

Biodiversity Net Gain Assessment

Site Address:

Brierley CofE Primary School, Beech Close, Barnsley S72 9EJ

Client:

Joan Wood

Assessment Date:

12th May 2026

Project:

This report is prepared to inform a planning application with Barnsley Metropolitan Borough Council. This proposal can be described as the erection of a temporary Portakabin modular building serving as a nursery (educational) facility.

BNG assessment methodology and legislation can be found in the Arbtech Supplement: **BNG Methodology and Legislation – 2025.**

The results and recommendations contained within this report are valid for 18 months. An updated site visit and BNG assessment may be required if the report is to be used any longer than 18 months after completion.

Version Control			
Status	Issue	Name	Date
Draft	0.1	Emma Platts, BSc (Hons) Consultant Ecologist	12/05/2026
Final	1.0	Emma Platts, BSc (Hons) Consultant Ecologist	15/05/2026
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Updated	3.0	Emma Platts, BSc (Hons) Consultant Ecologist	11/08/2026

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Site Location and Context

A baseline habitat map is provided in **Appendix 1**, a post development habitat map in **Appendix 2**, a proposed development plan in **Appendix 3**, headline BNG results in **Appendix 4**, and condition assessments in **Appendix 5**.

The site is located at National Grid Reference SE 41196 11101 and has an area of approximately 0.03ha comprising modified grassland, introduced shrub, scattered trees and a pond. The site, which is located within the grounds of Brierley C of E Primary School, is surrounded by palisade security fencing, lines of trees and hedgerow. There is an entrance for cars and walkers which is gated but offers routes for commuting. The site is located in a rural setting, immediately surrounded by the small village of Brierley with vegetated gardens and minor roads. Directly adjacent to the site lies a cemetery in the west. Approx 120m east of the sites lies a tree lined recreational park.

The wider landscape is comprised largely of arable fields, however they are surrounded by hedgerows and tree lined avenues, many of which offering direct connectivity to scattered woodlands particularly in the south and east, including Grimethorpe Nature Reserve approx 3km south. Approx 5.9km north-west however lies an A road which, while relatively small for a principal road, may still pose an obstacle to migration and commuting. Beyond that however, lies further scattered woodlands, well connected via hedgerows and tree lined avenues. There are multiple drains dotted throughout the wider landscape, with the River Dearne located 3.9km south, and Winterset Reservoir lying 4.7km north-west.

This report should be read in conjunction with the following documents:

- ❖ Statutory BNG Metric – Brierley C of E Primary School, S72 9EJ – v3 (Arbtech Consulting Ltd., 2026)
- ❖ Proposed Plan (Portakabin, 2026)
- ❖ Preliminary Ecological Appraisal (PEA) - Brierley C of E Primary School, S72 9EJ – v3 (Arbtech Consulting Ltd., 2026)

Executive Summary

- ❖ The current landscaping proposal generates a net gain of area-based habitat units (+14.90%). As such, the proposed development is compliant with current legislation (Environment Act 2021) and planning policies (National Planning Policy Framework, 2024) as a minimum biodiversity net gain of +10% was achieved for both area- and linear-based habitat units.
- ❖ All trading conditions have been satisfied.
- ❖ A Biodiversity Gain Plan (BGP) and Habitat Management and Monitoring Plan (HMMP) must be produced for the site. This should include recommendations for the implementation, management and monitoring of the site for at least 30 years to ensure that biodiversity net gain is delivered.

Introduction

BNG Informative		
Habitat Degradation Statement	Date reflected by BNG calculations	12/05/2026
	The baseline biodiversity value of the site is derived from the site as observed during the PEA field survey (Arbtech Consulting Ltd., 2026). As evident in the screenshots of satellite imagery obtained from GoogleEarth dated 15 th May 2019 and 20 th May 2025, the site does not appear to have undergone any degradation. The habitats on site, and therefore biodiversity value of the site, is not considered to have undergone degradation since 30th January 2020.	
	Historical imagery < 15 May 2019 > >I  Historical imagery < 20 May 2025 > >I 	
Irreplaceable Habitat Statement	No irreplaceable habitats as listed under the Biodiversity Gain Requirements (Irreplaceable Habitat) Regulations (2024) are currently present nor were present before 30 th January 2020.	

Metric Version & Publication Date	Statutory Biodiversity Metric Calculation Tool first published 29 th November 2023 with last updates to metric tools and user guides on 3 rd July 2025.		
BNG Target Uplift	+10%		
National Character Area (NCA)	38 - Nottinghamshire, Derbyshire and Yorkshire Coalfield		
Strategic Significance	South Yorkshire Mayoral Combined Authority, the responsible authority for drafting the Local Nature Recovery Strategy (LNRS), for Barnsley Metropolitan Borough Council, has yet to adopt a comprehensive LNRS. As such, the following documents were used to determine strategic significance: ❖ Barnsley Local Plan (adopted January 2019) ❖ Barnsley Biodiversity Action Plan		
	Habitat	Baseline / Post-Development	Justification
	Modified grassland	Baseline & Post-Development	Low – no explicit designation
	Introduced Shrub	Baseline & Post-Development	Low – no explicit designation
	Pond	Baseline & Post-Development	Low – no explicit designation
	Urban tree	Baseline & Post-Development	Low – no explicit designation
Limitations			
There were no specific limitations to the assessment.			

Baseline Biodiversity Value

Baseline Biodiversity Value: On-Site				
Area-Based Habitats (A-1)				
Habitat	Area (ha)	Description	Condition Assessment	Strategic Significance
Modified Grassland	0.0755	The site of development comprises actively managed modified grassland bordered by three different areas. North and east is a palisade fence which while thickly covered in shrubby vegetation such as flowering currant, firethorn, forsythia and holly berry cotoneaster in parts, nowhere did it meet the requirements to be called a hedgerow. To the south and west the site is wooded and contains a pond. To the north-west is another strip of modified grassland before reaching a car park. Species present within this habitat include daisy (<i>Bellis perennis</i>), dandelion (<i>Taraxacum</i> agg.), greater plantain (<i>Plantago major</i>), cock's-foot (<i>Dactylis glomerata</i>), red fescues (<i>Festuca rubra</i>), perennial ryegrass (<i>Lolium perenne</i>), creeping buttercup (<i>Ranunculus repens</i>), cleavers (<i>Galium aparine</i>), common field-speedwell (<i>Veronica persica</i>), common mouse-ear (<i>Cerastium fontanum</i>), bristly oxtongue (<i>Helminthotheca echioides</i>) and cow parsley (<i>Anthriscus sylvestris</i>).	Poor: passes 3 of 7 criteria excluding essential criterion A. Assessed using the 'Grasslands Low Distinctiveness' habitat type condition sheet.	Low Strategic Significance
Introduced Shrub	0.0042	There are three small ornamental areas of elevated bare ground contained within rectangular linear rock piles, containing introduced shrubs. Additionally, along the northeastern boundary of the site sits an area of introduced ornamental shrubs along the length of the fencing. Species present within this habitat include cypress sp. (<i>Cupressus</i> sp.), box (<i>Buxus sempervirens</i>), groundsel (<i>Senecio vulgaris</i>), bristly oxtongue (<i>Helminthotheca echioides</i>), dandelion (<i>Taraxacum</i> agg.), caucasian stonecrop (<i>Phedimus spurius</i>), roseroot (<i>Rhodiola rosea</i> (probably a garden cultivar), sycamore (<i>Acer pseudoplatanus</i>), sticky mouse-ear (<i>Cerastium glomeratum</i>), annual meadow-grass (<i>Poa annua</i>), (<i>Acer</i> sp.), and japanese spindle (<i>Euonymus japonicus</i>).	Habitat condition pre-determined as 'N/A' as detailed within the Statutory Biodiversity Condition Assessment Supplement.	
Pond	0.0035	A pond is present to the east of the site. The pond is unlined and does not appear to be fed or connected to any other waterbodies. The pond was almost entirely dry at the time of the survey, with only a few patches of water less than half an inch deep. The pond floor appears choked with an accumulation of leaf litter and various grassland vegetation, amongst a scattering of iris, reed grass and rushes.	Poor: Passes 5 or fewer criteria. Assessed using the 'Pond' habitat type condition sheet.	
Urban tree	0.0081	Two small trees are present on site, comprising a native willow (<i>Salix</i> sp.) tree and cherry (<i>Prunus</i> sp.) tree, the native status of which is unknown. No specific ecological niches were recorded for either tree during this assessment. All trees on site are young or semi-mature.	Moderate: passes 4 and 3 of 7 criteria respectively. Assessed using the 'Individual Trees' habitat type condition sheet.	

Post-Development Biodiversity Value

Post-Development Biodiversity Value: On-Site

Area-Based Habitats

	Habitat	Area (ha)	Description	Condition Assessment	Strategic Significance	
Retained (A-1)	Modified Grassland	0.0303	Partial retention of existing modified grassland.	Poor: passes 3 of 7 criteria excluding essential criterion A. Assessed using the 'Grasslands Low Distinctiveness' habitat type condition sheet.	Low Strategic Significance	
	Introduced Shrub	0.0038	Full retention of existing introduced shrubs.	Habitat condition pre-determined as ' N/A ' as detailed within the Statutory Biodiversity Condition Assessment Supplement.		
	Pond	0.0035	Full retention of existing pond, with fencing to be installed around its perimeter for health & safety reasons.	Poor: Passes 5 or fewer criteria. Assessed using the 'Pond' habitat type condition sheet.		
	Urban tree	0.0081	Full retention of existing trees.	Moderate: passes 4 and 3 of 7 criteria respectively. Assessed using the 'Individual Trees' habitat type condition sheet.		
Created (A-2)	Developed land; sealed surface (building)	0.0087	Creation of Portakabin modular building serving as a nursery (educational) facility.	Habitat condition pre-determined as ' N/A ' as detailed within the Statutory Biodiversity Condition Assessment Supplement.		Low Strategic Significance
	Developed land; sealed surface (hard standing)	0.0135	Creation of hard standing, serving as a footpath and play area.			
	Urban tree	0.0081	Creation of 2x small, native trees.	Moderate: passes 4 of 7 criteria respectively. Assessed using the 'Individual Trees' habitat type condition sheet.		

Enhanced (A-3)	Modified Grassland	0.0235	Enhancement of existing modified grassland to good condition, via the planting of additional, species-rich seed mix, and maintaining a varied sward.	Good: passes 6 of 7 criteria including essential criterion A. Assessed using the 'Grasslands Low Distinctiveness' habitat type condition sheet.	
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Change of Biodiversity Value

		Biodiversity Units		
		Area-Based	Linear-Based	Watercourse-Based
On-Site	Baseline	0.24 ❖ Modified grassland (0.15) ❖ Introduced shrubs (0.01) ❖ Pond (non-priority) (0.01) ❖ Urban tree (0.07)	N/A	N/A
	Post-Development	0.27 ❖ Modified grassland (retained) (0.06) ❖ Introduced shrubs (retained) (0.01) ❖ Pond (non-priority) (retained) (0.01) ❖ Urban tree (retained) (0.07) ❖ Urban tree (created) (0.02) ❖ Developed land; sealed surface (0) ❖ Modified grassland (enhanced) (0.10)		
	Overall Net Change	+0.04 +14.90%		

Results, Discussion, and Next Steps

BNG Informative	
Results and Next Steps	The current landscaping proposal generates a net gain of area-based habitat units (+14.90%). As such, the proposed development is compliant with current legislation (Environment Act 2021) and planning policies (National Planning Policy Framework, 2024) as a minimum biodiversity net gain of +10% was achieved for both area- and linear-based habitat units. All trading conditions have been satisfied. A Biodiversity Gain Plan (BGP) and Habitat Management and Monitoring Plan (HMMP) must be produced for the site. This should include recommendations for the implementation, management and monitoring of the site for at least 30 years to ensure that biodiversity net gain is delivered.
BNG Mitigation Hierarchy	
Avoidance	The minimum area of habitat will be removed as part of the development. No priority habitats will be impacted.
Minimisation	
Mitigation	Habitat enhancement and creation achieved on site.
Offset	N/A – net gain delivered on site.

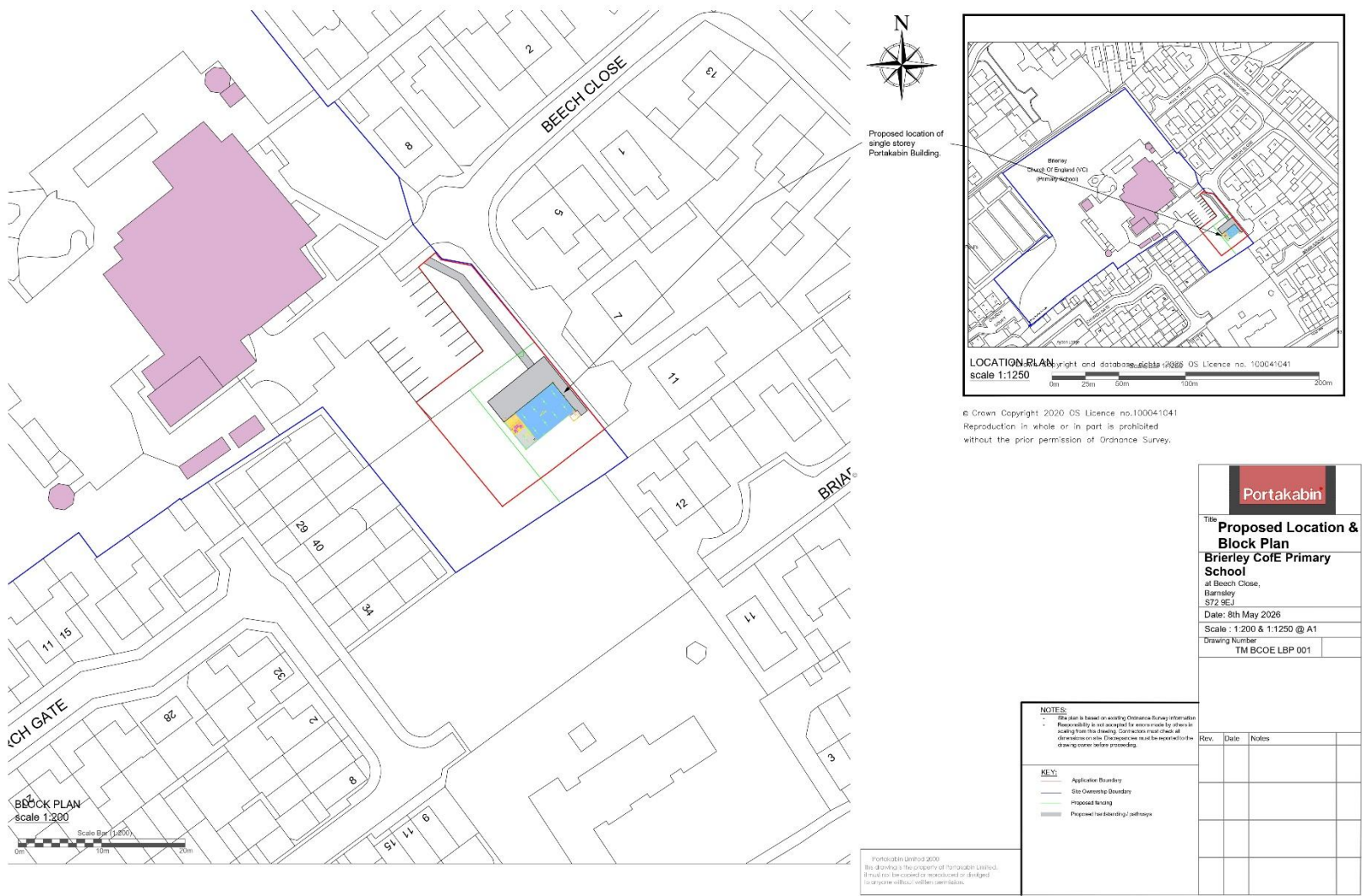
Appendix 1: Baseline Habitat Plan



Appendix 2: Post-Development Habitat Plan



Appendix 3: Proposed Development Plan



Appendix 4: Headline BNG Results

FINAL RESULTS		
Total net unit change (Including all on-site & off-site habitat retention, creation & enhancement)	Area habitat units	0.04
	Hedgerow units	0.00
	Watercourse units	0.00
Total net % change (Including all on-site & off-site habitat retention, creation & enhancement)	Area habitat units	14.90%
	Hedgerow units	0.00%
	Watercourse units	0.00%
Trading rules satisfied?	Yes ✓	

Unit Type	Target	Baseline Units	Units Required	Unit Deficit
Area habitat units	10.00%	0.24	0.26	0.00
Hedgerow units	10.00%	0.00	0.00	0.00
Watercourse units	10.00%	0.00	0.00	0.00

No additional area habitat units required to meet target ✓
No additional hedgerow units required to meet target ✓
No additional watercourse units required to meet target ✓

Appendix 5a: Baseline Habitat Condition Assessment Sheets

Modified grassland

	Criteria Description	Criteria Passed?
A	There are 6-8 vascular plant species per m2 present, including at least 2 forbs. Note - this criterion is essential for achieving Moderate or Good condition.	N
B	Sward height is varied (at least 20% of the sward is less than 7 cm and at least 20% is more than 7 cm) creating microclimates which provide opportunities for vertebrates and invertebrates to live and breed.	N
C	Any scrub present accounts for less than 20% of the total grassland area. (Some scattered scrub such as bramble <i>Rubus fruticosus</i> agg. may be present). Note - patches of scrub with continuous (more than 90%) cover should be classified as the relevant scrub habitat type.	Y
D	Physical damage is evident in less than 5% of total grassland area. Examples of physical damage include excessive poaching, damage from machinery use or storage, erosion caused by high levels of access, or any other damaging management activities.	N
E	Cover of bare ground is between 1% and 10%, including localised areas (for example, a concentration of rabbit warrens). For example, this could include small, scattered areas of bare ground allowing establishment of new species, or localised patches where not exceeding 10% cover.	Y
F	Cover of bracken <i>Pteridium aquilinum</i> is less than 20%.	Y
G	There is an absence of invasive non-native plant species (as listed on Schedule 9 of WCA).	Y
		Total 4/7
	Condition Poor due to failing one or more essential criteria.	

Pond

Core Criteria - applicable to all ponds:		
A	The pond is of good water quality, with clear water (low turbidity) indicating no obvious signs of pollution. Turbidity is acceptable if the pond is grazed by livestock.	N
B	There is semi-natural habitat (moderate distinctiveness or above) completely surrounding the pond, for at least 10 m from the pond edge for its entire perimeter.	N
C	Less than 10% of the water surface is covered with duckweed <i>Lemna</i> spp. or filamentous algae.	N
D	The pond is not artificially connected to other waterbodies, such as agricultural ditches or artificial pipework.	Y
E	Pond water levels can fluctuate naturally throughout the year. No obvious artificial dams ² , pumps or pipework.	Y
F	There is an absence of listed non-native plant and animal species ³ .	Y
G	The pond is not artificially stocked with fish. If the pond naturally contains fish, it is a native fish assemblage at low densities.	Y
H	Emergent, submerged or floating plants (excluding duckweed) ⁴ cover at least 50% of the pond area which is less than 3 m deep.	N
I	The pond surface is no more than 50% shaded by adjacent trees and scrub.	N
Number of criteria passed		
Condition Assessment Result	Condition Assessment Score	
Results for non-woodland ponds which require assessment of 9 criteria		
Passes 9 criteria	Good (3)	
Passes 6 to 8 criteria	Moderate (2)	
Passes 5 or fewer criteria	Poor (1)	✓

Individual trees (#1 Willow)

	Criteria Description	Criteria Passed?
A	The tree is a native species (or at least 70% within the block are native species).	Y
B	The tree canopy is predominantly continuous, with gaps in canopy cover making up <10% of total area and no individual gap being >5 m wide (individual trees automatically pass this criterion).	Y
C	The tree is mature (or more than 50% within the block are mature).	N
D	There is little or no evidence of an adverse impact on tree health by human activities (such as vandalism, herbicide or detrimental agricultural activity). And there is no current regular pruning regime, so the trees retain >75% of expected canopy for their age range and height.	Y
E	Natural ecological niches for vertebrates and invertebrates are present, such as presence of deadwood, cavities, ivy or loose bark.	N
F	More than 20% of the tree canopy area is oversailing vegetation beneath.	Y
		Total 4/6
	Condition Moderate due to passing 4 of 6 criteria and all essential criteria.	

Individual trees (#2 Cherry)

	Criteria Description	Criteria Passed?
A	The tree is a native species (or at least 70% within the block are native species).	N
B	The tree canopy is predominantly continuous, with gaps in canopy cover making up <10% of total area and no individual gap being >5 m wide (individual trees automatically pass this criterion).	Y
C	The tree is mature (or more than 50% within the block are mature).	N
D	There is little or no evidence of an adverse impact on tree health by human activities (such as vandalism, herbicide or detrimental agricultural activity). And there is no current regular pruning regime, so the trees retain >75% of expected canopy for their age range and height.	Y
E	Natural ecological niches for vertebrates and invertebrates are present, such as presence of deadwood, cavities, ivy or loose bark.	N
F	More than 20% of the tree canopy area is oversailing vegetation beneath.	Y
		Total 3/6
	Condition Moderate due to passing 3 of 6 criteria and all essential criteria.	

Appendix 5b: Post-Development Habitat Condition Assessment Sheets

Modified grassland (retained)

	Criteria Description	Criteria Passed?
A	There are 6-8 vascular plant species per m2 present, including at least 2 forbs. Note - this criterion is essential for achieving Moderate or Good condition.	N
B	Sward height is varied (at least 20% of the sward is less than 7 cm and at least 20% is more than 7 cm) creating microclimates which provide opportunities for vertebrates and invertebrates to live and breed.	N
C	Any scrub present accounts for less than 20% of the total grassland area. (Some scattered scrub such as bramble <i>Rubus fruticosus</i> agg. may be present). Note - patches of scrub with continuous (more than 90%) cover should be classified as the relevant scrub habitat type.	Y
D	Physical damage is evident in less than 5% of total grassland area. Examples of physical damage include excessive poaching, damage from machinery use or storage, erosion caused by high levels of access, or any other damaging management activities.	N
E	Cover of bare ground is between 1% and 10%, including localised areas (for example, a concentration of rabbit warrens). For example, this could include small, scattered areas of bare ground allowing establishment of new species, or localised patches where not exceeding 10% cover.	Y
F	Cover of bracken <i>Pteridium aquilinum</i> is less than 20%.	Y
G	There is an absence of invasive non-native plant species (as listed on Schedule 9 of WCA).	Y
		Total 4/7
	Condition Poor due to failing one or more essential criteria.	

Modified grassland (enhanced)

	Criteria Description	Criteria Passed?
A	There are 6-8 vascular plant species per m2 present, including at least 2 forbs. Note - this criterion is essential for achieving Moderate or Good condition.	Y
B	Sward height is varied (at least 20% of the sward is less than 7 cm and at least 20% is more than 7 cm) creating microclimates which provide opportunities for vertebrates and invertebrates to live and breed.	Y
C	Any scrub present accounts for less than 20% of the total grassland area. (Some scattered scrub such as bramble <i>Rubus fruticosus</i> agg. may be present). Note - patches of scrub with continuous (more than 90%) cover should be classified as the relevant scrub habitat type.	Y
D	Physical damage is evident in less than 5% of total grassland area. Examples of physical damage include excessive poaching, damage from machinery use or storage, erosion caused by high levels of access, or any other damaging management activities.	N
E	Cover of bare ground is between 1% and 10%, including localised areas (for example, a concentration of rabbit warrens). For example, this could include small, scattered areas of bare ground allowing establishment of new species, or localised patches where not exceeding 10% cover.	Y
F	Cover of bracken <i>Pteridium aquilinum</i> is less than 20%.	Y
G	There is an absence of invasive non-native plant species (as listed on Schedule 9 of WCA).	Y
		Total 6/7
	Condition: Passes 6 or 7 criteria including passing essential criterion A	

Pond (retained)

Core Criteria - applicable to all ponds:		
A	The pond is of good water quality, with clear water (low turbidity) indicating no obvious signs of pollution. Turbidity is acceptable if the pond is grazed by livestock.	N
B	There is semi-natural habitat (moderate distinctiveness or above) completely surrounding the pond, for at least 10 m from the pond edge for its entire perimeter.	N
C	Less than 10% of the water surface is covered with duckweed <i>Lemna</i> spp. or filamentous algae.	N
D	The pond is not artificially connected to other waterbodies, such as agricultural ditches or artificial pipework.	Y
E	Pond water levels can fluctuate naturally throughout the year. No obvious artificial dams ² , pumps or pipework.	Y
F	There is an absence of listed non-native plant and animal species ³ .	Y
G	The pond is not artificially stocked with fish. If the pond naturally contains fish, it is a native fish assemblage at low densities.	Y
H	Emergent, submerged or floating plants (excluding duckweed) ⁴ cover at least 50% of the pond area which is less than 3 m deep.	N
I	The pond surface is no more than 50% shaded by adjacent trees and scrub.	N
Number of criteria passed		
Condition Assessment Result	Condition Assessment Score	
Results for non-woodland ponds which require assessment of 9 criteria		
Passes 9 criteria	Good (3)	
Passes 6 to 8 criteria	Moderate (2)	
Passes 5 or fewer criteria	Poor (1)	✓

Individual trees (retained Willow **and** created trees)

	Criteria Description	Criteria Passed?
A	The tree is a native species (or at least 70% within the block are native species).	Y
B	The tree canopy is predominantly continuous, with gaps in canopy cover making up <10% of total area and no individual gap being >5 m wide (individual trees automatically pass this criterion).	Y
C	The tree is mature (or more than 50% within the block are mature).	N
D	There is little or no evidence of an adverse impact on tree health by human activities (such as vandalism, herbicide or detrimental agricultural activity). And there is no current regular pruning regime, so the trees retain >75% of expected canopy for their age range and height.	Y
E	Natural ecological niches for vertebrates and invertebrates are present, such as presence of deadwood, cavities, ivy or loose bark.	N
F	More than 20% of the tree canopy area is oversailing vegetation beneath.	Y
		Total 4/6
	Condition Moderate due to passing 4 of 6 criteria and all essential criteria.	

Individual trees – (retained Cherry)

	Criteria Description	Criteria Passed?
A	The tree is a native species (or at least 70% within the block are native species).	N
B	The tree canopy is predominantly continuous, with gaps in canopy cover making up <10% of total area and no individual gap being >5 m wide (individual trees automatically pass this criterion).	Y
C	The tree is mature (or more than 50% within the block are mature).	N
D	There is little or no evidence of an adverse impact on tree health by human activities (such as vandalism, herbicide or detrimental agricultural activity). And there is no current regular pruning regime, so the trees retain >75% of expected canopy for their age range and height.	Y
E	Natural ecological niches for vertebrates and invertebrates are present, such as presence of deadwood, cavities, ivy or loose bark.	N
F	More than 20% of the tree canopy area is oversailing vegetation beneath.	Y
		Total 3/6
	Condition Moderate due to passing 3 of 6 criteria and all essential criteria.	