



Biodiversity Net Gain Assessment HMMP

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Report	Biodiversity Net Gain Assessment & Habitat Management and Monitoring Plan
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EXECUTIVE SUMMARY

Ecosupport Ltd. were commissioned by Crest Nicholson Operations Ltd to undertake a Biodiversity Net Gain Assessment at 'Former Arborfield Studios (Parcels W, Y, and Z), Arborfield Green' and detail the results of this assessment within a Habitat Management and Monitoring Plan to satisfy the statutory requirements for developers to deliver a Biodiversity Net Gain (BNG) of at least 10% to ensure that habitats for wildlife are left in a measurable better state than they were before the development.

The purpose of this BNG assessment is to quantify the biodiversity value of the site prior to its development and the predicted value post development. This is measured in biodiversity units, calculated according to the habitats present based on their size, distinctiveness and condition. This enables the quantitative calculation of the predicted change in biodiversity value as a result of the proposed development, with the objective of achieving a net gain in biodiversity.

The methodology for the onsite condition assessment undertaken 10th July 2026 was carried out in line with Natural England Statutory Biodiversity Metric habitat condition assessment protocols and the assessment uses the Statutory Biodiversity Metric calculation tool to calculate biodiversity losses and gains.

Following the incorporation of the Site design into the DEFRA Statutory Biodiversity Metric, ***on Site there is a net gain +97.92% in area habitats (or +14.87 units), a net gain of +12.12% in linear habitats (or +0.77 units), a net gain of +14.28% in watercourse habitats (or +0.27 units), and the trading rules are satisfied.*** As the required 10% net gain has been achieved on Site, no further compensation is required. This report details specific habitat management and monitoring requirements to ensure that the proposed retained, enhanced, and created habitats maintain their proposed conditions.

1.0 INTRODUCTION

1.1 Background

Ecosupport Ltd. were commissioned by Crest Nicholson Operations Ltd to undertake a Biodiversity Net Gain Assessment for the proposed development at Former Arborfield Studios (Parcels W, Y, and Z), Arborfield Green (hereafter referred to as the 'Site').

The purpose of the Biodiversity Net Gain (BNG) assessment is to quantify the biodiversity value of the Site prior to its development, and the predicted value post development. This is measured in biodiversity units, calculated according to the habitats present based on their size, distinctiveness and condition. This enables the quantitative calculation of the predicted change in biodiversity value as a result of the proposed development, with the objective of achieving a net gain in biodiversity.

This report will also address how habitats will be enhanced and created to achieve a net gain in biodiversity units and how these habitats will be managed and monitored for at least 30 years. The following points will be covered (DEFRA, 2023):

- How significant on-Site enhancements will be managed, taking into account any legal restrictions and requirements;
- When and how habitats will be monitored;
- When and how monitoring results will be reported;
- When and how management proposals will be reviewed; and
- How habitats will be restored if the management plan is not working.

1.2 Site Location and Description

The Site is a linear parcel of land bounded by Langley Common Road to the north-west and fields (also allocated for housing in the emerging Local Plan) to the north (centred on OS grid reference SU 77039 66185) (**Figure 1**). To the south and east lie existing residential neighbourhoods and Farley Hill Primary School to the south, within the Arborfield Garrison SDL.

The Site forms the northern extent of Arborfield Green, an existing development Site of around 167 hectares, which forms part of the wider Arborfield Garrison Strategic Development Location (SDL). This SDL is allocated within Wokingham Borough Council's adopted Core Strategy (2010) and also benefits from an emerging allocation in the Council's emerging Local Plan.

Figure 1. Redline boundary of the Site (Google, 2026).

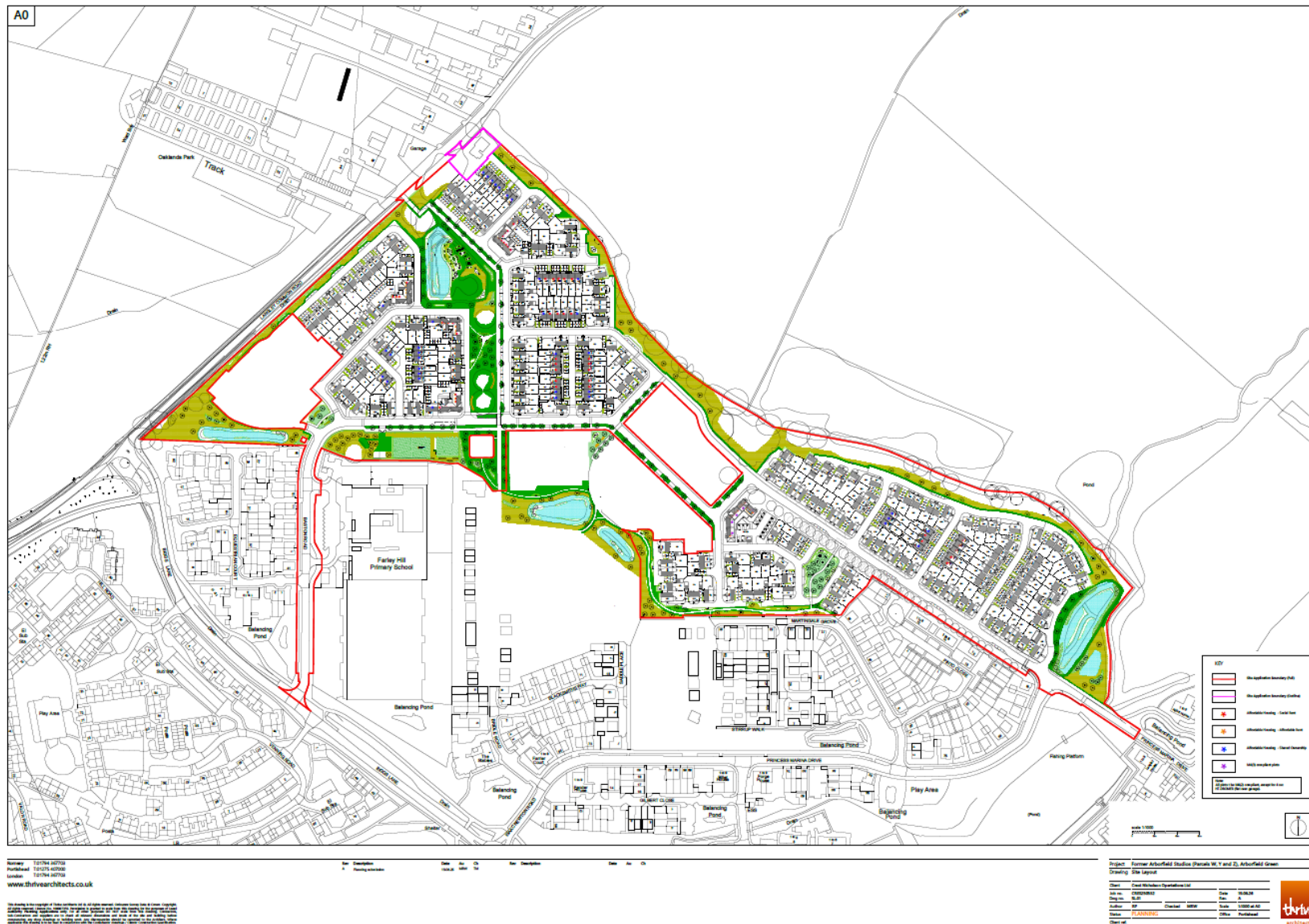


1.3 Development Proposals

The proposals are for a hybrid planning application comprising (**Fig 2**):

- Full planning application for the demolition of existing buildings and construction of new homes, together with creation of accesses, parking, green infrastructure (including landscaping, public open space, play areas), associated drainage, roads, substations, plant, bin and cycle storage and other related infrastructure works; and
- Outline planning application (all matters reserved except for access) for the construction of up to 2 new homes including through the retention (of whole or part) and conversion of the existing Langley Common Farmhouse.

Figure 2. Site Layout (Thrive architects – Rev A, June 2026).



2.0 METHODOLOGY

The methodology for the assessment follows the Natural England Statutory Biodiversity Metric habitat condition assessment protocols and uses the Statutory Biodiversity Metric calculation tool to calculate biodiversity losses and gains (DEFRA, 2024).

2.1 Habitat Assessment

Habitats on Site pre-development were identified in accordance with the categories specified for a UK Habitats survey, using Habitat Definitions Version 2.0 (UKHab Ltd., 2023). This was chosen as an appropriate habitat categorisation system as it fits within the Statutory Biodiversity Metric calculation. A condition assessment, in line with the Statutory Biodiversity Metric Condition Assessment sheets, was carried out on the Site by Senior Ecologist Darla Brown BSc (Hons) MCIEEM and Assistant Project Ecologist Laura Purnell BSc (Hons) AMRSB on the 10th July 2026. The area of identified habitats is calculated in hectares (ha). The dominant habitat type was selected, according to those defined by UKHab Ltd (2023). Where there was disparity between the UK classification for habitat type and those present within the Statutory Biodiversity Metric calculator tool, this was noted within the condition assessment tables.

2.2 Habitat Distinctiveness

Each habitat was assigned a score for distinctiveness, according to the Statutory Biodiversity Metric calculator tool (DEFRA, 2024). This ranged from Poor - High for most habitats, or Not Applicable. Using the tool, habitats were assigned a score based on their distinctiveness.

2.3 Habitat Condition

The condition of each habitat was assessed following criteria set out in the Statutory Biodiversity Metric Technical Annex 1 (DEFRA, 2024), which includes detailed assessment criteria for different habitats. Full results of the condition assessments can be found within **Section 3.0**. The condition of each habitat was assessed individually on Site but, where the condition was found to be the same across several parcels, these were grouped together.

2.4 Strategic Significance

Each habitat was assigned a strategic significance in line with the Statutory Biodiversity Metric User Guide (DEFRA, 2024). A search using the Berkshire Local Nature Recovery Strategy Map (LNRS) identified that the Site does not fall under any designations or ecological network and all habitats were classified as 'area/compensation not in local strategy' (Royal Borough of Windsor & Maidenhead, 2025).

2.5 River Condition Assessment

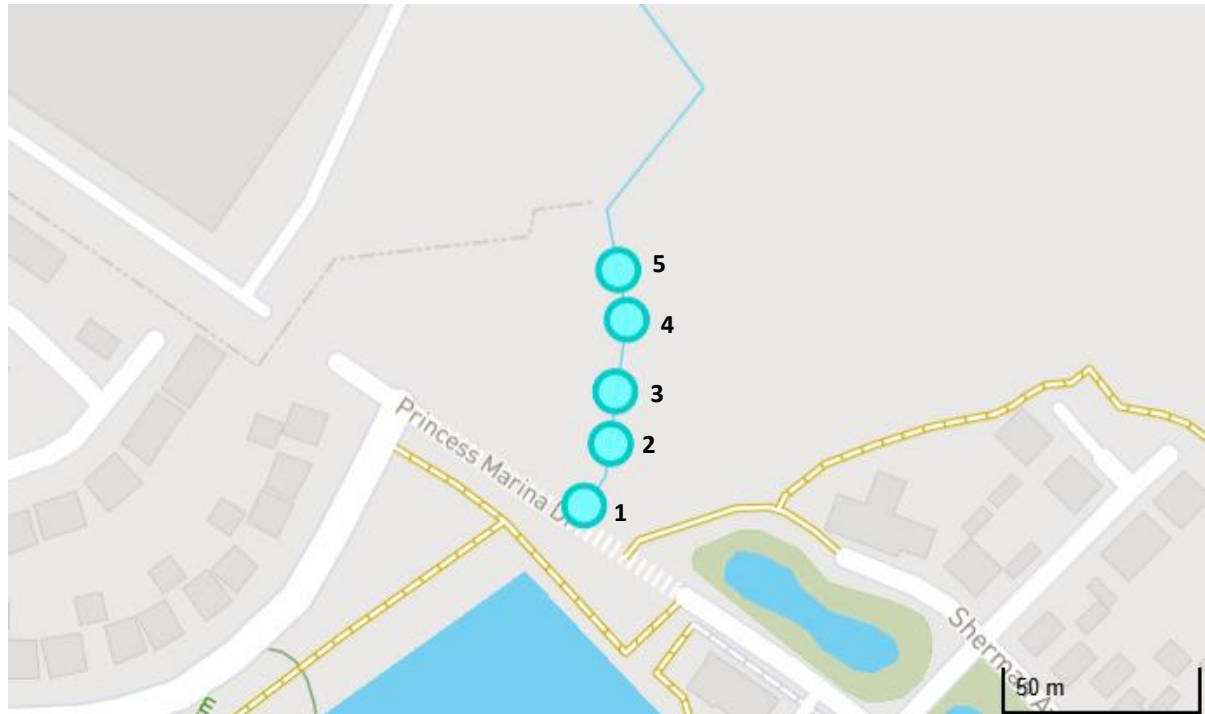
The methodology for the assessment follows the Natural England Statutory Biodiversity Metric habitat condition assessment protocols and uses the Statutory Biodiversity Metric calculation tool to calculate biodiversity losses and gains (DEFRA, 2024). The river condition assessment was undertaken as per the MoRPh survey methodology (Shuker et al., 2017, Gurnell et al., 2019, Gurnell et al., 2022).

2.5.1 The MoRPh Field Survey

The 'MoRPh' survey (Shuker et al., 2017, Gurnell et al., 2019) is used in the river condition assessment to collect field information for subreach(es) of a river with the aim of surveying at least 20% of the

total river length within the area of a proposed development. The survey was undertaken by Darla Brown BSc (Hons) (RCA Accredited) on the 10th July 2026 (**Fig 3**).

Figure 3. Locations of the MoRPH5 survey and module numbers completed at Barkham Brook (Cartographer, 2026).



MoRph field surveys should be conducted at low flow and preferably during Spring or early Summer to capture information on both vegetation and physical properties of the river and its margins. If surveying has to be conducted between mid-summer and autumn, care is needed to accurately identify and quantify physical features that may be obscured by vegetation. If surveys have to be conducted in Winter, observations of remnant and decaying vegetation from the previous summer should be used to estimate the potential presence and likely typical abundance (during the late spring, early summer) of short and tall herbs/grasses on the bank top and bank face, and aquatic vegetation morphotypes along the water-channel margin and on the river bed.

MoRph surveys capture information on short lengths (modules) of river that are approximately twice the river width (width < 5 m, length = 10 m; width > 5 m and < 10 m, length = 20 m, width > 10 m and < 20 m, length = 30 m, width > 20 m and < 30 m, length = 40 m). For 'canals and navigable rivers' and for 'large rivers', where the bed material and submerged bed features are not visible (i.e. many rivers > 20 m width and all > 30 m width), module lengths should be 50 m.

For assessing river condition, a MoRph5 subreach survey is comprised of 5 contiguous MoRph module surveys to capture information for subreaches of 50, 100, 150, 200 m in length according to the river width (250 m for canals, navigable and large rivers). MoRph5 surveys for these different river widths should be undertaken, respectively, within every 250, 500, 750 or 1000 m river length (1250 m for canals, navigable and large rivers) to provide a minimum survey of 20% of the total river/canal length within the proposed development area, to represent the range of local river conditions. In particular,

one subreach must be located to capture the most physically degraded part of the river within the project Site.

MoRPh surveys extend away from the river to 10m from the bank top edge on both banks and record information relating to the bank tops, bank faces, channel-water margin and the river bed as well as channel dimensions. The surveys are designed to be conducted on a single river thread. For distinctly multi-thread rivers, MoRPh surveys should be conducted on the thread(s) within the area of the proposed development. The survey captures the extent and character of (a) bank and bed sediments, (b) morphological and hydraulic features / habitats, (c) riparian and aquatic vegetation extent and structure, (d) presence and extent of non-native invasive plant species (NNIPS), (e) bank top land use pressures, (f) human interventions within the river channel and (g) the cross-sectional dimensions of the river channel.

2.5.2 Indicative River Type

River condition is assessed in the context of different river types. Although a continuum of river characteristics are present in nature, it is useful to identify the broad types or classes of river that may be encountered (Gurnell et al., 2016, Castro and Thorne, 2019) to provide a datum against which to assess the river's condition. At a European scale, 22 broad river types have been identified (Rinaldi et al., 2016). For the present application, these have been reduced to 15 morphological types (engineered canals and navigable rivers, large rivers, 13 river planform-bed material types (A to M)). Discrimination of these types is based mainly upon a reach-scale desk study but is supported by bed material information from MoRPh5 subreach-scale field surveys.

River types A to M are defined primarily by their planform and bed material, supported by the degree to which they are confined by their valley and also the valley gradient. These 13 types represent the range of near-natural river types likely to be encountered in England. Most rivers in England are currently single thread. However, wandering and multi-thread rivers are occasionally encountered and they would be found far more frequently under near-natural conditions.

Large rivers are those that are too wide or deep for reliable bed material information to be collected during a MoRPh field survey. Although full MoRPh surveys may be feasible on quite wide rivers, accurate survey of bed material often becomes challenging on near-natural rivers wider than 20m. Without a survey of bed material, these larger rivers cannot be allocated to one of river types A to M.

Canals and navigable rivers form the final river type. Their engineered or modified nature prevents the assignment of an indicative 'near-natural' type.

River types are referred to as 'indicative' because the river planform may have been altered by human activities rather than natural processes. The river type can only be confirmed with field observations that illustrate that the river is functioning as that type or is being constrained by various levels of human interventions/pressures.

2.5.3 Assessing River Condition

River condition is assessed using 32 condition indicators that are automatically extracted from MoRPh5 field surveys once the data have been uploaded into the information system. Each river

condition indicator is assigned a score of 0 to +4 (positive indicators) or 0 to -4 (negative indicators). Positive indicators represent the diversity (richness) and abundance (extent) of physical habitats offered by vegetation, sediment, vegetation-sediment-related physical features, and hydraulic habitats that can be observed at low flow. Negative indicators represent the extent and severity of local human interventions or pressures.

The Preliminary Condition Score for each MoRPh5 subreach is calculated as the sum of the average of the positive condition indicator scores and the average of the negative condition indicator scores for the subreach. The Preliminary Condition Score is translated into a Final Condition Score (5-good, 4-fairly good, 3-moderate, 2-fairly poor, 1-poor) based upon the River Type. The boundaries for allocating preliminary condition scores to final condition scores are listed in **Table 1**. These boundaries were defined for each river type by subdividing the numerical gap between the estimated worst and best case preliminary condition scores for each river type into 5 classes according to the top 10% of the range (Good), the next 15% (F. Good), the next 20% (Moderate), the next 25% (F. Poor) and the bottom 30% (Poor).

Table 1. Likely best and worst preliminary condition scores for each river type and lower threshold values for allocating preliminary condition scores to final condition scores (5 - good, 4 – fairly good, 3 – moderate, 2 – fairly poor, 1 – poor). The column for the River type of Barkham Brook has been circled.

River type	Canals/ navigation	Large e	A	B	C	D	E	F	G	H	I	J	K	L	M
Likely best average condition score	1.8	2.5	2.4	2.7	2.7	2.7	2.7	2.8	3.0	2.9	3.1	2.8	2.4	2.4	2.4
Lower threshold for GOOD	>1.4	>2.0	>1.9	>2.2	>2.2	>2.2	>2.2	>2.3	>2.5	>2.4	>2.5	>2.3	>1.9	>1.9	>1.9
Lower threshold for FAIRLY GOOD	>0.7	>1.3	>1.2	>1.4	>1.4	>1.4	>1.4	>1.5	>1.6	>1.6	>1.7	>1.5	>1.2	>1.2	>1.2
Lower threshold for MODERATE	>-0.1	>0.3	>0.2	>0.2	>0.2	>0.2	>0.2	>0.4	>0.5	>0.5	>0.6	>0.4	>0.2	>0.2	>0.2
Lower threshold for FAIRLY POOR	>-1.2	>-1.0	>-1.0	>-0.9	>-0.9	>-0.9	>-0.9	>-0.9	>-0.9	>-0.9	>-0.8	>-0.9	>-1.0	>-1.0	>-1.0
Likely worst average condition scores	-2.5	-2.5	-2.5	-2.5	-2.5	-2.5	-2.5	-2.5	-2.5	-2.5	-2.5	-2.5	-2.5	-2.5	-2.5

Two channel dimension indicators are also automatically extracted from MoRPh5 field surveys: River shape, Average width. These are used to support professional judgements concerning whether the channel is overdeep and thus hydrologically/ecologically disconnected to some degree from its bank tops/floodplain. This 'overdeepening' assessment is only applied to certain river types, but if the channel of those river types is judged to be overdeep, the Final Condition Score is reduced by one class (e.g. Good is reduced to Fairly Good).

2.6 Additionality

The concept of additionality requires that net gain should deliver a real increase in ecological value over and above the requirements to meet other statutory obligations. In the context of biodiversity net gain, this requires a portion of habitat enhancement and creation elements to be specifically attributed to 'biodiversity net gain' in addition to those delivering other development, environmental and legal policies or requirements, such as provisions for nutrient neutrality and alternative natural recreational greenspace.

Whilst certain enhancement actions can be used in full for contributions towards delivering net gain, land used for other mitigation and compensation actions (such as land used for nutrient mitigation or protected species mitigation/ compensation) can only count in part towards BNG (up to 100%). As such, at least 10% of the total 110% net gain delivery for a site must come from habitats/units that are not associated with delivering other requirements other than biodiversity net gain. The sustainable urban drainage (SUDs) features and green infrastructure situated beyond the footprint of the residential development area is to be utilised towards nutrient neutrality offsetting (the details of this are outlined within a separate document).

2.7 Mitigation Hierarchy

The proposed development has been designed to follow the biodiversity gain hierarchy as described in paragraph 192 of the National Planning Policy Framework (DLUHC), which sets out a list of actions when achieving a net gain on Site:

- a) Identify, map and safeguard components of local wildlife-rich habitats and wider ecological networks, including the hierarchy of international, national and locally designated sites of importance for biodiversity; wildlife corridors and stepping stones that connect them; and areas identified by national and local partnerships for habitat management, enhancement, restoration or creation; and
- b) promote the conservation, restoration and enhancement of priority habitats, ecological networks and the protection and recovery of priority species; and identify and pursue opportunities for securing measurable net gains for biodiversity.

2.8 Limitations

No significant limitations were identified during the Site visit with the survey undertaken at a suitable time of the year for habitat assessment and vascular flowering plants.

3.0 EXISTING HABITATS AND DEVELOPMENT PROPOSALS

3.1 Habitat Survey

The habitats on Site were categorised according to UK Hab Ltd. Habitat Definitions Version 2.0 (2023) as listed below (please refer to the **Baseline Habitats map appended** for information on the locations of these habitats on Site):

- g4 – Modified grassland with secondary codes scattered trees (32);
- w1g – Other woodland; broadleaved with secondary code line of trees (33);
- r1g – Other standing water with secondary code sustainable drainage system (848);
- u1b – Developed land; sealed surface with secondary codes scattered trees (32) and introduced shrub (847);
- u1b5 – Buildings;
- u1c – Artificial unvegetated; unsealed surface; and
- h3d – Bramble scrub.

3.1.1 g4 – Modified grassland with secondary codes scattered trees (32)

Modified grassland parcels are present throughout the Site which appear to be regularly managed (**Fig 4**). Species identified include Perennial Rye Grass (*Lolium perenne*), False Oat Grass (*Arrhenatherum elatius*), Willowherb species (*Epilobium* sp.), White Clover (*Trifolium repens*), White Stonecrop (*Sedum album*), Common Horsetail (*Equisetum arvense*), Creeping Cinquefoil (*Potentilla reptans*), St John's Wort (*Hypericum perforatum*), White Campion (*Silene latifolia*), Parsley species (*Petroselinum* sp.), Creeping Buttercup (*Ranunculus repens*), Field Bindweed (*Convolvulus arvensis*), Yarrow (*Achillea millefolium*), Herb Robert (*Geranium robertianum*), Bristly Oxtongue (*Helminthotheca echinoides*), and Ivy (*Hedera helix*).

Figure 4. Area of modified grassland (taken July 2026).



Several scattered trees were identified on Site (**Fig 5**). Species identified include Poplar species (*Populus* sp.), European Ash (*Fraxinus excelsior*), Sycamore (*Acer pseudoplatanus*), Field Maple (*Acer campestre*), and Oak (*Quercus robur*).

Figure 5. Scattered trees within the modified grassland on Site (taken July 2026).



3.1.2 w1g – Other woodland; broadleaved with secondary code line of trees (33)

Three lines of trees (under primary code w1g) were identified throughout the Site, forming the Site boundaries (**Fig 6**). Species identified include Poplar species (*Populus* sp.), European Ash (*Fraxinus excelsior*), Sycamore (*Acer pseudoplatanus*), Field Maple (*Acer campestre*), and Oak (*Quercus robur*).

NB. Although this woodland habitat is present on Site, the UKHab classification system requires the secondary habitat code 'line of trees' (33) to be placed under the primary woodland category (W). This is a technical mapping requirement within UKHab to ensure consistency in how linear tree features are recorded and does not imply that the feature functions ecologically as woodland.

Figure 6. Line of trees within the Site (taken July 2026).



3.1.3 w1f – Lowland mixed deciduous woodland

A small parcel of lowland mixed deciduous woodland (w1f) is present along the northern boundary (**Fig 7**). The woodland was noted to lack in understorey vegetation and woodland indicators within the ground flora. Tree species identified include Pedunculate Oak (*Quercus robur*), Ash (*Fraxinus excelsior*), and Field Maple (*Acer campestre*).

Figure 7. Lowland mixed deciduous woodland located at the north of the Site (taken July 2026).



3.1.4 r1g – Other standing water with secondary code sustainable drainage system (848)

Two Sustainable urban Drainage System (SuDS) waterbodies are present within the redline Site boundary. One is situated towards the north-west of the Site, with the other situated at the south-east of the Site. Following a review of aerial imagery, both SuDS waterbodies were constructed between 2020 and 2021.

3.1.5 u1b – Developed land; sealed surface with secondary codes scattered trees (32), introduced shrub (847)

The majority of the Site comprises of developed land; sealed surface in the form of hardstanding, with several scattered trees (**Figs 8 & 9**).

Figure 8. Hardstanding on Site (taken July 2026).



Figure 9. Scattered trees within the hardstanding on Site (taken July 2026).



3.1.6 u1b5 – Buildings

There are numerous buildings around the Site (**Fig 10**).

Figure 10. Buildings found throughout Site (taken July 2026).



3.1.7 u1c – Artificial unvegetated; unsealed surface

A small area of gravel (artificial unvegetated; unsealed surface) is present adjacent to the hardstanding car park (**Fig 11**).

Figure 11. Artificial unvegetated; unsealed surface found throughout Site (taken July 2026).



3.1.8 h3d – Bramble scrub

Bramble scrub is present forming a barrier between the Site and the adjacent woodland (outside of the redline Site boundary) (**Fig 12**). The scrub predominately consists of Bramble (*Rubus fruticosus agg.*) with some Hawthorn (*Crataegus monogyna*), Blackthorn (*Prunus spinosa*), and Field Maple (*Acer campestre*).

Figure 12. Bramble scrub near the northern boundary (taken July 2026).



3.1.9 u1 – Built-up areas and gardens with secondary code vegetated garden (828)

Towards the north of the Site, a vegetated garden is present surrounding a building.

3.2 Baseline Condition Assessment

The following tables provide detail as to the condition assessments undertaken of the non-linear (**Table 2**) and linear (**Table 3**) habitats present on Site with reference to the Statutory Biodiversity Metric Technical Annex 1 (DEFRA, 2024). All tree numbers have been referenced in line with the Arboricultural Implications Report (SJA trees, 2026).

NB. Developed land; sealed surface, buildings, artificial unvegetated; unsealed surface, introduced shrub, and Bramble scrub do not require condition assessments as they have a predetermined condition of 'N/A – Other or Condition Assessment N/A' under current guidance within the statutory metric.

Table 2. Existing non-linear habitats present on Site including details as to their condition and the condition assessment criteria that have been met / failed as per the Statutory Biodiversity Metric Technical Annex 1 (DEFRA, 2024).

Habitat Type	Area (ha)	Condition	Condition Assessment Notes	Strategic Significance	Parcel Reference - Location Notes
Modified grassland	2.738	Poor	The grassland comprised of modified grassland with <6-8 vascular plant species present per m ² . Scrub and bracken accounted for <20% of the grassland, whilst bare ground accounted for <10% of each grassland area. Despite management, physical damage was noted to be <5%. Sward height was uniformly clipped short as a result of ongoing management and maintenance, with a lack of varied sward height and structure. Furthermore, no invasive non-native plant species were identified on Site. Specifically, the grassland failed essential criterion A and criterion B.	Area not in local strategy.	MG1-9 – scattered grassland parcels and verges throughout the Site.
Artificial unvegetated ; unsealed surface	0.0881	N/A	No condition assessment is required as per The Statutory Biodiversity Metric calculation tool (DEFRA, 2024).	Area not in local strategy.	N/A
Developed land; sealed surface	9.0946	N/A	No condition assessment is required as per The Statutory Biodiversity Metric calculation tool (DEFRA, 2024).	Area not in local strategy	N/A – hardstanding and buildings.
Bramble scrub	1.0318	N/A	No condition assessment is required as per The Statutory Biodiversity Metric calculation tool (DEFRA, 2024).	Area not in local strategy.	BS1-2 – Forming the northern Site boundary.

Introduced shrub	0.0235	N/A	No condition assessment is required as per The Statutory Biodiversity Metric calculation tool (DEFRA, 2024).	Area not in local strategy.	N/A – Small scattered parcels across the Site.
Vegetated Gardens	0.0205	N/A	No condition assessment is required as per The Statutory Biodiversity Metric calculation tool (DEFRA, 2024).	Area not in local strategy.	N/A
Sustainable urban drainage system	0.0921	N/A	The SuDS on Site had varied vegetation structure, with various flowering species, no invasive non-natives were present. Specifically, criteria A, B, C, and E1 were met.	Area not in local strategy.	SuDS1-2
Lowland mixed deciduous woodland	0.1515	Poor	The woodland on Site was noted to score 3 for indicator B, with no evidence of browsing on the woodland; indicator C, with no invasive species noted; and indicator E, with native species dominating the woodland. The woodland scored 2 for indicator A, with only two-age classes present; indicator D, with 4 native tree / shrub species per parcel, dominated by field maple and oak; indicator F, with large areas of open space comprising 21-40%; and indicator H, with species in the woodland showing signs of poor physiological condition; indicator L, with some standing deadwood present but at a limited amount; and indicator M, with evidence of damage from regular mowing. Finally, the woodland scores 1 for indicator G, with no young age classes or regrowth present in the parcel; indicator I, with no woodland ground flora present; indicator J, with only one noticeable storey present in the woodland; and indicator K, no veteran trees within the woodland parcel.	Area not in local strategy.	W1

			Specifically, the woodland scores 3 for indicators B, C, and E, 2 for indicators A, D, F, H, L, and M, and 1 for indicators G, I, J, and K, overall scoring 25.		
Individual trees*	0.2565	Good	8 No. large trees were present; tree 1979 was noted to pass all criteria. It was a mature native tree; it had ecological niches present, showed no evidence of adverse impacts by anthropogenic activities, and >20% of the tree canopy oversails vegetation beneath. Tree 1910 failed criterion F, with canopy not oversailing vegetation beneath. Trees 1984, 1985, 1812, 1813, and 1814 failed criterion A, as they are non-natives Specifically, tree 1979 met all criteria. Tree 1910 failed criterion F and trees 1984, 1985, 1812, 1813, and 1814 failed criterion A.	Area not in local strategy.	7 large good trees, all retained (1812, 1813, 1814, 1910, 1979, 1984, 1985)
Individual trees*	0.1506	Moderate	9 No. medium and 1 small tree is present on Site in a moderate condition. Trees 1879 and 1885 were native but not mature; they also showed no evidence of adverse impacts by anthropogenic activities. Furthermore, they had no ecological niches and <20% of their canopy oversailed vegetation below. Specifically, the above trees met criteria A, B, and D. Trees 2011, 2009, 2010, 2012, and 1775 were native trees, they weren't mature, showed no evidence of adverse impacts from anthropogenic activities, and no ecological niches. Furthermore, >20% of their canopy oversailed vegetation below. Specifically, the above trees met criteria A, B, D, and F. Trees 1784 and 1777 were not native or mature, however, they had ecological niches present and showed no evidence of adverse impacts from anthropogenic activities and >20% of their canopy oversailed vegetation below. Specifically, the above trees met criteria B, D, E, and F.	Area not in local strategy.	9 medium and 1 small moderate trees (5 medium retained (2011, 1775, 1777, 1781, 1784) 4 lost (1885, 2009, 2010, 2012); 1 small retained (1879))

**Trees have been recorded as per the Arboricultural Implications Report (SJA trees, 2026). This assessment excludes any trees which have been approved for removal under the 2014 outline planning application (REF: O/2014/2280).*

Additionally, tree groups G1 and G121 are scheduled for partial removal. Trees subject to removal within these groups have not been counted, as per advice from SJA trees Arboricultural Planning Consultants, which state the trees had not been present during the 2014 survey; therefore, their diameter at breast height is estimated to be under 30cm. Consequently, under the DEFRA guidance (DEFRA, 2024), they do not need to be counted as lost individually since they are located within a linear tree line with a DBH of under 30cm.

Table 3. Existing linear habitats present on Site including details as to their condition and the condition assessment criteria that have been met / failed as per the Statutory Biodiversity Metric Technical Annex 1 (DEFRA, 2024).

Habitat Type	Length (km)	Condition	Condition Assessment Notes	Strategic Significance	Parcel Reference - Location Notes
Line of Trees	0.039	Moderate	The line of trees were dominated by native tree species (>70%) which have a consistent continuous canopy. At least 95% of trees are of a healthy condition with little adverse impacts on tree health. No ecological niches were identified within LOT1 and this linear feature did not have a naturally vegetated strip of 6m on either side. Specifically, a total of 3 criteria (A, B, and E) were met for the lines of trees on Site.	Area not in local strategy.	LOT1
Line of Trees	0.874	Good	This line of trees was dominated by native tree species (>70%) which have a consistent continuous canopy. Trees present within the line of trees had ecological niches through features such as cavities and loose bark. There is a 6m naturally vegetated strip present on both sides. Furthermore, at least 95% of trees are of a healthy condition with little adverse impacts on tree health. Specifically, all criteria were met.	Area not in local strategy.	LOT2
Line of Trees	0.232	Moderate	The line of trees were dominated by native tree species (>70%) which have a consistent continuous canopy. At least 95% of trees are of a healthy condition with little adverse impacts on tree health. No ecological niches were identified within LOT3 and this linear feature did not have a naturally vegetated strip of 6m on either side. Specifically, a total of 3 criteria (A, B, and E) were met for the lines of trees on Site.	Area not in local strategy.	LOT3

3.2.1 River Condition Assessment Results

3.2.1.1 MoRPh5 Baseline

The results of the MoRPh5 survey undertaken are presented in **Table 4** below which shows the score achieved for each indicator. The preliminary condition score achieved following the MoRPh5 survey was 0.583.

Table 4. Results of the MoRPh5 field survey (NNIPS = non-native invasive plant species, positive indicators underlined, negative indicators in italic font).

Location	Code	Indicator Name	Score
Bank Top	B1	<u>Bank top vegetation structure</u>	1
	B2	<u>Bank top tree feature richness</u>	0
	B3	<u>Bank top water-related features</u>	0
	B4	<i>Bank top NNIPS cover</i>	0
	B5	<i>Bank top managed ground cover</i>	-1
Bank Face	C1	<u>Bank face riparian vegetation structure</u>	1
	C2	<u>Bank face tree feature richness</u>	0
	C3	<u>Bank face natural bank profile extent</u>	3
	C4	<u>Bank face natural bank profile richness</u>	2
	C5	<u>Bank face natural bank material richness</u>	1
	C6	<u>Bank face bare sediment extent</u>	3
	C7	<i>Bank face artificial bank profile extent</i>	0
	C8	<i>Bank face reinforcement extent</i>	0
	C9	<i>Bank face reinforcement material severity</i>	0
	C10	<i>Bank face NNIPS cover</i>	0
Channel – Water margin	D1	<u>Channel margin aquatic vegetation extent</u>	0
	D2	<u>Channel margin aquatic morphotype richness</u>	0
	D3	<u>Channel margin physical feature extent</u>	0
	D4	<u>Channel margin physical feature richness</u>	0
	D5	<i>Channel margin artificial features</i>	0
Channel bed	E1	<u>Channel aquatic morphotype richness</u>	0
	E2	<u>Channel bed tree features richness</u>	0
	E3	<u>Channel bed hydraulic features richness</u>	1
	E4	<u>Channel bed natural features extent</u>	0
	E5	<u>Channel bed natural features richness</u>	0
	E6	<u>Channel bed material richness</u>	2
	E7	<i>Channel bed siltation</i>	-1
	E8	<i>Channel bed reinforcement extent</i>	0
	E9	<i>Channel bed reinforcement severity</i>	0
	E10	<i>Channel bed artificial features severity</i>	0
	E11	<i>Channel bed NNIPS extent</i>	0
	E12	<i>Channel bed filamentous algae extent</i>	0
Preliminary Condition score:			0.585

3.2.1.2 River Type Survey

The results of the River Type survey are present in **Table 5** below.

Table 5. Results of the River Type Survey.

Code	Indicator Name	Score
A1	Braiding index (BI)	0
A2	Sinuosity index (SI)	1
A3	Anabranching index (AI)	0
A4	Level of confinement (U, PC, C)	Unconfined
A5	Valley gradient	0.00513m
A6	Bedrock reaches	False
A7	Coarsest bed material size class	Gravel-Pebble
A8	Average alluvial bed material size class	Clay
	River Type:	K – Straight/sinuuous, coarsest SA, average SI

3.2.1.3 River Condition

Through the combination of the above MoRPh5 data and River type survey, the Barkham Brook achieved a baseline condition of Moderate.

3.2.1.4 Impacts of Proposals

The proposals entail the construction of residential units with associated access, infrastructure, and landscaping. The river will not be impacted upon by the development, with no development encroaching into the 10m riparian zone. As the proposals, with the exception of habitat improving enhancements such as species-rich grassland and mixed scrub, will not impact the riparian zone, bank top, bank face, or in channel vegetation or channel bed, there will be no impact to the condition of the watercourse. As such, Barkham Brook will be maintained in its current moderate condition.

4.0 PROPOSED CREATED HABITATS & NET GAIN ASSESSMENT

4.1 On-Site Proposals

4.1.1 Habitats

Table 6 indicates those habitats due to be *retained*, *created*, and *enhanced* on Site with details provided, where appropriate, as to how the necessary condition criteria will be met if relevant. All tree numbers have been referenced in line with the Arboricultural Implications Report (SJA trees, 2026).

Table 6. Non-linear habitats to be *retained, created, and enhanced* on Site including details as to the condition assessment criteria that must be met in order to achieve the targeted condition.

Habitat Type	Action	Area (ha)	Target Condition	Condition Assessment Notes	Strategic Significance	Parcel Reference – Location Notes
Urban tree	Retained	0.2565	Good	Retained in current condition targeting the same criteria (DEFRA, 2024).	Area not in local strategy.	7 large good trees (1812, 1813, 1814, 1910, 1979, 1984, 1985)
Urban tree	Retained	0.0855	Moderate	Retained in current condition targeting the same criteria (DEFRA, 2024).	Area not in local strategy.	5 medium (2011, 1775, 1777, 1781, 1784) and 1 small (1879)
Developed land; sealed surface	Retained	0.2987	N/A	Retained in current condition with no condition targeted (DEFRA, 2024).	Area not in local strategy.	Existing hardstanding in the north-western corner and a road to the south
Developed land; sealed surface	Retained	0.0194	N/A	Retained in current condition with no condition targeted (DEFRA, 2024).	Area not in local strategy.	Retained buildings

Introduced shrub	Retained	0.0205	N/A	Retained in current condition with no condition targeted (DEFRA, 2024).	Area not in local strategy.	Retained introduced shrubs
Sustainable urban drainage systems	Retained	0.0921	Moderate	Retained in current condition targeting the same criteria (DEFRA, 2024).	Area not in local strategy.	SuDS1-2
Vegetated gardens	Retained	0.0205	N/A	Retained in current condition with no condition targeted (DEFRA, 2024).	Area not in local strategy.	Retained gardens
Modified grassland	Retained	0.2042	Poor	Retained in current condition targeting the same criteria (DEFRA, 2024).	Area not in local strategy.	MG6 & 9
Lowland mixed deciduous woodland	Retained	0.1465	Poor	The woodland on Site will be retained in it's current poor condition, with general management practices implemented to achieve this, including practices such as coppicing, thinning, invasive species removal, as well as deadwood retention, which will further maintain the woodland condition.	Area not in local strategy.	W1

Modified grassland	Enhanced	0.2478	Moderate	Modified grassland will be enhanced to moderate condition in line with the Statutory Biodiversity Metric Technical Annex 1 (DEFRA, 2024). Specifically, criteria A, C, E, and F will be targeted for achievement with sowing of an appropriate seed mix and appropriate management implemented to minimise bare ground, scrub, and bracken.	Area not in local strategy.	MG3 – northern corner
Other neutral grassland	Enhanced	0.1558	Moderate	Modified grassland will be enhanced to moderate condition other neutral grassland in line with the Statutory Biodiversity Metric Technical Annex 1 (DEFRA, 2024). Specifically, criteria A, B, C and D will be targeted for achievement with sowing of an appropriate seed mix and appropriate management to minimise bare ground, scrub, and bracken and maintain a varied sward height.	Area not in local strategy.	ONG1 – western corner
Mixed scrub	Enhanced	0.4701	Moderate	Some of the existing Bramble scrub will be enhanced to moderate condition mixed scrub. This will be done in line with the Statutory Biodiversity Metric Technical Annex 1 (DEFRA, 2024). Specifically, criteria A, B, and C will be targeted for achievement through planting native shrub and tree species and appropriate management.	Area not in local strategy.	MS1 – near the northern boundary
Developed land; sealed surface	Created	4.1706	N/A – Other	No condition assessment required as per the Statutory Biodiversity Metric Technical Annex 1 (DEFRA, 2024).	Area not in local strategy.	Proposed hardstanding
Developed land; sealed surface	Created	1.841	N/A – Other	No condition assessment required as per the Statutory Biodiversity Metric Technical Annex 1 (DEFRA, 2024).	Area not in local strategy.	Proposed buildings

Introduced shrub	Created	0.1285	Condition Assessment N/A	No condition assessment required as per the Statutory Biodiversity Metric Technical Annex 1 (DEFRA, 2024).	Area not in local strategy.	Ornamental planting around the Site
Vegetated gardens	Created	2.775	Condition Assessment N/A	No condition assessment required as per the Statutory Biodiversity Metric Technical Annex 1 (DEFRA, 2024).	Area not in local strategy.	Proposed gardens
Sustainable Drainage System (SuDS)	Created	0.253	Moderate	Multiple SuDS of moderate conditions will be created in line with the Statutory Biodiversity Metric Technical Annex 1 (DEFRA, 2024). Specifically, criteria A, C and E1 will be targeted for achievement of a varied vegetation structure (with a single structural habitat component not accounting for 80% of the total habitat area), plants comprising of mostly native species (if non-native they should not be detrimental to the habitat or native wildlife) and appropriate management to ensure invasive non-native species do not exceed 5% of the total vegetated area.	Area not in local strategy.	Around open space
Allotments	Created	0.0809	Poor	Allotments of poor condition will be created on Site; since poor condition is targeted, no management practices will need to be implemented.	Area not in local strategy.	Near the southern boundary

Other neutral grassland	Created	0.2753	Poor	Other neutral grassland of moderate condition will be created in line with the Statutory Biodiversity Metric Technical Annex 1 (DEFRA, 2024). Specifically, criteria C and D will be targeted for achievement with sowing of an appropriate seed mix and appropriate management to minimise bare ground, scrub, and bracken.	Area not in local strategy.	ONG7-9
Other neutral grassland	Created	0.8149	Moderate	Other neutral grassland of moderate condition will be created in line with the Statutory Biodiversity Metric Technical Annex 1 (DEFRA, 2024). Specifically, criteria A, B, C and D will be targeted for achievement with sowing of an appropriate seed mix and appropriate management to minimise bare ground, scrub, and bracken and maintain a varied sward height.	Area not in local strategy.	ONG4-6
Modified grassland	Created	0.7027	Poor	Modified grassland of poor condition will be created in line with the Statutory Biodiversity Metric Technical Annex 1 (DEFRA, 2024). Specifically, criteria C, F and G will be targeted for achievement with management implemented to minimise cover of scrub, bracken and invasive species.	Area not in local strategy.	MG10-14, 17
Modified grassland	Created	0.4785	Moderate	Modified grassland of poor condition will be created in line with the Statutory Biodiversity Metric Technical Annex 1 (DEFRA, 2024). Specifically, criteria A, C, F, and G will be targeted for achievement with a suitable seed mix chosen, and management implemented to minimise cover of scrub, bracken and invasive species.	Area not in local strategy.	MG15, 16, 18
Mixed scrub	Created	0.1017	Moderate	Mixed scrub of moderate condition will be created in line with the Statutory Biodiversity Metric Technical Annex 1 (DEFRA, 2024). Specifically, criteria A, B, and C will be targeted for achievement through planting native shrub and tree species and appropriate management.	Area not in local strategy.	MS3-6

Individual urban trees	Created	0.9487	Moderate	233 urban trees of moderate condition will be created in line with the Statutory Biodiversity Metric Technical Annex 1 (DEFRA, 2024). Specifically, criteria A, B, D and F will be targeted for achievement with appropriate management implemented to prevent adverse impacts to health and trees placed within suitable green space areas were at least 20% of the canopy will oversail vegetation beneath.	Area not in local strategy.	233 no. trees planted throughout the Site
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4.1.2 Linear Habitats

Table 7 indicates those linear habitats due to be *retained* and *created* on Site with details provided, where appropriate, as to how the necessary condition criteria will be met.

Table 7. Linear habitats to be *retained* and *created* on Site including details as to the condition assessment criteria that must be met in order to achieve the targeted condition.

Habitat Type	Action	Length (km)	Target Condition	Condition Assessment Notes	Strategic Significance	Location Notes
Line of trees	Retained	0.039	Moderate	Retained in current condition targeting the same criteria (DEFRA, 2024).	Area not in local strategy.	LOT1
Line of trees	Retained	0.874	Good	Retained in current condition targeting the same criteria (DEFRA, 2024).	Area not in local strategy.	LOT2
Line of trees	Retained	0.232	Moderate	Retained in current condition targeting the same criteria (DEFRA, 2024).	Area not in local strategy.	LOT3
Non-native and ornamental hedgerow	Created	0.183	Poor	No condition assessment required as per the Statutory Biodiversity Metric Technical Annex 1 (DEFRA, 2024).	Area not in local strategy.	H2

Native hedgerow	Created	0.306	Poor	Native hedgerow will be created targeting poor condition in line with the Statutory Biodiversity Metric Condition Assessments (DEFRA, 2024). Although the target condition aim is listed as poor, higher criteria will be aimed to be met and Criterion B1, B2, C2, and D1 will be targeted for achievement.	Area not in local strategy.	H1
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4.1.3 Watercourse Habitats

Table 8 indicates those watercourse habitats due to be retained on Site with details provided, where appropriate, as to how the necessary condition criteria will be met.

Table 8. Watercourse habitats to be retained on Site including details as to the condition assessment criteria that must be met in order to achieve the targeted condition (the necessary planting and management required to achieve the stated condition criteria is detailed in **Section 5.0**).

Habitat Type	Action	Length (km)	Target Condition	Condition Assessment Notes	Strategic Significance	Parcel Reference - Location Notes
Other Rivers and Streams	Retained	0.157	Moderate	Condition Assessment Notes are below within Section 4.1.2.1 .	Area not in local strategy.	R1
Ditches	Created	0.06	Moderate	A ditch will be created on Site of a moderate condition in line with the Statutory Biodiversity Metric Technical Annex 1 (DEFRA, 2024). Specifically, Criteria A, C, D, E, and G will be targeted for achievement. Management will be implemented to prevent physical damage and minimise cover of filamentous algae / duckweed as well as invasive / non-native species. Additionally, the banks of the ditch will be planted with a mix of aquatic marginal vegetation.	Area not in local strategy.	D1

4.1.2.1 MoRPh5 Post Development

Enhancement measures are proposed to the area of riparian zone encroaching into the redline boundary at the far south-east of the Site, however, the enhancement measures will not impact the outcome of the condition assessment as the majority of the riparian zone is located outside of the redline boundary which already comprises of high value habitat. The predicted post-development condition score achieved following inputting the enhancements into MoRPh5 is 0.583.

Table 9. Results of the proposed enhancements when input into MoRPH5 (NNIPS = non-native invasive plant species, positive indicators underlined, negative indicators in italic font, enhancement in bold green font and negative changes in bold red font).

Location	Code	Indicator Name	Score
Bank Top	B1	<u>Bank top vegetation structure</u>	1
	B2	<i>Bank top tree feature richness</i>	0
	B3	<i>Bank top water-related features</i>	0
	B4	<i>Bank top NNIPS cover</i>	0
	B5	<i>Bank top managed ground cover</i>	-1
Bank Face	C1	<u>Bank face riparian vegetation structure</u>	1
	C2	<u>Bank face tree feature richness</u>	0
	C3	<u>Bank face natural bank profile extent</u>	3
	C4	<u>Bank face natural bank profile richness</u>	2
	C5	<u>Bank face natural bank material richness</u>	1
	C6	<u>Bank face bare sediment extent</u>	3
	C7	<i>Bank face artificial bank profile extent</i>	0
	C8	<i>Bank face reinforcement extent</i>	0
	C9	<i>Bank face reinforcement material severity</i>	0
	C10	<i>Bank face NNIPS cover</i>	0
Channel – Water margin	D1	<u>Channel margin aquatic vegetation extent</u>	0
	D2	<u>Channel margin aquatic morphotype richness</u>	0
	D3	<i>Channel margin physical feature extent</i>	0
	D4	<i>Channel margin physical feature richness</i>	0
	D5	<i>Channel margin artificial features</i>	0
Channel bed	E1	<u>Channel aquatic morphotype richness</u>	0
	E2	<i>Channel bed tree features richness</i>	0
	E3	<i>Channel bed hydraulic features richness</i>	1
	E4	<i>Channel bed natural features extent</i>	0
	E5	<i>Channel bed natural features richness</i>	0
	E6	<u>Channel bed material richness</u>	2
	E7	<i>Channel bed siltation</i>	-1
	E8	<i>Channel bed reinforcement extent</i>	0
	E9	<i>Channel bed reinforcement severity</i>	0
	E10	<i>Channel bed artificial features severity</i>	0
	E11	<i>Channel bed NNIPS extent</i>	0
	E12	<i>Channel bed filamentous algae extent</i>	0
Preliminary Condition score:			0.583

4.1.2.2 River Type Survey

The proposals will not impact the river type and as such, it will remain as K - Straight/sinuuous, coarsest SA, average SI.

4.1.2.3 River Condition

Through the combination of the above proposed enhanced MoRph5 data and River type survey, Barkham Brook will achieve the expected condition of Moderate.

4.2 Metric Calculation

Following the incorporation of the above measures into the DEFRA Statutory Biodiversity Metric, **on Site there is a net gain +98.37% in area habitats (or +14.72 units), a net gain of +12.12% in linear habitats (or +0.77 units), a net gain of +14.28% in watercourse habitats (or +0.27 units), and the trading rules are satisfied (Fig 13).** As the required 10% net gain has been achieved on Site, no further compensation is required.

Figure 13. Screenshot of the 'headline results' output from the BNG assessment undertaken for the Site using the DEFRA Statutory Biodiversity Metric.

FINAL RESULTS		
Total net unit change (Including all on-site & off-site habitat retention, creation & enhancement)	Area habitat units	14.72
	Hedgerow units	0.77
	Watercourse units	0.27
Total net % change (Including all on-site & off-site habitat retention, creation & enhancement)	Area habitat units	98.37%
	Hedgerow units	12.12%
	Watercourse units	14.28%
Trading rules satisfied?	Yes ✓	

4.3 Mitigation Hierarchy

The proposed habitat retention and creation described in the above sections follows the Biodiversity Gain Hierarchy as detailed in paragraph 193 of the National Planning Policy Framework (DLUHC, 2024). The below sections cover each of the elements of the hierarchy and how we have sought to address them in this scheme:

- **Avoid:** The majority of on-Site habitats cannot be retained because the area proposed for development is predominantly hardstanding. However, key boundary features, including most existing trees and associated linear habitats, are to be preserved, with parcels of modified grassland being enhanced and large areas of on-Site scrub are to be retained for targeted enhancement.
- **Mitigate:** In order to mitigate the loss of habitats, species-rich meadow creation, tree planting, and scrub enhancement is proposed throughout the Site.
- **Offset:** As the targeted 10% net gain has been achieved on Site, further offsetting and compensation is not required.

5.0 HABITAT MANAGEMENT

This section provides an outline of the habitat management prescriptions to create and enhance the proposed habitats within the Site to meet the desired condition criteria for the purposes of delivering biodiversity net gain.

Introduced shrubs and non-native/ornamental hedgerow do not have a target criterion under the Statutory Biodiversity Metric and as such are not subject to the Habitat Management and Monitoring requirements.

5.1 Protection of Retained Habitats

The habitats to be retained and/or enhanced (such as trees, linear features, and scrub) will be protected during the works. The works area will be fenced using Heras fencing or similar to prevent access by machinery to the retained habitats.

No vehicles will enter the protective ring fencing, and no materials will be stored within their circumference. All protective fencing must be in place prior to any construction machinery arriving on Site, before any works on Site get underway, and will remain in place until all work is completed. This will minimise the level of disturbance within the ecological buffer zones during the works and ensure the habitats and any wildlife species that may be using them are protected.

5.2 Modified Grassland

5.2.1 Proposed Planting

Modified grassland of poor condition will be created. The areas of poor condition will be seeded with Emorsgate EG22 – Strong Lawn Grass Mixture or similar (approved by an ecologist). Furthermore, parcels enhanced and created in moderate condition will be seeded with Emorsgate EL1 – Flowering Lawn Mixture or similar (approved by an ecologist). This comprises of species that are tolerant of regular mowing which includes but is not limited to Common Knapweed (*Centaurea nigra*), Birdsfoot Trefoil (*Lotus corniculatus*), Ribwort Plantain (*Plantago lanceolata*), Cowslip (*Primula veris*), Meadow Buttercup (*Ranunculus acris*), Tufted Vetch (*Vicia cracca*), Common Bent (*Agrostis capillaris*), Crested Dogtail (*Cynosurus cristatus*) and White Clover (*Trifolium repens*).

5.2.2 Management

The sowing of these seeds will be completed either during the Spring (March-May) or the late Summer (August-October) when the temperatures are warm, and the ground is dry. The seed must be surface sown at an even distribution throughout the entire landscaped area.

It is expected that the 'moderate condition' grassland areas will be managed regularly with some areas left to grow longer and other areas mown more frequently. The 'poor condition' areas will be regularly mown to a short sward height.

First year management: During the first year, all of the created grassland areas must be regularly maintained to a height of 40-60mm every 3-4 weeks (or more frequently as needed) to prevent the establishment of weeds. All arisings must be taken from Site to prevent the addition of too many

nutrients into the soil. If necessary, glyphosate-based weed killer can be used to spot treat any areas with dense patches of Nettles or Bramble.

Management Once Established: Once the seed is established after the first year, regular mowing is still expected across the 'poor condition' areas and more formal sections of the 'moderate condition' areas which will result in a shorter sward height however grass should not be cut lower than 25mm. However, some areas (such as along edges) within the 'moderate condition' grassland will be left to grow longer and mowing will also be relaxed in various areas from late June for 4-8 weeks to encourage floral diversity.

Targeted bracken and invasive plant removal should also be carried out as needed to prevent encroachment into the grassland.

5.3 Other Neutral Grassland

5.3.1 Proposed Planting

Other neutral grassland of poor and moderate condition will be created and enhanced on-Site and will be established via sowing of a suitable wildflower mix, for example Emorsgate EM3 – Special General Purpose Meadow Mixture (or similar as approved by an ecologist). This seed mix contains wild flowers and grasses. The wild flower portion includes Yarrow (*Achillea millefolium*), Agrimony (*Agrimonia eupatoria*), Betony (*Betonica officinalis*), Common Knapweed (*Centaurea nigra*), Greater Knapweed (*Centaurea scabiosa*), Wild Carrot (*Daucus carota*), Viper's-bugloss (*Echium vulgare*), Meadowsweet (*Filipendula ulmaria*), Hedge Bedstraw (*Galium album*), Lady's Bedstraw (*Galium verum*), Meadow Crane's-bill (*Geranium pratense*), Field Scabious (*Knautia arvensis*), Oxeye Daisy (*Leucanthemum vulgare*), Black Medick (*Medicago lupulina*), Sainfoin (*Onobrychis viciifolia*), Wild Parsnip (*Pastinaca sativa*), Salad Burnet (*Poterium sanguisorba ssp. sanguisorba*), Cowslip (*Primula veris*), Selfheal (*Prunella vulgaris*), Meadow Buttercup (*Ranunculus acris*), Bulbous Buttercup (*Ranunculus bulbosus*), Common Sorrel (*Rumex acetosa*), Pepper Saxifrage (*Silene silaus*), Red Campion (*Silene dioica*), Ragged Robin (*Silene flos-cuculi*), Bladder Campion (*Silene vulgaris*), Dandelion (*Taraxacum officinale*), and Tufted Vetch (*Vicia cracca*). The grass portion consists of Common Bent (*Agrostis capillaris*), Crested Dogtail (*Cynosurus cristatus*), Red Fescue (*Festuca rubra*), Smaller Cat's-tail (*Phleum bertolonii*), and Smooth-stalked Meadow-grass (*Poa pratensis*).

The ground will be prepared, and the sowing of these seeds will be completed either during the Spring (March-May) or the late Summer (August-October) when the temperatures are warm, and the ground is dry. The seed must be surface sown at an even distribution throughout the entire landscaped area.

First year management: Perennial species take at least a full year to establish. For newly sown areas the first summer will be dominated by annual weeds (species indicative of sub-optimal condition) arising from the soil seed bank and by grass growth. This should be controlled by mowing throughout the first year to minimise competition and weed seed production.

5.3.2 Management

Wildflower areas do not require any additional watering or fertiliser. Cutting a meadow and removing the clippings retains low nutrient levels in the soil and suppresses coarse grasses which would

otherwise out-compete the wildflowers. It is recommended the wildflower grassland undergoes two annual cuts. The cut grass should be dried on Site. Cuttings should be left in situ for approximately one week, after this the arisings are to be removed from Site.

It is expected that the 'poor condition' grassland areas will be managed more regularly with some areas left to grow longer and other areas mown more frequently.

First year management: Resist cutting until mid to late summer; once the first cut is done, all arisings must be taken from Site following cuts to prevent the addition of too many nutrients into the soil. Then keep short through regular maintenance of the grassland areas till the end of March of the following year.

Management Once Established: After the first year, the wildflower areas will be mown in Spring to 100mm and will then be left to flower through to late July/August. This is beneficial for nesting birds, which do not fledge until late July, as well as insects and other wildlife. After flowering, the area will undergo a hay cut with growth reduced to 50mm. Arisings will be left in situ for 1-7 days, then removed from the area. The grassland can be mown or grazed till late autumn / winter to 50mm.

To maintain maximum flowering interest and a varied sward height, sections of each grassland parcel should be managed at different times between August and September. Varying the mowing times from year to year is the best way to maintain a diverse balanced sward and minimise cover of sub-optimal species.

Targeted scrub and bracken removal will also need to be carried out as necessary to prevent encroachment into the grassland.

5.4 Mixed Scrub

5.4.1 Proposed Planting

Areas of mixed scrub will be created, and the existing area of Bramble will be enhanced to mixed scrub by planting with at least three different native woody shrub species. Native shrub species include Hazel (*Corylus avellana*), Guelder Rose (*Viburnum opulus*), Blackthorn (*Prunus spinosa*), Hawthorn (*Crataegus monogyna*) and Dogwood (*Cornus sanguinea*).

5.4.2 Management

First year management: During the first year, new plants will be watered during any periods of drought as necessary to ensure they remain in good health and areas will be weeded as needed to ensure the plants establish well. Additional clearance of Bramble around the new plants may be required occasionally during the first years to allow the plants to establish.

If tree/shrub guards, stakes, or any other plant protection is used during establishment, this will be removed by Year 5 post-planting once the trees are sufficiently mature.

Following establishment: Scrub management will be undertaken annually (as needed) to maintain a suitable matrix between grassland, scrub and other habitats. This can be achieved by manual cutting

as well as mechanical clearance outside the bird nesting season (March to August inclusive) that can be carried out to ensure the area does not become overgrown. Management will aim to maintain a scalloped natural scrub edge.

Scrub areas will be thinned every five years to allow new growth to maintain a diverse mix of ages and targeting any species that are becoming dominant. Bramble will be reduced in density annually and will be maintained at approximately 15% density of the scrub patches.

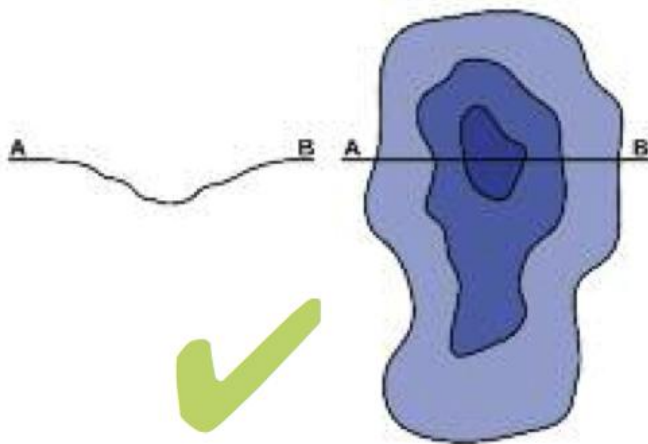
Should any vegetation die or its density become sparse, additional planting will be undertaken, replacing like-for-like. If any non-native species are identified, treatment will be carried out as necessary.

5.5 Sustainable Drainage System (SuDS) and Ditches

5.5.1 Considerations for Construction

Ideally the margins of the SuDS and ditches should be shallow. The best ecologically valuable ponds and ditches have 'gentle shelving edges'. Therefore, whilst excavating the features it will be ensured that they have sloping edges to ensure there is a shallow water environment at less than 1:5 (12°) and preferably less than 1:20 (3°) (Freshwater Habitats 2013) (**Fig 14**). It is recommended the SuDS are an approximate maximum depth of 0.9m, but the depth should vary across the SuDS. Creating shelves is one option of obtaining different depths.

Figure 14. Design of SuDS showing varying depths at a gently sloping level (Freshwater Habitats 2013).



5.5.2 Proposed Planting

It is predicted that the SuDS and ditch will be created and managed more as a grassland, with a suitable wetland seed mix, such as Emorsgate EM8 – Meadow Mixture for Wetlands (or similar as approved by an ecologist). This seed mix contains wild flowers and grasses. The wild flower portion includes Yarrow (*Achillea millefolium*), Agrimony (*Agrimonia eupatoria*), Wild Angelica (*Angelica sylvestris*), Betony (*Betonica officinalis*), Common Knapweed (*Centaurea nigra*), Meadowsweet (*Filipendula ulmaria*), Lady's Bedstraw (*Galium verum*), Meadow Vetchling (*Lathyrus pratensis*), Rough Hawkbit (*Leontodon hispidus*), Oxeye Daisy (Moon Daisy) (*Leucanthemum vulgare*), Birdsfoot Trefoil (*Lotus corniculatus*), Greater Birdsfoot Trefoil (*Lotus pedunculatus*), Ribwort Plantain (*Plantago lanceolata*), Cowslip (*Primula veris*), Selfheal (*Prunella vulgaris*), Meadow Buttercup (*Ranunculus acris*), Common

Sorrel (*Rumex acetosa*), Ragged Robin (*Silene flos-cuculi*), Dandelion (*Taraxacum officinale*), and Tufted Vetch (*Vicia cracca*). The grass portion consists of Common Bent (*Agrostis capillaris*), Star Sedge (w) (*Carex echinata*), Crested Dogtail (*Cynosurus cristatus*), Tufted Hair-grass (w) (*Deschampsia cespitosa*), Red Fescue (*Festuca rubra*), Smaller Cat's-tail (w) (*Phleum bertolonii*), and Smooth-stalked Meadow-grass (*Poa pratensis*).

5.5.3 Management

First year management: Resist cutting until mid to late summer; once the first cut is done, all arisings must be taken from Site following cuts to prevent the addition of too many nutrients into the soil. Then keep short through regular maintenance of the grassland areas till the end of March of the following year.

Management Once Established: Once the seed is established (it may take several years for full colonisation to be successful), due to the seasonal flooding of this feature, it will be managed as a meadow/grassland. After the first year, management should ensure that the feature is not cut through to July/August to give sown species opportunity to flower, prior to a main summer cut followed by cuts in autumn and spring (as required/ during drier periods). Management to reduce the sward height, however, should not be lower than 50mm.

Targeted scrub, bracken and invasive plant removal should also be carried out as needed to prevent encroachment into the habitat.

5.6 Individual (Urban) Trees

5.6.1 Proposed Planting

A total of 233 trees will be planted across the Site. Recommended species planting includes Alder (*Alnus glutinosa*), Beech (*Fagus sylvatica*), Hazel (*Corylus avellana*), Oak (*Quercus robur*), Wild Cherry (*Prunus avium*), Crab Apple (*Malus sylvestris*), Elder (*Sambucus nigra*), Field Maple (*Acer campestre*), or Small-leaved Lime (*Tilia cordata*).

Planting will be carried out in the first year. The best time to plant is late autumn and it is recommended to avoid freezing temperatures or heat. Rootgrow or Bonemeal will be applied to the new plants to encourage healthy root growth.

5.6.2 Management

5.6.2.1 Mycorrhizal Treatment

To ensure a successful establishment of the newly planted trees, it is recommended that mycorrhizal treatment to the tree roots is conducted **during the planting**, this would reduce the risk of tree mortality and increase the long-term tolerance of these trees to periods of drought or adverse soil conditions thus ensuring a higher chance of successful long-term establishment.

5.6.2.2 Weed Management

All newly planted trees must have a 1-metre exclusion zone whereby weeds are routinely and pro-actively removed for the **first 2 – 3 years**. Bark mulch is recommended around each tree and will act as an effective management method to also suppress weed colonisation.

5.6.2.3 Pruning

The trees will be subject to light pruning as required in October to ensure that they are developing healthy growth forms (but pruning will not be extensive enough to restrict expected canopy or height for their species).

5.6.2.4 Monitoring and Replacement

Trees will be monitored as part of the BNG monitoring reports. Any plants that are removed, die or become seriously damaged or defective shall be replaced like for like in the next planting season.

5.7 Native Hedgerow

5.7.1 Proposed Planting (Created Hedgerows)

New hedgerows will be created around the Site. The following native species are recommended to be included in a species mix:

- Hawthorn (*Crataegus monogyna*);
- Hazel (*Corylus avellana*);
- Hornbeam (*Carpinus betulus*);
- Holly (*Ilex aquifolium*);
- Guelder Rose (*Viburnum opulus*);
- Alder Buckthorn (*Frangula alnus*);
- Wild Cherry (*Prunus avium*);
- Crab Apple (*Malus sylvestris*);
- Elder (*Sambucus nigra*);
- Dogwood (*Cornus sanguinea*);
- Privet (*Ligustrum vulgare*); and / or
- Dog Rose (*Rosa canina*).

The new planting should result in hedgerows with a minimum of 5 plants per m². Species will be mixed throughout. As poor condition is targeted no specific management criteria have been listed.

5.8 Lowland Mixed Deciduous Woodland

5.8.1 Invasive Species Management

Invasive species (if occurring) will generally be removed by a combination of cutting back and removal of cut material from the Site, followed by treatment of stumps, roots or regrowth using an approved systemic herbicide (such as glyphosate). This process may need to be repeated over the course of several years.

Contractors will need to be shown the locations of the species and mark these where needed to help avoid native species being removed accidentally. Areas of bare ground created by this work should be left for regeneration or be replaced with understorey planting of native species.

5.8.2 Ongoing Woodland Management

5.8.2.1 Coppicing

Any Hazel understorey shrubs will be managed on a rotational coppicing scheme. This involves cutting young trees down to ground level to promote new growth and prevent over-shading. This will be rotationally implemented, with only a small portion comprising approximately 30% of Hazel coppiced every 3 years during winter months (November to March), but only once the Hazel has grown to a size that will be beneficial and appropriate.

Coppice management is best carried out on a rotation of approximately every 6-10 years for each tree, with timing staggered for plants to ensure there is continued connectivity at any given time.

This coppicing will maintain a diversity of age ranges and vertical structure in the long term and the resulting dead wood from coppicing can be used to maintain log piles as described in **Section 5.8.3**.

5.8.2.2 Thinning

In the future thinning would be beneficial in order to maintain an optimal canopy target of 75% cover. This coverage allows greater development of the understorey and will be important for maintaining the newly planted understorey and ground flora in the long term. Once necessary, selective thinning will be carried out every five years to maintain a canopy target of 75% cover. Selective thinning of poor-quality trees will re-invigorate the development of understory vegetation and woodland ground flora through increasing light levels and reduce competition from removing aggressive colonizing species.

The target trees to be removed are those showing signs of disease or poor growth; the specific target trees and areas of woodland will be determined by the supervising ecologist or arborist. Please note, all mature trees will need to be surveyed for PRFs that may be suitable for roosting bats. If any trees have PRFs, it is recommended they are retained if possible and alternative trees are selected for thinning.

5.8.2.3 Replacement & Natural Regeneration

Recommendations may also include any plants (newly planted or retained) that are removed, die or become seriously damaged or defective during the 30-year monitoring period shall be replaced like for like in the next planting season. If any of the plants fail, they will be replaced like-for-like.

Similarly, scope for tree and shrub species to establish by natural regeneration should be permitted where possible e.g., by creating space for new regeneration around existing specimens of the desired trees and shrub species. Ash regeneration could be an important part of the mix, it should not be cut out or destroyed unless suffering from Ash Dieback and would benefit from being protected.

5.8.3 Deadwood

Suitable arisings and deadwood generated from the thinning operations and vegetation clearance on Site will be retained and used to create deadwood habitat piles within suitable locations throughout 50% of all survey plots within the woodland. These will comprise of logs with a diameter of no less than 20cm and will be created from habitat management (from initial tree removal to facilitate the

access road and development alongside ongoing coppicing) carried out on Site. To maximise the benefit of these log piles for invertebrates and any small mammals that may be utilising the Site, brash and grass cuttings will also be incorporated into their design. By increasing invertebrate abundance, these log piles will also increase the foraging resources available to the bat species present on Site and provide hibernaculum for reptiles. An example of a log pile is indicated in **Fig 15** below. Standing deadwood (with suitable trees reduced to a safe height) will also be created were possible to create additional features and opportunities for wildlife.

Figure 15. Example of log pile created for biodiversity



5.9 Compliance Check

A compliance visit will be completed by a suitably qualified ecologist once the construction phase of the development has been completed.

The check will be conducted annually for the first 5 years post-completion, and every 5-years thereafter until year 30 to ensure the habitat remains in place. The compliance check will be carried out during a suitable time of year and in suitable weather conditions.

On completion of the visit, a Biodiversity Net Gain (BNG) monitoring report will be compiled, including the following:

- Assessment of habitats against the objectives defined in this management plan;
- Any presence of target species noted during the compliance check;
- Date stamped photographic evidence taken from fixed monitoring points, of which will be the central point of each land parcel per habitat type as listed in **Section 4.0**, during the first compliance check after the construction phase;
- Detailed Site notes including a condition assessment for each habitat type listed in **Section 4.0** (where appropriate) using the condition criteria within the Technical Annex 1 (DEFRA, 2023b, updated 2024);
- Detailed specific recommendations on management actions to promote growth and establishment of target species / habitats including timescales for undertaking actions (if required) and marked Site plans to show the actions;
- Management of the above recommended actions must be carried out in the next phase and report of any details; and

- Each BNG monitoring report will be written up in accordance with the BNG Habitat Monitoring Report template provided by Natural England (2023) and will be sent to the LPA.

5.10 Safeguarding

The developer and project manager will be responsible for briefing all Site personnel of the ecological sensitivities of the Site. If any protected species are encountered during the construction works, it will be the responsibility of the project manager to cease works and immediately contact an ecologist for advice.

5.11 Post-Construction Habitat Creation

Table 10 below depicts the indicative timings associated with the habitat creation and enhancements to be undertaken after all construction works on Site have been completed. This is considered to be year 1 of the management plan. For those activities that can be undertaken at any time of year, the earliest possible time is recommended. Each area will be created at different times due to the phased nature of the project.

5.12 Management Responsibilities

Crest Nicholson Operations Ltd will assume responsibility for the management and maintenance of the newly created and enhanced habitats. When required, responsibility will include ensuring all management works are completed and qualified ecologists, arborists or landscape managers are contracted as needed. An annual management timeline of all habitats has been provided in **Table 11** and management works should continue in perpetuity.

A formal review process will be implemented when objectives and management recommendations are not reached / roles and responsibilities are not fulfilled as agreed. The details of this formal review process are as below:

- A suitably qualified ecologist will visit the Site to conduct the compliance check (detailed in **Section 5.9**);
- The compliance check will include the write up and submission of a BNG monitoring report;
- The ecologist will review the success for BNG that the previous recommendations or management actions have for the target species / habitats;
- The project manager is contacted by the ecologist and is informed of the recommendations or management actions which have not been fulfilled to identify what or who is responsible;
- The BNG monitoring report will include a section addressing any raised issues identified during the compliance check; and
- The BNG monitoring report is submitted to the LPA for review and comment.

5.13 Years 2 – 30 Management / Monitoring Table

Once the initial works covering the first year of management / monitoring have been completed as outlined in **Table 10**, the longer-term management objectives for the ecological features on Site will need to be implemented (which have been outlined in detail in the above sections). **Table 11** below provides an overview of the actions required and the timings of when they should be complete (covering years 2– 30 post construction).

Table 10. Habitat creation and year 1 management and monitoring of the habitats on Site.

General Activity	Specific Activity	Dates / Timing	Description
Habitat Retention Line of trees and individual trees (Section 5.1)	Installation of protective fencing	Anytime – pre-commencement of works	Protective fencing will be installed around the retained habitats on Site to ensure that they are not damaged during the works
Habitat Creation Modified grassland (Section 5.2)	Planting	Ideally Autumn or Spring	- Establish the areas ‘poor’ of grassland through sowing of Emorsgate EG22 – Strong Lawn Grass Mixture (or similar as approved by an ecologist). - Establish the areas ‘moderate’ of grassland through sowing of Emorsgate EL1 – Flowering Lawn Mixture (or similar as approved by an ecologist).
	Year 1 Management	Routinely as required	- Control annual weed growth by regular mowing throughout the first year to minimise competition and weed seed production. - If necessary, glyphosate-based weed killer can be used to spot treat any areas with dense patches of Nettles or Bramble.
Habitat Creation Other Neutral Grassland (Section 5.3)	Planting	Ideally Autumn or Spring	- Ground will be prepared as per planting details - The areas scheduled to be created as other neutral grassland will be sown with Emorsgate EM3 – Special General Purpose Meadow Mixture (or similar as approved by an ecologist)
	Year 1 Management	Routinely as needed	- Annual weeds may be arising from the soil seed bank and by grass growth during the first year. - This should be controlled by mowing to 40-60mm throughout the first year to minimise competition and weed seed production.
Habitat Creation and Enhancement Mixed Scrub (Section 5.4)	Plant native shrub species	Late Autumn	- Within the area of Bramble scrub to be enhanced, native shrubs will be planted - Species will be mixed around the existing area of scrub to create better diversity of species and structure - In the newly created scrub areas, plant the mix of native shrub species randomly with species interspersed
	Year 1 Management	Routinely as needed	- Weed around newly planted shrubs as necessary - Water if needed during dry periods during establishment

			Replace any dead shrubs like-for-like in the next planting season
Habitat Creation Sustainable Drainage System (SuDS) and Ditches (Section 5.5)	Excavation of SuDS	Anytime	The SuDS and ditch will have a varying depth across the features. Creating shelves is one option of obtaining different depths.
	Planting	Ideally Autumn or Spring	Area will be established through seeding of Emorsgate EM8 Meadow Mixture for Wetlands (or similar as approved by an ecologist).
	Year 1 Management	Routinely as required	- Resit cutting till mid-late summer, then control annual weed growth by regular mowing throughout the first year to 30-50mm to minimise competition and weed seed production. - If necessary, glyphosate-based weed killer can be used to spot treat any areas with dense patches of Nettles or Bramble.
Habitat Creation Individual (Urban) Trees (Section 5.6)	Planting	Late Autumn	- Trees will be planted as specified - Rootgrow or Bonemeal and mycorrhizal treatment should be applied upon planting to promote root growth. - Stakes and ties will be erected for stability.
	Year 1 Management	Routinely as required	- Trees should be watered as needed during dry periods - Replacement of dead or damaged trees in the next planting season. - Trees will be subject to light pruning in October - Weeding at the tree base and replacement of wood mulch as necessary to suppress weeds
Habitat Creation Native Hedgerow (Section 5.7)	Planting	Late Autumn ideally, in suitable weather	Native species will be planted (with species recommendations in Section 5.7).
	Year 1 Management	Late September – October	- Begin 3 year cutting cycle in which a portion of the hedges on Site are cut in the first year, another portion in the second year and no cutting in the third year. - Use hand tools and avoid the use of flails.

Table 11. Schedule of monitoring and management in Years 2 – 30 for all habitats (as per **Sections 4.0 and 5.0**).

General Activity	Specific Activity	Dates / Timing	Description
Modified Grassland (Section 5.2)	Years 2-30 Management	Year-round	- The grassland will be subject to regular mowing to a height no lower than 25mm - Areas of moderate condition will be rotationally mown, allowing for areas to grow longer and encourage floral diversity.
	Removal of undesirable species	As needed	Targeted scrub, Bracken and invasive species removal will be carried out as necessary.
Other Neutral Grassland (Section 5.3)	Years 2-30 Management	Mid to late Summer and Autumn	- Mown in spring to 100mm and left to flower until late July/August - Conduct initial hay cut after flowering with growth reduced to 50mm - Manage sections of each grassland parcel at different times from late June to the end of August, varying timings year to year - Carry out a second cut in late autumn or early spring
	Removal of undesirable species	As needed	Targeted scrub, bracken and invasive species removal will be carried out as necessary.
Mixed Scrub (Section 5.4)	Cutting back / thinning	Late September – October	- Scrub will be cut back annually as needed to ensure areas do not become overgrown or encroach into the grassland. - Thinning will take place routinely every 5 years. - Different areas will be cut back / thinned on rotation to maintain a diverse age range and Bramble will be maintained at approximately 15% of the scrub area. - Any scrub encroaching into adjacent habitats will be cut back as needed.
	Invasive species removal	Late September – October	Removal of invasive species will be undertaken as necessary if they establish on Site.
Sustainable Drainage System (SuDS) and Ditches (Section 5.5)	Years 2 – 30 Management	Spring and mid to late Summer	- Mow to 100mm in Spring. - Leave to flower until late July / August. - Conduct single hay cut after flowering with growth reduced to 30-50mm. - Further cuts to be implemented in autumn and spring as required (subject to access during wetter periods).

	Removal of undesirable species	Winter i.e. October - February (outside of bird nesting season)	Targeted scrub, bracken and invasive species removal will be carried out as necessary.
Individual (Urban) Trees (Section 5.6)	Weed management	Routinely as required	Remove weeds from a 1m area around the base of the trees for the first 2-3 years.
	Pruning	October	The trees will be subject to light pruning as required in October to ensure that they are developing healthy growth forms
	Monitoring	Annually in Years 1-5 then every 5 years late Winter – early Spring	- Trees will be inspected during compliance checks - General health will be assessed with remedial action recommended as necessary. - Any plants that are removed, die or become seriously damaged shall be replaced like-for-like in the next planting season. - Stakes and ties will be monitored and removed once necessary or maximum in year 5.
Native Hedgerow (Section 5.7)	Years 2-30 Management	Late September – October	- Continue the 3 year cutting cycle. - A proportion of hedges (at least 30%) should wherever possible be left to grow for 7-10 years. - Maintain a height of 3-4m wherever possible. - Use hand tools and avoid the use of flails. - Use coppicing or laying to fill gaps. - If hedgerow size needs to be reduced (e.g. in more formal areas), avoid cutting the top and cut only one side.
	Monitoring	Late Winter – Early Spring Annually in Years 1-3 Bi-annually in Years 4-10	Suitably qualified ecologist will assess the health of the hedgerow and recommend any necessary remedial action

	Replacement Planting	Late Autumn ideally, in suitable weather (for planting) Late September – October (for coppicing / laying)	- Removed, dead or damaged specimens will be replaced like for like in the next planting season. - Coppicing / laying will be used to gap up / thicken any thin hedgerows.
Lowland Mixed Deciduous Woodland (Section 5.8)	Hazel Coppicing Scheme (if Hazel is present or planted within the woodland)	Every 3 years Rotationally every 6-10 years	- Any Hazel will be managed on a rotational coppicing scheme. This involves cutting young trees down to ground level to promote new growth and prevent over-shading. This will be rotationally implemented, with only a small portion, approximately 30% of Hazel coppiced every 3 years during winter months (November to March), but only once the Hazel has grown to a size that will be beneficial and appropriate. Coppice management is best carried out on rotation of approximately every 6-10 years for each tree, with timing staggered for plants to ensure there is continued connectivity at any given time. - The newly planted woodland will not be subject to coppicing or thinning until at least years 10 – 15.
	Thinning	Anytime, every 5 years	- Woodland will be thinned (i.e., trees removed) to benefit retained trees and promote regeneration. The optimal canopy target is 75% cover, which allows greater development of the understory to create a more diverse woodland. Selective thinning will be carried out every five years to maintain a canopy target of 75% cover. - Any newly planted woodland will not be subject to coppicing or thinning until at least years 10 – 15.
	Replacement Planting	Routinely where required	Should any understorey scrub or tree species die or become diseased, they will be replaced like-for-like within the next planting season.
	Log Piles Creation	Whenever undertaking management works	Log piles will be created within ~50% of all survey plots. These will comprise of logs with a diameter of no less than 20cm and will be created from removal of trees and habitat management
	Log Piles Management	Routinely where required	Log piles must be kept remained on Site and will be replaced should they be moved or rot (with the rotting wood kept in place).

Compliance check (Section 5.8)	Monitoring report	Annually for the first 5 years, then every 5 years until year 30 Must be conducted during a suitable time of year and weather conditions	• A report will be produced by an ecologist to provide details on all management, assessment of habitats, additional management requirements (if required), management to be carried out in the next phase and reporting on any delays • Each report will be sent to the LPA
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6.0 CONCLUSION

The Biodiversity Net Gain Assessment for the Former Arborfield Studios (Parcels W, Y and Z), Arborfield Green demonstrates that the proposed development delivers a clear and measurable uplift in biodiversity in accordance with the statutory 10% BNG requirement. Using the Natural England Statutory Biodiversity Metric and undertaking condition assessments on 10th July 2026, the baseline biodiversity value of the Site was quantified and compared against the post-development habitat proposals.

Following integration of the final Site design into the DEFRA Statutory Metric, the development achieves a **+98.37% net gain in area habitats (+14.72 units)**, **+12.12% net gain in linear habitats (+0.77 units)**, and **+14.28% net gain in watercourse habitats (+0.27 units)**, with all trading rules satisfied. As the required 10% net gain is exceeded on-Site, no off-Site compensation is necessary.

This Habitat Management and Monitoring Plan sets out the long-term management prescriptions and monitoring commitments required to ensure that all retained, enhanced and newly created habitats reach and maintain their target conditions. Implementation of this plan will secure the predicted biodiversity gains and ensure the Site is left in a measurably better ecological state than prior to development.

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8.0 APPENDIX

A – Baseline Habitats Map

