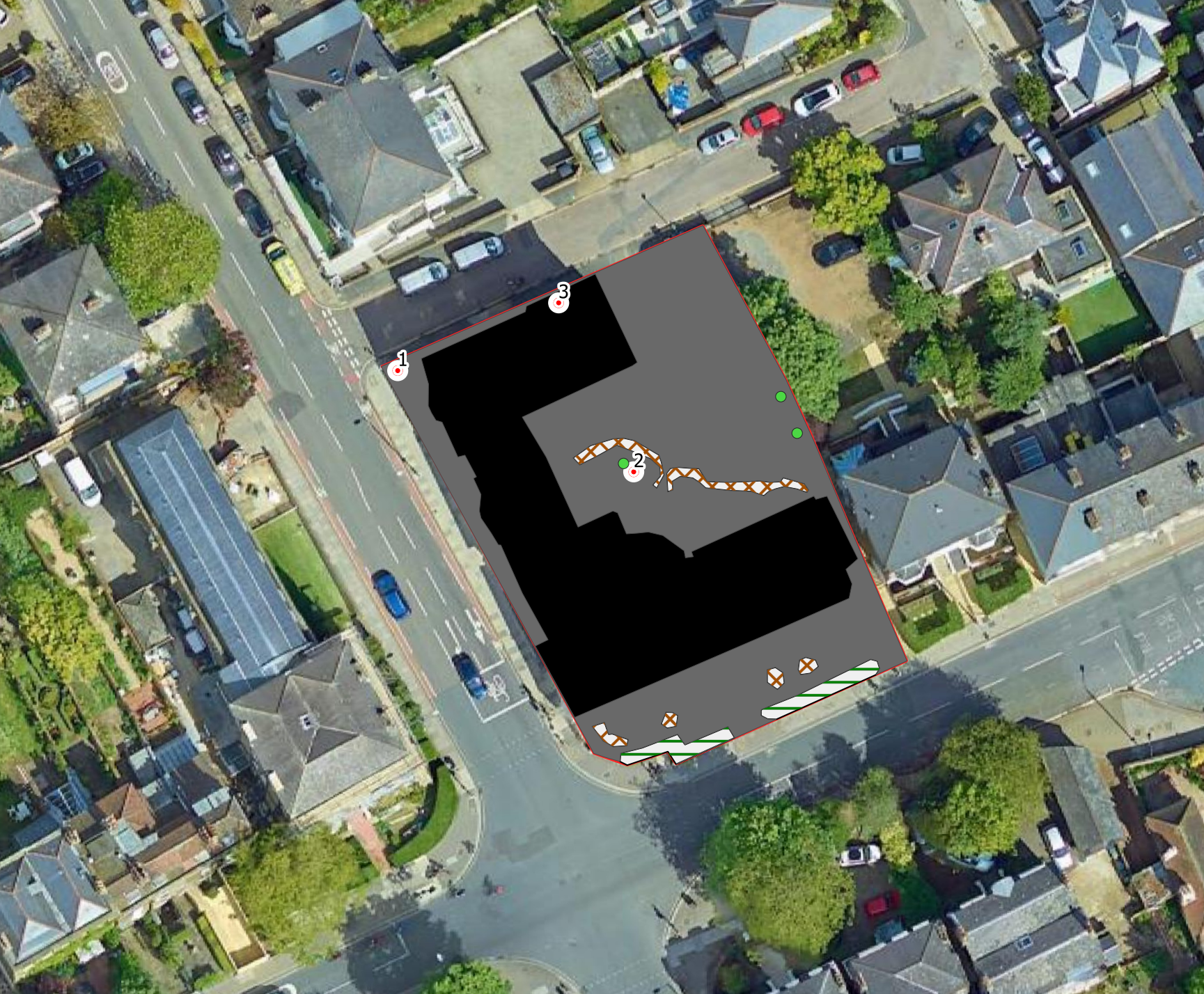
Bridges Healthcare (Richmond) Limited to undertake a Biodiversity Impact Assessment at 50-56 Sheen Road in London Borough of Richmond Upon Thames (hereafter LB Richmond) in order to assess the change in ecological value of the site in light of the proposed development.

This report demonstrates that the development proposals will result in a net gain of 0.11 biodiversity units should existing plans be adhered to, equivalent to a 216.76% increase in ecological value for habitats and is in compliance with the BNG Mandate which targets 10% net gain in biodiversity.

Details on any habitat creation and its ongoing management should be agreed with the Local Planning Authority and described in an EMP (secured by planning condition) for the site.

APPENDIX A SITE PLAN, HABITAT MAP AND TREE TABLE

Richmond Inn Hotel



- Site boundary
- Scattered Trees
- Target Notes

Habitats

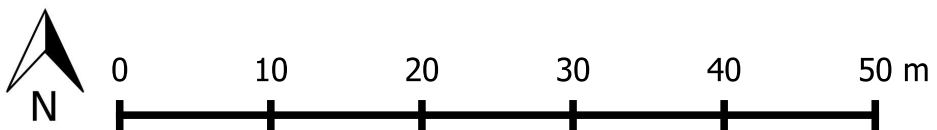
- J1.4 - Introduced shrub
- J2.1.2 - Intact species-poor hedge
- J3.6 - Buildings
- J3.6.1 - Hardstanding



Greengage Environmental Ltd
9 Holyrood Street, London SE1
2EL

Fig 1.0 Site Plan and Habitat Map

Project Number 551829
September 2021
1 to 500 at A3



APPENDIX B LANDSCAPE PLAN/STRATEGY

8.2 PLANTING STRATEGY ON SHEEN ROAD TO BE UPDATED

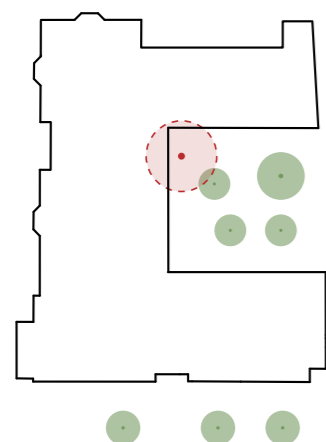
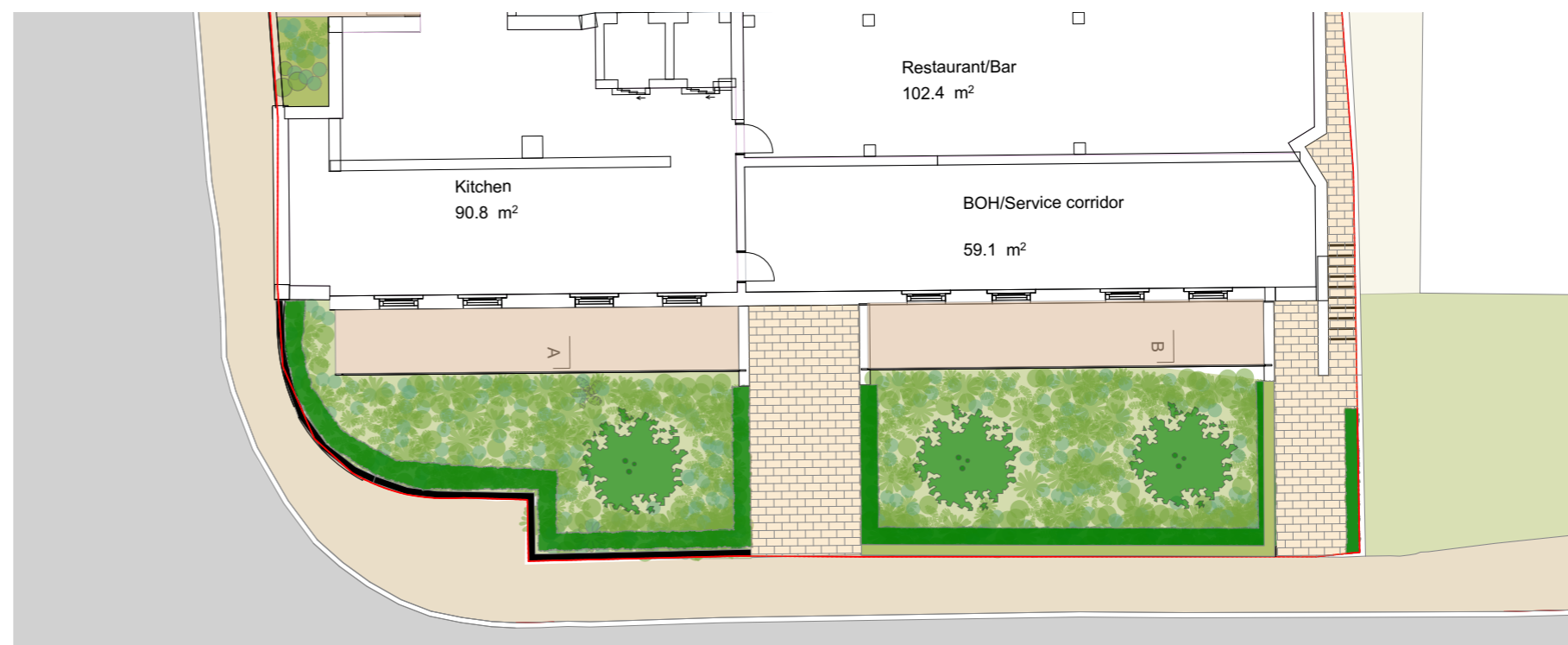
FROM LANDSCAPE DESIGNER CAMLINS:

Sheen Road streetscape planting

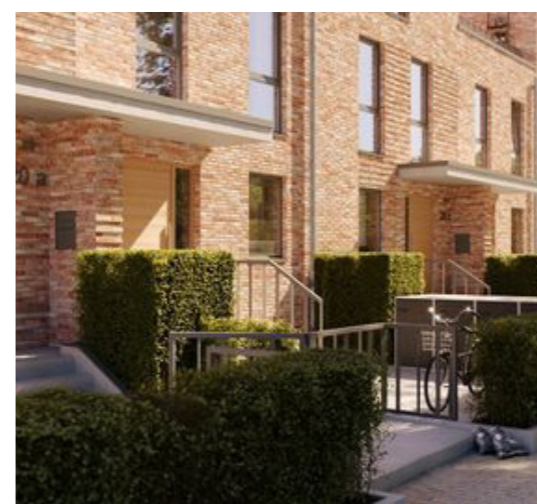
- Existing brickwork boundary and privet hedge to be retained and enhanced/ repaired.
- Three *Prunus serrulata Amanagowa* specimen trees proposed.
- Ornamental groundcover and specimen shrub planting, predominantly evergreen replacing hard paved areas
- 1.2m high instant privet hedges - structure and autumn colour, retain leaves late into winter, to boundary on east side.

Planting continues along Church Road to building pediment and thresholds, alongside routes around building, providing interest and pedestrian level scale and variety.

NOTE: All the proposed species will be discussed and agreed with the Arboricultural Officer accordingly.



- Tree to be removed
- Proposed trees



8.4 COURTYARD

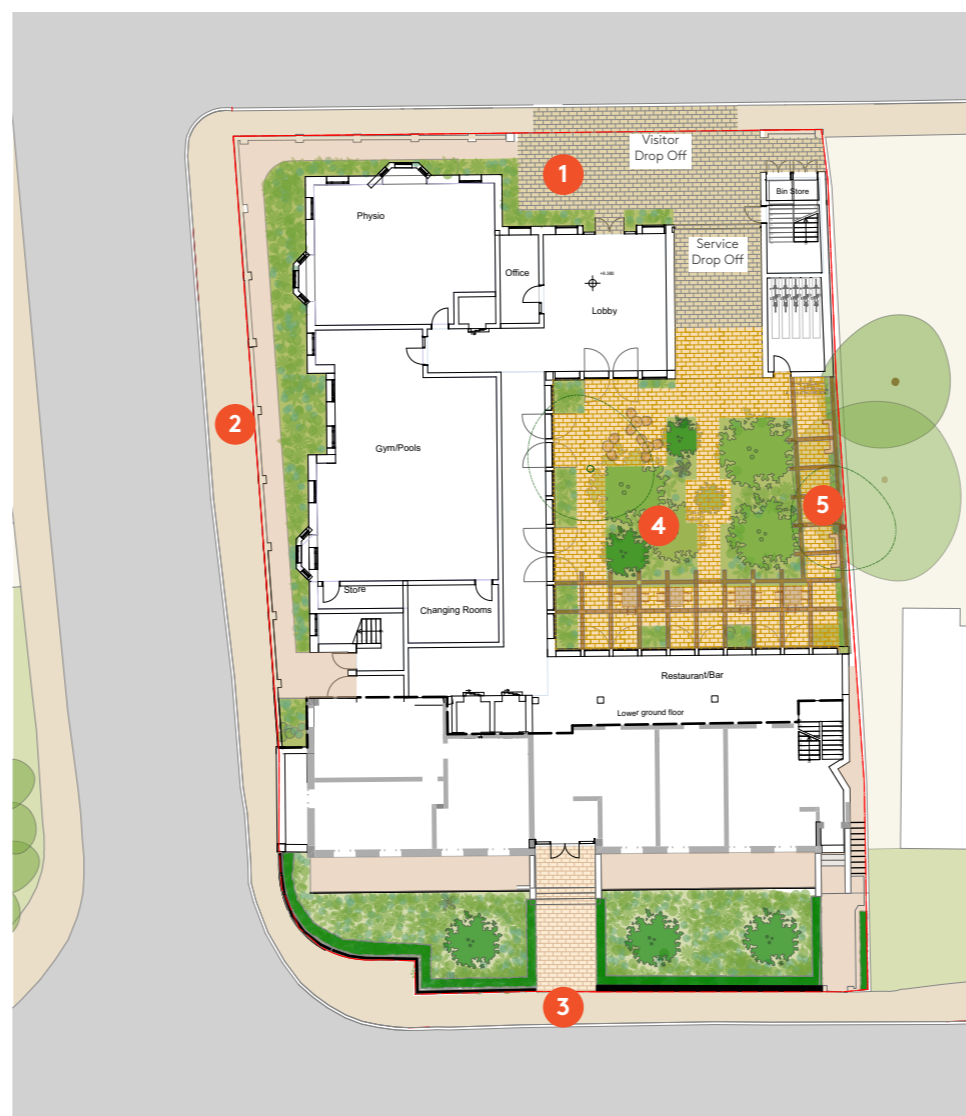
FROM LANDSCAPE DESIGNER CAMLINS:

The principal focus for the landscape design is to create a garden of sanctuary at the heart of the development.

On arrival on Sydney Road, visitors would enter the lobby area, through which the garden would be glimpsed beyond the double doors. The well planted, lush garden will provide an enticing and relaxing place in which to linger, or enjoy the restaurant and socialise.

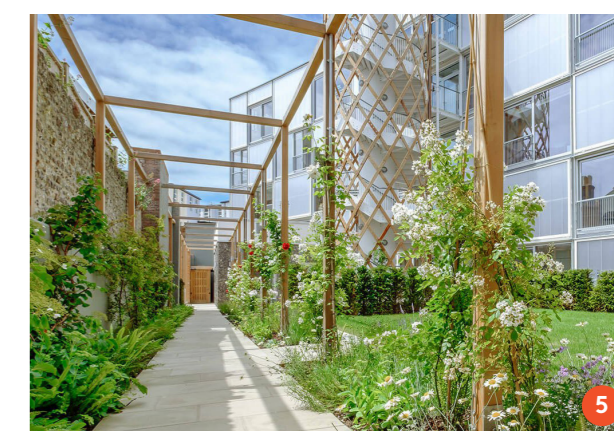
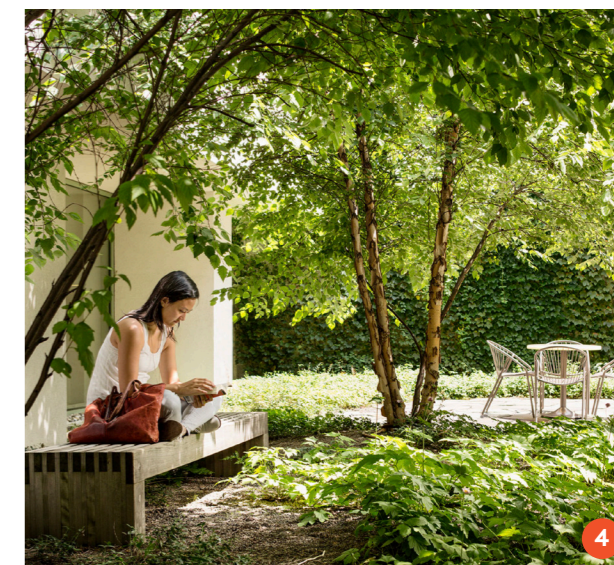
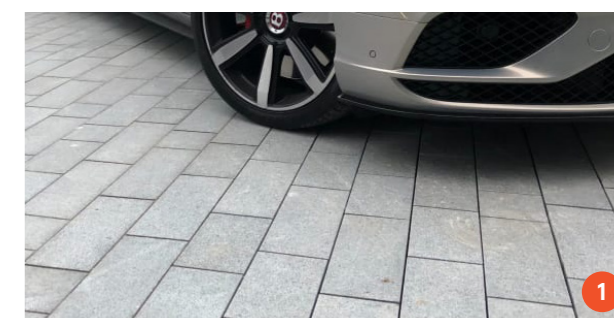
The surround is enclosed by a cloister walk, on two sides this is within the building, adjacent to the pool, and on the south and east side it is formed externally by the pergola structure. This will provide shelter and privacy from overlooking, and accommodate scented climbing plants.

Cycle stands are incorporated under the pergola structure adjacent the bin store. Seating is provided under the pergola with an attractive outlook across the mulstistem trees and planting.



- 1 Lobby/Reception/Arrival/drop-off
- 2 Church Road frontage
- 3 Enhanced Sheen Road Streetscape
- 4 Cloister Garden Courtyard
- 5 Pergola structure and seating area

TO BE UPDATED



8.4

COURTYARD

PLANTING STRATEGY

Specimen courtyard trees

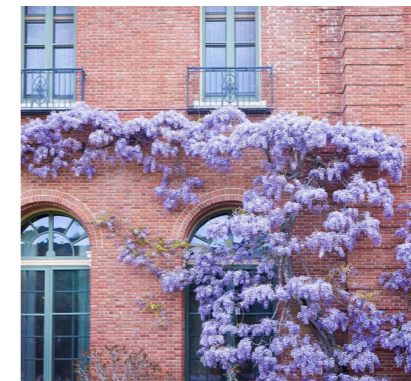
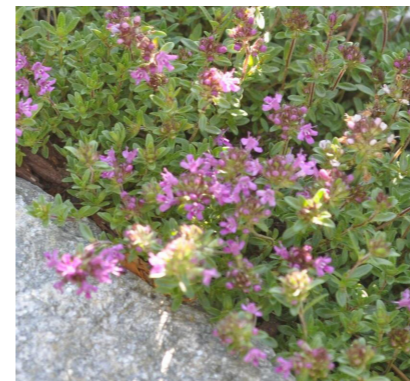
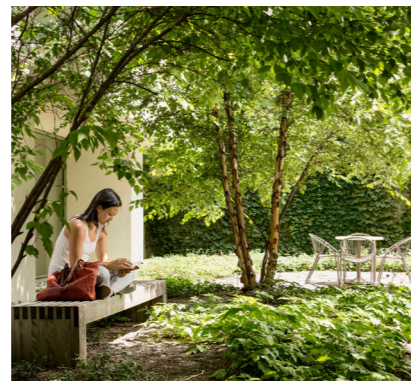
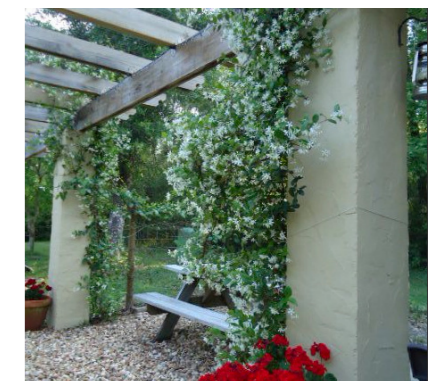
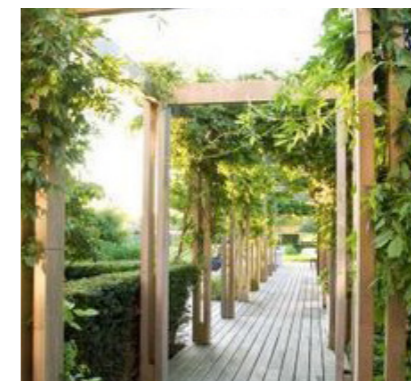
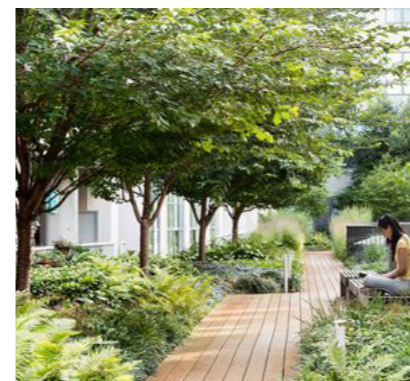
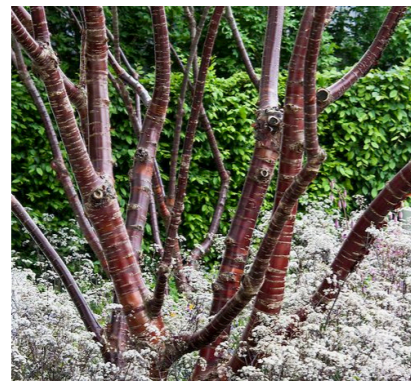
- Multi-stem spring flowering trees with interesting bark colour and form, such as Tibetan Cherry, Amelanchier sp.
- Species suggestions to be taken from Arboricultural Officer.

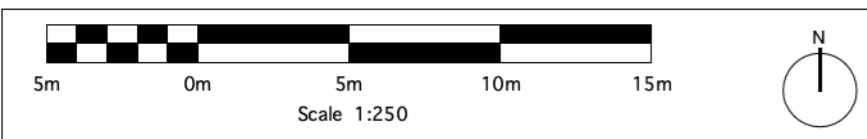
Lush ornamental perennial and shrub planting to sanctuary garden

- Shade tolerant, spring flowering predominantly evergreen with year round interest
- Flowering specimen shrubs emerging to provide incidents and highlights
- High density planting (12/m2) of perennials and shrubs.

Vertical greening

- Climbing plants to trained to pergola structure and building elevation.
- Scented varieties
- Careful species selection appropriate for maintenance level and solar aspect.
- Irrigation to be provided, potential for rainwater harvesting to be incorporated.





Sheen Road Elevation

Small street tree - Prunus serrulata 'Amanagowa'
At planting: 3m high, minimum girth size 20-25cm, 1m spread



Small street tree - Prunus serrulata 'Amanagowa'
At maturity: 6m high, 2m spread.



Prunus serrulata 'Amanagowa', or Japanese Flowering Cherry, is a small deciduous tree that bears clusters of pink or white flowers in Spring at the same time the leaves emerge. Grown for the display of blossom, the tree also gives Autumn interest when the leaves turn to shade of yellow, orange and red. Prunus Serrulata 'Amanogawa' is a small flowering Japanese cherry with very narrow, pillar-shaped growth and large semi double pink flowers which smell of almonds in late mid-spring. This tree is a popular tree for very small gardens as it is so narrow, rarely exceeding 2m (6ft) wide with an overall height of 6m (20ft). The flowers stand straight on the branches and the young leaves are yellowish bronze.



Mature form, spring



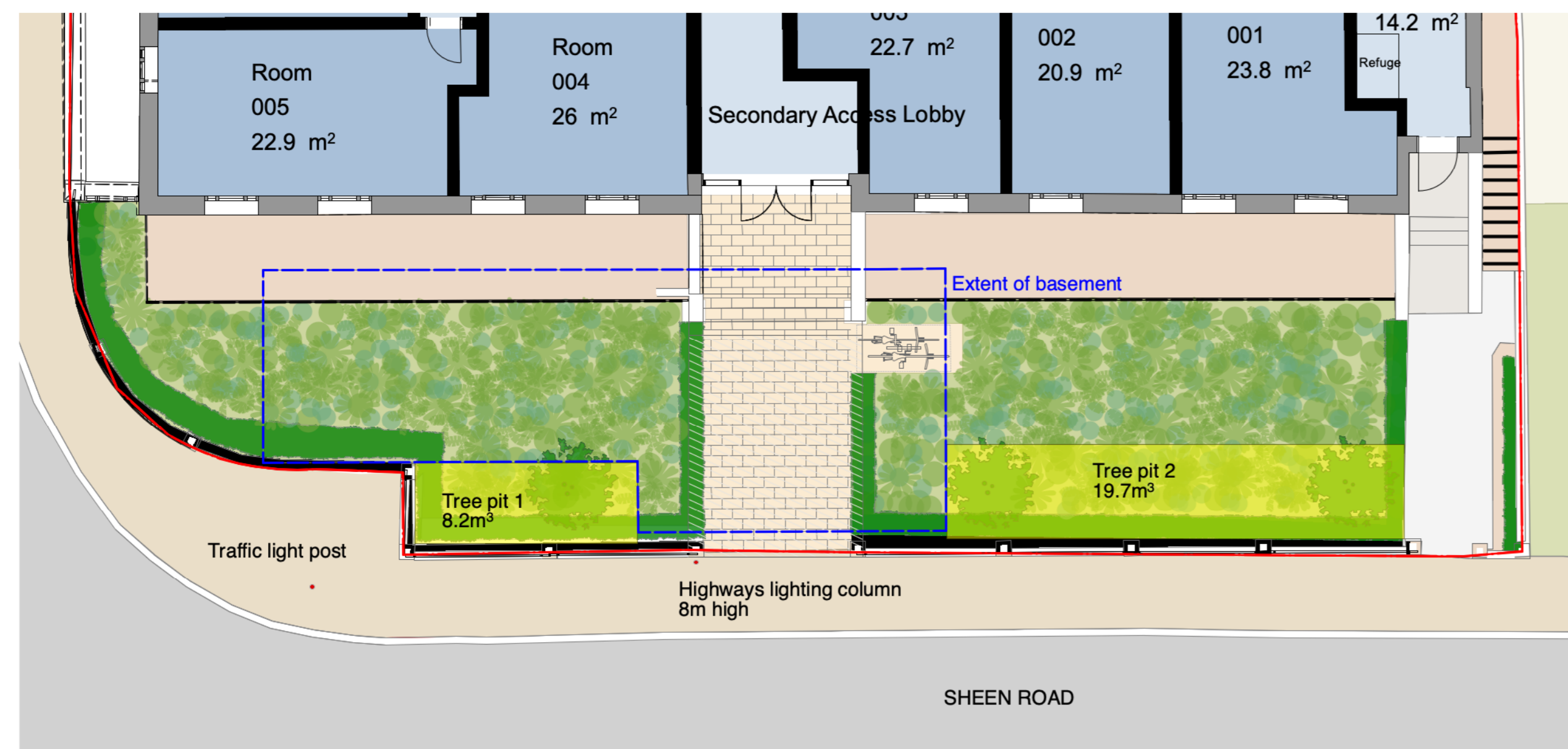
Form and size at planting.



Spring flower colour



Autumn leaf colour



EXISTING STREET VIEW ALONG SHEEN ROAD

Camlins

New Zealand House, Abbey Foregate,
 Shrewsbury, Shropshire, SY2 6FD
 01743 290 778
 www.camlins.com

Richmond Inn, London
 Bridges Fund Management Ltd

Sheen Road Elevation - Small Tree Option

Status Planning	Drawn by MD	Checked by PSS
Drawing Number SY685-000-0103	Revision 1:100	Date 13.10.2022

APPENDIX C CONDITION ASSESSMENT CRITERIA

C.1 CONDITION ASSESSMENT SHEET FOR URBAN HABITATS

1. Vegetation structure is varied, providing opportunities for insects, birds and bats to live and breed. A single ecotone (i.e. scrub, grassland, herbs) should not account for more than 80% of the total habitat area.

2. There is a diverse range of flowering plant species, providing nectar sources for insects. These species may be either native, or non-native but beneficial to wildlife.

NB - to achieve GOOD condition, criterion 2 must be satisfied by native species only (rather than non-natives beneficial to wildlife).

3. Invasive non-native species (Schedule 9 of WCA) cover less than 5% of total vegetated area.

NB - to achieve GOOD condition, criterion 3 must be satisfied by a complete absence of non-native species (rather than <5% cover).

Condition	Assessment Criteria	Score
Good	<ul style="list-style-type: none"> • Passes 3 of 3 core criteria; and • Meets the requirements for good condition within criteria 2 and 3. 	3
Moderate	<ul style="list-style-type: none"> • Passes 2 of 3 criteria; or • Passes 3 of 3 core criteria but does not meet the requirements for good condition criteria 2 and 3. 	2
Poor	<ul style="list-style-type: none"> • Passes 0 or 1 of 3 criteria. 	1

C.2 CONDITION ASSESSMENT CRITERIA FOR URBAN TREES

1. More than 70% of trees are native species.

2. Tree canopy is predominantly continuous with gaps in canopy cover making up <10% of total area and no individual gap being >5 m wide.

3. More than 50% of trees are mature or veteran.

4. 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.

5. Management regime has encouraged micro habitat sites for birds, mammals and insects e.g. presence of deadwood, cavities or loose bark etc.

6. Trees are immediately adjacent to other vegetation, and tree canopies are oversailing vegetation beneath.

Condition	Assessment Criteria	Score
Good	Passes 5 or 6 of 6 criteria	3
Moderate	Passes 3 or 4 of 6 criteria	2
Poor	Passes 0, 1 or 2 of 6 criteria	1

C.3 CONDITION ASSESSMENT CRITERIA FOR GRASSLAND HABITAT (LOW DISTINCTIVENESS)

7. There must be 6-8 species per m². Note - if a grassland has 9 or more species per m² it should be classified as a moderate distinctiveness grassland habitat type.
8. Sward height is varied (at least 20% of the sward is less than 7 cm and at least 20 per cent is more than 7 cm) creating microclimates which provide opportunities for insects, birds and small mammals to live and breed.
9. Some scattered scrub (including bramble) may be present, but scrub accounts for less than 20% of total grassland area. Note - patches of shrubs with continuous (more than 90%) cover should be classified as the relevant scrub habitat type.
10. Physical damage evident in less than 5% of total grassland area, such as excessive poaching, damage from machinery use or storage, damaging levels of access, or any other damaging management activities.
11. Cover of bare ground between 1% and 5%, including localised areas, for example, rabbit warrens.
12. Cover of bracken less than 20%.
13. There is an absence of invasive non-native species (as listed on Schedule 9 of WCA, 1981) and undesirable species make up less than 5% of ground cover.

Condition	Assessment Criteria	Score
Good	Passes 6 or 7 of 7 criteria including non-negotiable criterion 7	3
Moderate	Passes 4 or 5 of 7 criteria; OR Passes 6 of 7 criteria excluding non-negotiable criterion 7	2
Poor	Passes 0, 1, 2 or 3 of 7 criteria	1

C.4 CONDITION ASSESSMENT CRITERIA FOR GRASSLAND HABITAT (MEDIUM DISTINCTIVENESS)

14. The appearance and composition of the vegetation closely matches characteristics of the specific grassland habitat type (see UKHab definition). Wildflowers, sedges and indicator species for the specific grassland habitat type are very clearly and easily visible throughout the sward.
15. Sward height is varied (at least 20% of the sward is less than 7cm and at least 20 per cent is more than 7 cm) creating microclimates which provide opportunities for insects, birds and small mammals to live and breed.

16. Cover of bare ground between 1% and 5%, including localised areas, for example, rabbit warrens.
17. Cover of bracken less than 20% and cover of scrub (including bramble) less than 5%.
18. There is an absence of invasive non-native species (as listed on Schedule 9 of WCA, 1981).
 Combined cover of undesirable species and physical damage (such as excessive poaching, damage from machinery use or storage, damaging levels of access, or any other damaging management activities) accounts for less than 5% of total area.

Condition	Assessment Criteria	Score
Good	Passes 5 of 5 criteria	3
Moderate	Passes 3 or 4 of 5 criteria	2
Poor	Passes 0, 1 or 2 of 5 criteria	1

C.5 CONDITION ASSESSMENT CRITERIA FOR WOODLAND

Indicator		Good (3 points)	Moderate (2 points)	Poor (1 point)
1	Age distribution of trees ¹	Three age classes present	Two age classes present	One age class present
2	Wild, domestic and feral herbivore damage	No significant browsing damage evident in woodland ²	Evidence of significant browsing pressure is present in 40% or less of whole woodland	Evidence of significant browsing pressure is present in 40% or more of whole woodland
3	Invasive plant species ³	No invasive species present in woodland	Rhododendron or laurel not present, other invasive species < 10% cover	Rhododendron or laurel present, or other invasive species > 10% cover
4	Number of native tree species	Five or more native tree or shrub species found across woodland parcel	Three to four native tree or shrub species found across woodland parcel	None to two native tree or shrub species across woodland parcel
5	Cover of native tree and shrub species	> 80% of canopy trees and >80% of understory shrubs are native	50-80% of canopy trees and 50-80% of understory shrubs are native	< 50% of canopy trees and <50% of understory shrubs are native
6	Open space within woodland ⁴	10 – 20% of woodland has areas of temporary open space, unless woodland is <10ha in which case lower threshold of 10% does not apply	21- 40% of woodland has areas of temporary open space	More than 40% of woodland has areas of temporary open space
7	Woodland regeneration ⁵	All three classes present in woodland; trees 4-7cm dbh, saplings and seedlings or advanced coppice regrowth	One or two classes only present in woodland	No classes or coppice regrowth present in woodland
8	Tree health	Tree mortality less than 10%, no pests or diseases and no crown dieback	11% to 25% mortality and/or crown dieback or low risk pest or disease present	Greater than 25% tree mortality and or any high risk pest or disease present
9	Vegetation and ground flora	Ancient woodland flora indicators present	Recognisable NVC plant community present	No recognisable NVC community
10	Woodland vertical structure ⁶	Three or more storeys across all survey plots or a complex woodland	Two storeys across all survey plots	One or less storey across all survey plots
11	Veteran trees ⁷	Two or more veteran trees per hectare	One veteran tree per hectare	No veteran trees present in woodland
12	Amount of deadwood	50% of all survey plots within the woodland parcel have standing deadwood, large dead branches/ stems and stumps	Between 25% and 50% of all survey plots within the woodland parcel have standing deadwood, large dead branches/ stems and stumps	Less than 25% of all survey plots within the woodland parcel have standing deadwood, large dead branches/ stems and stumps
13	Woodland disturbance ⁸	No nutrient enrichment or damaged ground evident	Less than 1 hectare in total of nutrient enrichment across woodland area and/or less than 20% of woodland area has damaged ground	More than 1 hectare of nutrient enrichment and/or more than 20% of woodland area has damaged ground

Condition	Assessment Criteria	Score
Good	Total score >32 (33 to 39)	3
Moderate	Total score 26 to 32	2
Poor	Total score <26 (13 to 25)	1

C.6 CONDITION ASSESSMENT CRITERIA FOR HEDGEROW

19. A series of ten attributes, representing key physical characteristics, are used for this assessment. The attributes, and the minimum criteria for achieving a favourable condition in each, are defined. The attributes use similar favourable condition criteria to the Hedgerow Survey Handbook and the handbook is the recommended source of reference for assessing individual hedgerow attributes.

Hedgerow favourable condition attributes		
Attributes and functional groupings (A, B, C, D & E)	Criteria (the minimum requirements for 'favourable condition')	Description
Core groups - applicable to all hedgerow types		
A1. Height	>1.5 m average along length	<p>The average height of woody growth estimated from base of stem to the top of shoots, excluding any bank beneath the hedgerow, any gaps or isolated trees.</p> <p>Newly laid or coppiced hedgerows are indicative of good management and pass this criterion for up to a maximum of four years (if undertaken according to good practice).</p> <p>A newly planted hedgerow does not pass this criterion (unless it is > 1.5 m height).</p>
A2. Width	>1.5 m average along length	<p>The average width of woody growth estimated at the widest point of the canopy, excluding gaps and isolated trees.</p> <p>Outgrowths (e.g. blackthorn suckers) are only included in the width estimate when they >0.5 m in height.</p> <p>Laid, coppiced, cut and newly planted hedgerows are indicative of good management and pass this criterion for up to a maximum of four years (if undertaken according to good practice⁴).</p>
B1. Gap - hedge base	Gap between ground and base of canopy <0.5 m for >90% of length (unless 'line of trees')	<p>This is the vertical gappiness of the woody component of the hedgerow, and its distance from the ground to the lowest leafy growth.</p> <p>Certain exceptions to this criterion are acceptable (see page 65 of the Hedgerow Survey Handbook).</p>
B2. Gap - hedge canopy continuity	<ul style="list-style-type: none"> ☒ Gaps make up <10% of total length and ☒ No canopy gaps >5 m 	<p>This is the horizontal gappiness of the woody component of the hedgerow. Gaps are complete breaks in the woody canopy (no matter how small).</p> <p>Access points and gates contribute to the overall gappiness, but are not subject to the >5 m criterion (as this is the typical size of a gate).</p>

C1. Undisturbed ground and perennial vegetation	>1 m width of undisturbed ground with perennial herbaceous vegetation for >90% of length: ☐ measured from outer edge of hedgerow, and ☐ is present on one side of the hedge (at least)	This is the horizontal gappiness of the woody component of the hedgerow. Gaps are complete breaks in the woody canopy (no matter how small). Access points and gates contribute to the overall gappiness, but are not subject to the >5 m criterion (as this is the typical size of a gate).
C2. Undesirable perennial vegetation	Plant species indicative of nutrient enrichment of soils dominate <20% cover of the area of undisturbed	The indicator species used are nettles (<i>Urtica</i> spp.), cleavers (<i>Galium aparine</i>) and docks (<i>Rumex</i> spp.). Their presence, either singly or together, should not exceed the 20% cover threshold.
D1. Invasive and neophyte species	>90% of the hedgerow and undisturbed ground is free of invasive non-native and neophyte species	Neophytes are plants that have naturalised in the UK since AD 1500. For information on neophytes see the JNCC website and for information on invasive non-native species see the GB Non-Native Secretariat website.
D2. Current damage	>90% of the hedgerow or undisturbed ground is free of damage caused by human activities	This criterion addresses damaging activities that may have led to or lead to deterioration in other attributes. This could include evidence of pollution, piles of manure or rubble, or inappropriate management practices (e.g. excessive hedge cutting).
Additional group - applicable to hedgerows with trees only		
E1. Tree age	At least one mature tree per 30m stretch of hedgerow. A mature tree is one that is at least 2/3 expected fully mature height for the species.	This criterion addresses if there are sufficient mature trees (within the scope of planning timescales) which are of higher value to biodiversity.
E2. Tree health	At least 95% of hedgerow trees are in a healthy condition (excluding veteran features valuable for wildlife). There is little or no evidence of an adverse impact on tree health by damage from livestock or wild animals, pests or diseases, or human activity.	This criterion identifies if the trees are subject to damage which compromises the survival and health of the individual specimens.

20. Each attribute is assigned to one of five functional groups (A – E), as indicated in Table TS1-2 and the condition of a hedgerow is assessed according to the number of attributes from these functional groups which pass or fail the ‘favourable condition’ criteria according to the approach set out in Table TS1-3.
21. The hedgerow condition assessment generates a weighting (score) ranging from 1-3, which is used within the biodiversity metric 3.0. The scores for each are set out in tables TS1-3 and TS1-4 below.

TABLE TS1-3: Hedgerow condition assessment and weighting

Condition categories for hedgerows without trees		
Category	Maximum number of attributes that can fail to meet 'favourable condition' criteria	Weighting (score)
Good	No more than 2 failures in total; AND No more than 1 in any functional	3
Moderate	No more than 4 failures in total; AND <u>Does not fail both attributes</u> in more than one functional group (e.g. fails attributes A1, A2, B1 & C2 = Moderate condition).	2
Poor	Fails a total of more than 4 attributes; OR <u>Fails both attributes</u> in more than one functional group (e.g. fails attributes A1, A2, B1 & B2 = Poor condition).	1
Condition categories for hedgerows with trees		
Category	Maximum number of attributes that can fail to meet 'favourable condition' criteria	Weighting (score)
Good	No more than 2 failures in total; AND No more than 1 failure in any functional group.	3
Moderate	No more than 5 failures in total; AND <u>Does not fail both attributes</u> in more than one functional group (e.g. fails attributes A1, A2, B1, C2 & E1 = Moderate condition).	2
Poor	Fails a total of more than 5 attributes; OR <u>Fails both attributes</u> in more than one functional group (e.g. fails attributes A1, A2, B1 & B2 = Poor condition).	1

APPENDIX D LEGISLATION AND POLICY

D.1 LEGISLATION

The Environment Act, 2021⁴

The Environment Act, 2021 mandates the requirement for new development in England to deliver a minimum 10% biodiversity net gain (BNG), as measured by the agreed metric (the current relevant version being the Natural England Metric 3.0), secured through planning condition as standard (as per schedule 14 of the Act). Approach to the delivery of BNG must follow the mitigation hierarchy, with avoidance of impact and on-site compensation/gains prioritised, ahead of the use of offsite biodiversity unit offsets, or the purchase of biodiversity credits.

The Act introduces the condition that no development may begin unless a biodiversity net gain plan has been submitted and approved by the local planning authority (LPA).

The Act also amends requirements of the NERC Act, 2006, adding the need to not just conserve, but enhance biodiversity through planning projects. Furthermore, it introduces the need for the LPA to have regard to relevant local nature recovery strategies and relevant species/protected site conservation strategies, when making their decision.

D.2 POLICY

National

National Planning Policy Framework (NPPF)

The National Planning Policy Framework (NPPF) 2021⁵ sets out the Government's planning policies for England, including how plans and decisions are expected to apply a presumption in favour of sustainable development. Chapter 15 of the NPPF focuses on conservation and enhancement of the natural environment, stating plans should 'identify and pursue opportunities for securing measurable net gains for biodiversity'.

It goes on to state: 'if significant harm to biodiversity resulting from a development cannot be avoided (through locating on an alternative site with less harmful impacts), adequately mitigated, or, as a last resort, compensated for, then planning permission should be refused'. Alongside this, it acknowledges that planning should be refused where irreplaceable habitats such as ancient woodland are lost..

The London Plan⁶

Policy G1 Green infrastructure

22. London's network of green and open spaces, and green features in the built environment such as green roofs and street trees, should be protected, planned, designed and managed as integrated features of green infrastructure.

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23. Boroughs should prepare green infrastructure strategies that integrate objectives relating to open space provision, biodiversity conservation, flood management, health and wellbeing, sport and recreation.
 24. Development Plans and Opportunity Area Planning Frameworks should:
 1. identify key green infrastructure assets, their function and their potential function
 2. identify opportunities for addressing environmental and social challenges through strategic green infrastructure interventions.
 25. Development proposals should incorporate appropriate elements of green infrastructure that are integrated into London's wider green infrastructure network.

Policy G5 Urban greening

26. Major development proposals should contribute to the greening of London by including urban greening as a fundamental element of site and building design, and by incorporating measures such as high-quality landscaping (including trees), green roofs, green walls and nature-based sustainable drainage.
27. Boroughs should develop an Urban Greening Factor (UGF) to identify the appropriate amount of urban greening required in new developments. The UGF should be based on the factors set out in Table 8.2, but tailored to local circumstances. In the interim, the Mayor recommends a target score of 0.4 for developments that are predominately residential, and a target score of 0.3 for predominately commercial development. (excluding B2 and B8 uses).
28. Existing green cover retained on site should count towards developments meeting the interim target scores set out in (B) based on the factors set out in Table 8.2.

Policy G6 Biodiversity and access to nature

29. Sites of Importance for Nature Conservation (SINCs) should be protected.
30. Boroughs, in developing Development Plans, should:
 - a. use up-to-date information about the natural environment and the relevant procedures to identify SINCs and ecological corridors to identify coherent ecological networks
 - b. identify areas of deficiency in access to nature (i.e. areas that are more than 1km walking distance from an accessible Metropolitan or Borough SINC) and seek opportunities to address them
 - c. support the protection and conservation of priority species and habitats that sit outside the SINC network, and promote opportunities for enhancing them using Biodiversity Action Plans
 - d. seek opportunities to create other habitats, or features such as artificial nest sites, that are of particular relevance and benefit in an urban context

- e. ensure designated sites of European or national nature conservation importance are clearly identified and impacts assessed in accordance with legislative requirements.
31. Where harm to a SINC is unavoidable, and where the benefits of the development proposal clearly outweigh the impacts on biodiversity, the following mitigation hierarchy should be applied to minimise development impacts:
 - a. avoid damaging the significant ecological features of the site
 - b. minimise the overall spatial impact and mitigate it by improving the quality or management of the rest of the site
 - c. deliver off-site compensation of better biodiversity value.
 32. Development proposals should manage impacts on biodiversity and aim to secure net biodiversity gain. This should be informed by the best available ecological information and addressed from the start of the development process.
 33. Proposals which reduce deficiencies in access to nature should be considered positively.

Policy G7 Trees and woodlands

1. London's urban forest and woodlands should be protected and maintained, and new trees and woodlands should be planted in appropriate locations in order to increase the extent of London's urban forest – the area of London under the canopy of trees.
2. In their Development Plans, boroughs should:
 - a. Protect 'veteran' trees and ancient woodland where these are not already part of a protected site
 - b. Identify opportunities for tree planting in strategic locations
3. Development proposals should ensure that, wherever possible, existing trees of quality are retained [Category A and B]. If planning permission is granted that necessitates the removal of trees, there should be adequate replacement based on the existing value of the benefits of the trees removed, determined by, for example, i-tree or CAVAT or another appropriate valuation system. The planting of additional trees should generally be included in new developments – particularly large-canopied species which provide a wider range of benefits because of the larger surface area of their canopy.

[London Environment Strategy 2018⁷](#)

The Mayor's Environment Strategy was published in May 2018. This document sets out the strategic vision for the environment throughout London. Although not primarily a planning guidance document, it does set strategic objectives, policies and proposals that are of relevance to the delivery of new development in a planning context, including:

Objective 5.1 Make more than half of London green by 2050

Policy 5.1.1 Protect, enhance and increase green areas in the city, to provide green infrastructure services and benefits that London needs now.

This policy states:

“New development proposals should avoid reducing the overall amount of green cover and, where possible, seek to enhance the wider green infrastructure network to increase the benefits this provides. [...] New developments should aim to avoid fragmentation of existing green space, reduce storm water run-off rates by using sustainable drainage, and include new tree planting, wildlife-friendly landscaping, or features such as green roofs to mitigate any unavoidable loss”.

This supports the ‘environmental net gain’ approach promoted by government in the 25 Year Environment Plan.

Proposal 5.1.1.d The London Plan includes policies to green streets and buildings, including increasing the extent of green roofs, green walls and sustainable drainage.

Objective 5.2 conserving and enhancement wildlife and natural habitats

Policy 5.2.1 Protect a core network of nature conservation sites and ensure a net gain in biodiversity

This policy requires new development to include new wildlife habitat, nesting and roosting sites, and ecologically appropriate landscaping will provide more resources for wildlife and help to strengthen ecological corridors. It states:

“Opportunities should be sought to create or restore priority habitats (previously known as UK Biodiversity Action Plan habitats) that have been identified as conservation priorities in London [and] all land managers and landowners should take BAP priority species into account”.

D.3 LOCAL

London Borough of Richmond Local Plan 2018-2033

Policy LP12 Green Infrastructure

The policy states:

“Green infrastructure is a network of multi-functional green spaces and green features, which provides multiple benefits for people, nature and the economy.

To ensure all development proposals protect, and where opportunities arise enhance, green infrastructure, the following will be taken into account when assessing development proposals:

The need to protect the integrity of the green spaces and features that are part of the wider green infrastructure network; improvements and enhancements to the green infrastructure network are supported;

Its contribution to the wider green infrastructure network by delivering landscape enhancement, restoration or re-creation;

Incorporating green infrastructure features, which make a positive contribution to the wider green infrastructure network.”

Policy LP15 Biodiversity

The council will protect and enhance the borough’s biodiversity, in particular, but not exclusively, the sites designated for their biodiversity and nature conservation value, including connectivity between habitats. Weighted priority in terms of their importance will be afforded to protected species and priority species and habitats including National Nature Reserves, SSSIs and other SINCs as set out in the Biodiversity Strategy for England, and the London and Richmond upon Thames BAPs. This will be achieved by:

Protecting biodiversity in, and adjacent to, the borough’s designated sites for biodiversity and nature conservation importance (including buffer zones), as well as other existing habitats and features of biodiversity value;

Supporting enhancements to biodiversity;

Incorporating and creating new habitats or biodiversity features, including trees, into development sites and into the design of buildings themselves where appropriate; major developments are required to deliver net gain for biodiversity, through incorporation of ecological enhancements, wherever possible;

Ensuring new biodiversity features or habitats connect to the wider ecological enhancements wherever possible;

Enhancing wildlife corridors for the movement of species, including river corridors, where opportunities arise; and

Maximising the provision of soft landscaping, including trees, shrubs and other vegetation that support the borough-wide Biodiversity Action Plan.

Policy LP17 Green roofs and walls

Green roofs and/or brown roofs should be incorporated into new major developments with roof plate area of 100sqm or more where technically feasible and subject to considerations of visual impact. The aim should be to use at least 70% of any potential roof plate area as a green/brown roof.

The use of green/brown roofs and green walls is encouraged and supported in smaller developments, renovations, conversions and extensions.

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