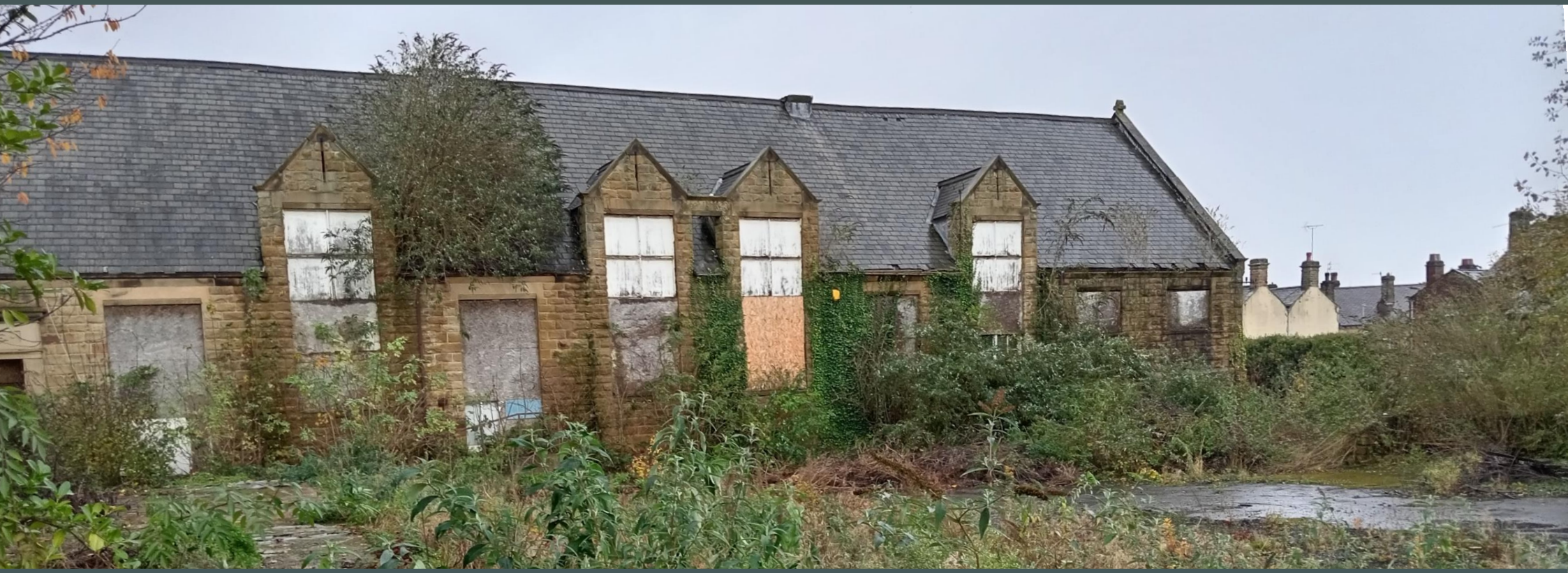
Brooks Ecological
Grounded advice

St Mary's School, Batley



Biodiversity Net Gain Assessment (Baseline)

Report Ref. ER-7034-03

21/12/2023

AHR Architects Ltd.

Report reference	**ER-7034-03 – Biodiversity Net Gain Assessment (Baseline)**
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Authorised	Rob Weston BSc (Hons) MSc MCIEEM Technical Director
Date	21/12/2023
Report duration	In accordance with CIEEM (2019), unless otherwise stated the findings of this report remain valid for a period of 18 months. After this period advice should be sought on the scope of any updating work required.

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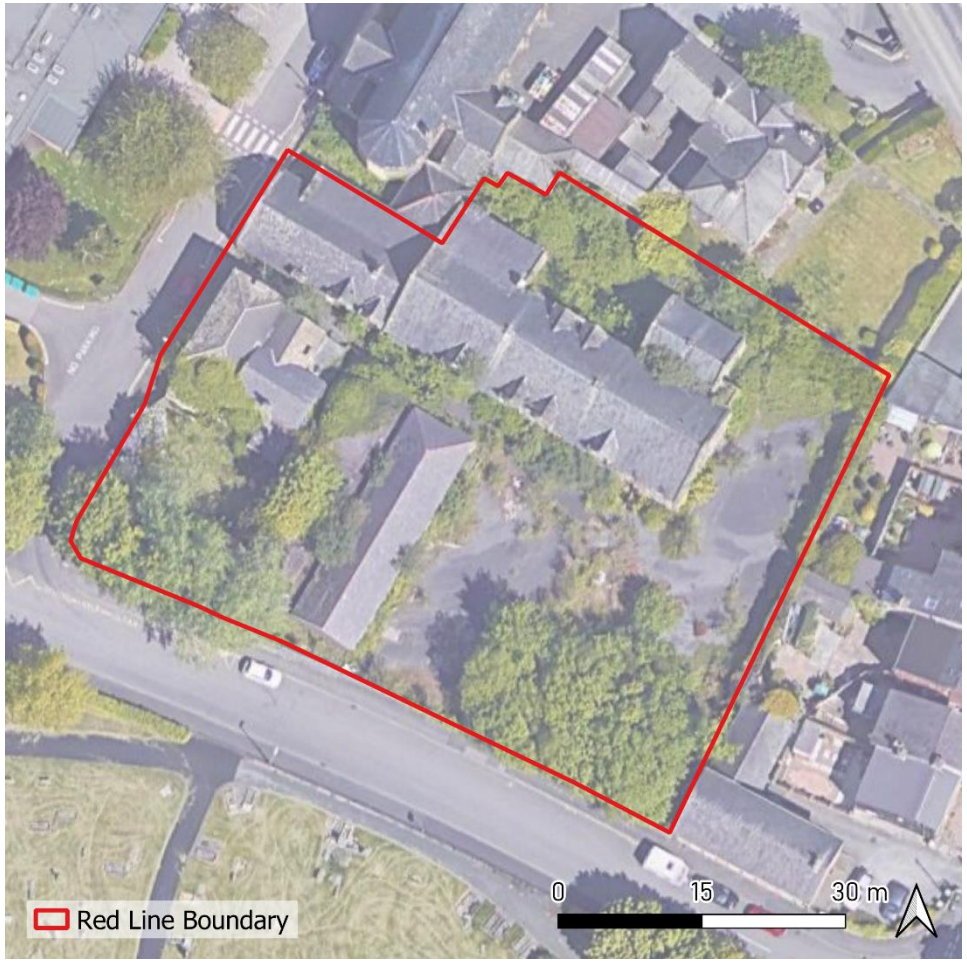
Introduction

1. Brooks Ecological Ltd was commissioned by AHR Architects Ltd. to carry out a Biodiversity Net Gain (BNG) Assessment of the proposed development Site at St Mary's School, Batley.
2. The assessment applies to the parcel of land shown in Figure 1, opposite.
3. The assessment is informed by a Preliminary Ecological Appraisal Survey of the Site detailed in our report ER-7034-02.
4. Biodiversity Accounting metrics are used to quantify the value of a site in Biodiversity Units, which helps in assessing the ecological impacts of the proposed development on the Site.
5. Biodiversity Units can help to inform avoidance, or on-Site mitigation levels required; or as a last resort can translate to a direct monetary value where compensation (off-Site) is required.

Figure 1 Extent of BNG assessment (red line boundary).



Part 1

Pre-development baseline

Habitats identified

6. Habitats present on-Site are outlined in Table 1, opposite. These are shown in relation to location and extent in Figure 2 overleaf.

Condition Assessment

7. Habitat condition has been assessed as part of the Preliminary Ecological Appraisal of the Site.
8. Information on condition assessments is provided in the Excel spreadsheet CA-7034-01 provided alongside this report.

Strategic Significance

9. None of the habitats on-Site fall within or close to the Wildlife Habitat Network, and so all are mapped as 'area/compensation not in local strategy/no local strategy'.

Irreplaceable habitat

10. Irreplaceable habitats have not been found on-Site.

Biodiversity Metric

11. Habitat types, conditions, and areas have been entered into the Statutory Biodiversity Metric Calculation Tool, alongside information on their strategic significance.
12. The Statutory Biodiversity Metric Calculation Tool is provided alongside this assessment, in Excel spreadsheet BM-7034-01, and may be useful in investigating design options for the Site.

Table 1 Habitat Types.

Habitat	Label ref.	Irreplaceable?	Distinctiveness	Condition	See Condition Assessment sheet
Bramble scrub	BrSc	No	Medium	N/A	N/A
Mixed scrub	MxSc-1	No	Medium	Poor	20B
	MxSc-2				
Developed land; sealed surface	-	No	V. Low	N/A	N/A
Vacant or derelict land	-	No	Low	Poor	
Other woodland; broadleaved	-	No	Medium	Poor	
Individual trees	T1-9	No	Medium	Good	9B
	T10-11	No		Moderate	
Ornamental hedgerow	H1	No	V. Low	Automatically Poor	N/A
	H2				

Figure 2 The Site's habitats assigned to types used in the Biodiversity Metric. Labelled codes cross-reference to our condition assessment and description in the PEAR, which should be read in conjunction with this report.

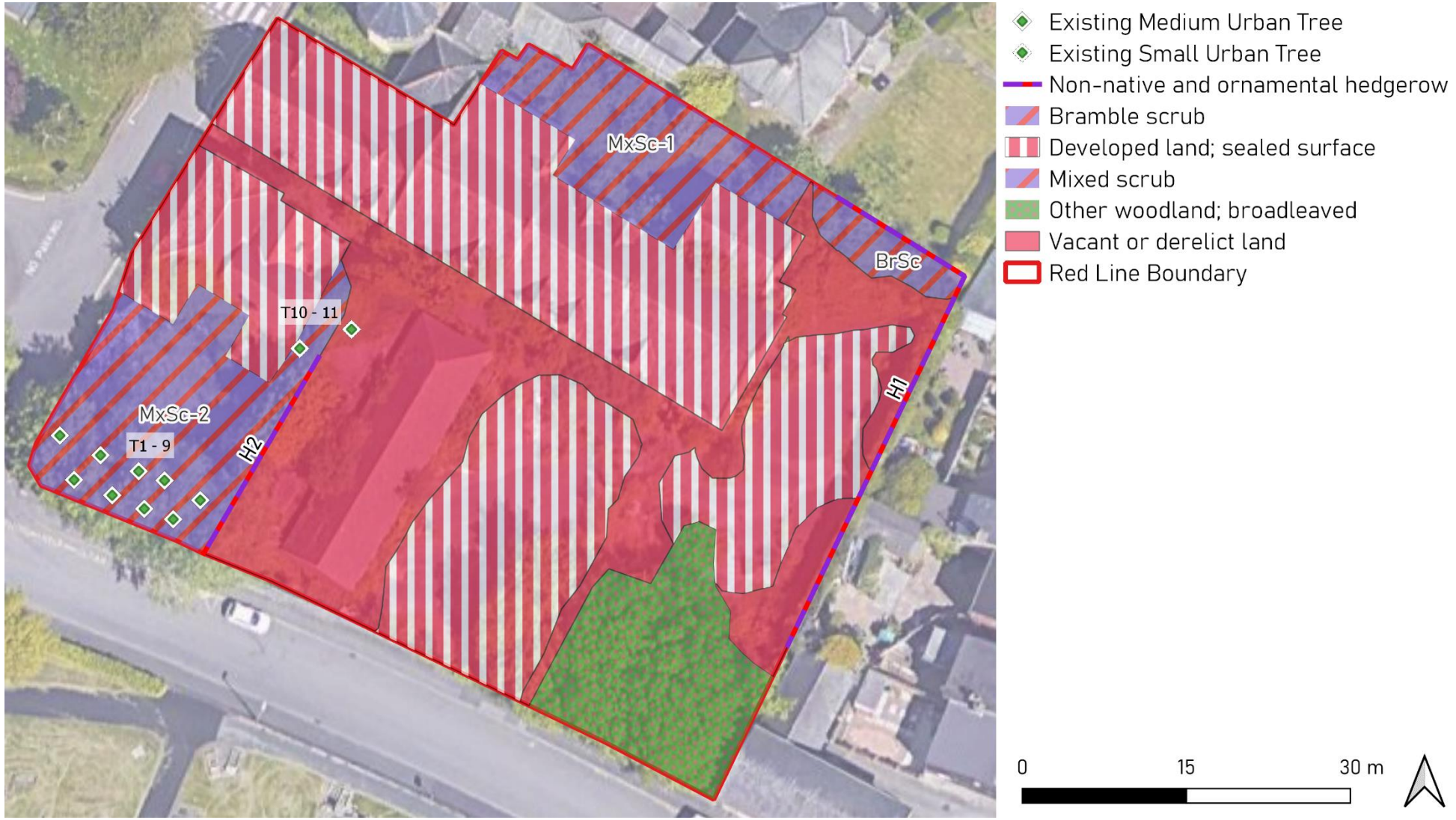


Figure 3 Extract from the Statutory Biodiversity Metric Calculation Tool showing entered information and resultant Biodiversity Units[1] - Habitats.

Project Name: 7034 St. Mary's School, Batley Map Reference:

A-1 On-Site Habitat Baseline

Condense / Show Columns | Condense / Show Rows | Main Menu

	Existing area habitats				Distinctiveness	Condition	Strategic significance	Required Action to Meet Trading Rules	Ecological baseline
Ref	Broad Habitat	Habitat Type	Irreplaceable habitat	Area (hectares)	Distinctiveness	Condition	Strategic significance		Total habitat units
1	Heathland and shrub	Bramble scrub	No	0.0057	Medium	Condition Assessment N/A	Area/compensation not in local strategy/ no local strategy	Same broad habitat or a higher distinctiveness habitat required (≥)	0.02
2	Heathland and shrub	Mixed scrub	No	0.0626	Medium	Poor	Area/compensation not in local strategy/ no local strategy	Same broad habitat or a higher distinctiveness habitat required (≥)	0.25
3	Urban	Developed land; sealed surface	No	0.0979	V.Low	N/A - Other	Area/compensation not in local strategy/ no local strategy	Compensation Not Required	0.00
4	Urban	Vacant or derelict land	No	0.0075	Low	Poor	Area/compensation not in local strategy/ no local strategy	Same distinctiveness or better habitat required ≥	0.02
5	Woodland and forest	Other woodland; broadleaved	No	0.03	Medium	Poor	Area/compensation not in local strategy/ no local strategy	Same broad habitat or a higher distinctiveness habitat required (≥)	0.12
6	Individual trees	Urban tree	No	0.146574147	Medium	Good	Area/compensation not in local strategy/ no local strategy	Same broad habitat or a higher distinctiveness habitat required (≥)	1.76
7	Individual trees	Urban tree	No	0.008143008	Medium	Moderate	Area/compensation not in local strategy/ no local strategy	Same broad habitat or a higher distinctiveness habitat required (≥)	0.07
8									
9									
10									
11									
12									
				Total habitat area	0.36				2.23
				Site Area (Excluding area of individual trees, green walls, intertidal hard structures)	0.20				

[1] Our report provides an estimate of the Site's value in Biodiversity Units. This is based on thorough assessment at the time of survey and using the information available at this time. In this assessment we have used the Statutory Biodiversity Metric Calculation Tool, the UK Habitats Classification, and relevant guidance. This assessment requires subjective judgments to be made in terms of habitat type and condition and could be open to other interpretations. Reliance on the Unit Score, or conversion of this into a monetary value, would be at the developer's own risk. Where conversion to monetary value is required, it is always advisable to get calculations checked independently.

Figure 4 Extract from the Statutory Biodiversity Metric Calculation Tool showing entered information and resultant Biodiversity Units - Hedgerows.

Project Name: 7034 St. Mary's School, Batley Map Reference:

B-1 On-Site Hedge Baseline

Condense / Show Columns | Condense / Show Rows | Main Menu

	Existing hedgerow habitats			Distinctiveness	Condition	Strategic significance	Required Action to Meet Trading Rules	Ecological baseline
Ref	Hedge number	Habitat type	Length (km)	Distinctiveness	Condition	Strategic significance		Total hedgerow units
1	H1-2	Non-native and ornamental hedgerow	0.072	V.Low	Poor	Area/compensation not in local strategy/ no local strategy	Same distinctiveness band or better	0.07
2								
3								
4								
5								
6								
			0.07					0.07

Habitat score

13. The Site has been assessed as having a baseline score of 2.23 Habitat Units and 0.07 Hedgerow Units. These break down as shown in Tables 2 & 3, below.
14. As part of delivering a Net Gain for biodiversity, the BNG process requires that trading rules are complied with, such that loss of habitats is compensated for in a like-for-like or like-for-better fashion. This is based on habitat distinctiveness.
15. Once trading rules are complied with, the 'gain' component can come from any distinctiveness category.

Table 2 Habitat Units broken down by distinctiveness at this Site.

Distinctiveness	Units	Approach to compensation if lost
Very Low	0	No compensation required.
Low	0.02	Can be replaced with any habitat of Low or higher distinctiveness – this can include gardens and landscaping.
Medium	2.22	Can be replaced with habitat from the same broad category – in this case, **trees, woodland**, and **scrub** – or by any High or Very High distinctiveness habitat.
High	0	Can only be replaced with the same habitat.
Very High	0	Can only be replaced with the same habitat; bespoke compensation required.
Irreplaceable	0	Bespoke compensation required, outside of BNG.

Note that figures presented may not appear to 'add up' correctly; this is due to rounding within the Metric Calculator.

Table 3 Hedgerow Units broken down by distinctiveness at this Site.

Distinctiveness	Units	Approach to compensation if lost
Very Low	0.07	Can be replaced with any hedgerow of the same or higher distinctiveness.
Low	0	Can be replaced with any hedgerow of the same or higher distinctiveness.
Medium	0	Can be replaced with any hedgerow of the same or higher distinctiveness.
High	0	Can be replaced with the same hedgerow type, or one of Very High distinctiveness.
Very High	0	Can only be replaced with the same hedgerow type.

Planning your development

Mitigation hierarchy

16. To engage with the Biodiversity Gain process, a project must be able to demonstrate that it has complied with the Mitigation Hierarchy of Avoid – Mitigate – Compensate. Its relevance to this Site is set out in Table 4 below.

Table 4 Mitigation hierarchy summary.

Level of Hierarchy	Requirement at this Site
First **Avoid**	The PEA has established that there are no High or Very High distinctiveness habitats. Of the medium distinctiveness habitats present, retention of the connectivity and structure provided by the existing trees and woodland has been advised. Achieving this in a layout would engage with this part of the hierarchy and helps avoid the loss of Biodiversity Units.
then **Mitigate**	As it would be very difficult to retain the Site's scrub within any development, the structure and habitat it provides would be lost. This loss could be mitigated in part by designing in structured landscaping with native species.
then **Compensate**	Any residual loss would need to be compensated off-Site. It will not be possible to deliver a Net Gain on-Site alongside development here, so this element will be required.

Summary and Recommendations

17. Site value is measured as 2.23 Habitat Units and 0.07 Hedgerow Units.

18. Assuming the recommendations set out above can be followed, it seems likely that the mitigation hierarchy can be complied with. These recommendations should be a consideration of any design work.

19. If development of the Site results in the requirement to offset losses elsewhere, potential means of achieving this would be:

    - Creating a bespoke offset on land available to the developer, as locally as possible.
    - Making use (through contribution) of any Local Authority habitat banking scheme, if this is available.
    - Purchasing the necessary Units from a broker or habitat banking scheme, again as locally as possible (and ideally within the same Local Authority or Natural Character Area as the development).
    - Purchasing Statutory Credits from the UK government scheme. This is the last resort and is deliberately priced to be uncompetitive, and is not available yet at the time of writing. Twice as many Credits will be required as there are Units to offset.

20. Finding a means of offsetting losses from the Site should be part of the project planning and any pre-application discussions. Assuming the retention of the woodland, and trees to the southeast corner, **the remaining likely requirement of Units** has been estimated for the purposes of project planning, as follows:

    - **0.58 Habitat Units**
    - **0.08 Hedgerow Units**

Table 5 Summary of recommendations.

Planning considerations		
Recommendation	**Rationale**	**When**
R1 Produce a layout which minimises loss of biodiversity	Engage with the recommendations set out above, involve your ecologist in designs at an early stage, as required. The proposals will need to consider the NPPF hierarchy of Avoid – Mitigate – Compensate in minimising any loss of biodiversity.	During the design process
R2 Biodiversity Gain Strategy (BGS)	Engage an ecologist to work with the design team to maximise available Biodiversity Units on-Site. Identify opportunities to address any losses off-Site.	During the design process
R3 Landscape Design	Make sure your landscape architect follows ecological advice or the BGS to maximise Biodiversity Units on-Site and make sure there are no design conflicts.	During the design process
R4 Calculate final Biodiversity Impact Score	Use the Statutory Metric to quantify Net Gain/Loss of biodiversity – complete Part 2 of this report.	After a fixed design is agreed

Part 2

Post-development value

21. This section calculates the biodiversity value of the post-development Site and quantifies any shortfall in Biodiversity Units.
22. It can only be completed once a design for the Site is fixed.

References

Chartered Institute of Ecology and Environmental Management (CIEEM). 2019. *Advice note: on the lifespan of ecological reports and surveys.* Winchester: Chartered Institute of Ecology and Environmental Management. [Online]. Available from: https://cieem.net/resource/advice-note-on-the-lifespan-of-ecological-reports-and-surveys/

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Appendices

The following reports/digital documents have been provided alongside this report and should be read in conjunction with it:

- BM-7034-01 – Statutory Biodiversity Metric Calculation Tool
- CA-7034-01 – Statutory Biodiversity Metric Condition Assessments
- ER-7034-02 – Preliminary Ecological Appraisal