



LAND OFF HEMPSTED LANE, GLOUCESTER

Biodiversity Net Gain Assessment

2019-056

MARCH 2022

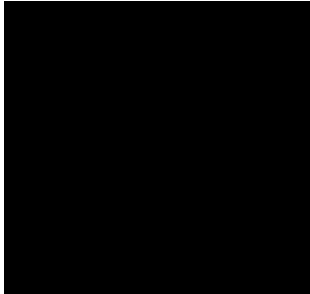
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Biodiversity Net Gain Assessment

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Checker

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Report No 2019-056

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Version Control

Version	Date	Author	Changes
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1 INTRODUCTION

1.1 Background

1.1.1 This report sets out the findings of a Biodiversity Net Gain Assessment (BNGA) in relation to Land off Hempsted Lane, Gloucester (hereafter referred to as, 'the site') for the erection of up to 245 dwellings, public open space, landscaping and sustainable drainage system (SuDS) and vehicular access points from Hempsted Lane.

1.2 Site Location and Setting

1.2.1 The 12.22ha site is situated immediately south of the village of Hempsted, approximately 1.5km to the south west of Gloucester City centre and the River Severn passes at a short distance to the west. The M5 is 4km at its closest to the southeast, beyond which lies the Cotswolds.

1.2.2 The site comprises three arable fields with a south facing gradient that are bordered by hedgerows, treelines, dry ditches and scrub. A drainage pond is located within the southern extent of the site. The site is also bordered by a stream to the south.

1.3 Purpose of the Biodiversity Net Gain Assessment

1.3.1 This assessment was undertaken in relation to a consultation response received on 16th June 2020 from Gloucestershire Council County Ecologist, Dr Elizabeth Pimley.

- *"The development needs to show a positive Biodiversity Net Gain, which can be calculated using the DEFRA Metric."*

1.3.2 Thus, this BNGA aims to:

- Provide baseline data to classify the type, distinctiveness, condition and strategic significance of habitats prior to and post development.
- Ensure that baseline habitat conditions are classified in a robust and consistent manner, and that classification is based on the best available data at the time of assessment.
- Clearly identify data collection methods and any limitations.
- Calculate baseline pre- and post-development habitat units for the site based on current development proposals.
- Aim to achieve BNG on-site wherever possible; with off-site contribution measures being considered as an alternative option if required.

2 PLANNING POLICY AND LEGISLATION

2.1 Overview

- 2.1.1 The National Planning Policy Framework (NPPF) sets out that planning policies and decisions should contribute to and enhance the natural and local environment by, inter alia, minimising impacts on and providing net gains for biodiversity. The Natural Environment Planning Policy Guidance (PPG) (updated June 2021) provides further explanation on how this should be done. In particular, it addresses principles across a broad spectrum of topics targeting biodiversity conservation, from individual site and species protection through to the supporting of ecosystem services, and the use of local ecological networks to support the national Nature Recovery Network. The PPG promotes the delivery of measurable Biodiversity Net Gain through the creation and enhancement of habitats alongside development.
- 2.1.2 The Government has confirmed its intention to mandate Biodiversity Net Gain at a minimum of 10%. This has now been enacted into UK law through the adoption of the Environment Act 2021. Whilst the Act has now received Royal Assent, there will be two-year transition period to allow for the making of necessary secondary legislation before the 10% Biodiversity Net Gain requirement is legally enforceable. Notwithstanding this, many Local Planning Authorities have started to include biodiversity net gain requirements into Local Plan policy.
- 2.1.3 The emerging Gloucester City Plan, Policy E2 states that *“Development proposals must demonstrate the conservation of biodiversity, in addition to providing net gains appropriate to the ecological network. Potential adverse impacts on natural environment assets, including the connectivity of the ecological network, must be avoided or satisfactorily mitigated in line with the objectives of the Gloucestershire Local Nature Partnership or a future equivalent body. In exceptional circumstances, where an impact cannot be avoided or mitigated on site, compensatory measures, including the use of biodiversity offsets will be considered to provide an overall net gain”*. While the emerging local plan does not stipulate a percentage requirement for biodiversity net gain, endeavours have been made to secure a 10%.

3 METHODOLOGY

3.1 Good Practice Principles

- 3.1.1 Biodiversity net gain has been defined as ‘development that leaves biodiversity in a better state than before, and an approach where developers work with local governments, wildlife groups, landowners and other stakeholders in order to support their priorities for nature conservation’ (Baker, 2016).
- 3.1.2 Good practice principles for biodiversity net gain are set out within Table 1.1 of Biodiversity Net Gain: Good practice principles for development (Baker et al., 2019). The key principles include:
 - Apply the ‘Mitigation Hierarchy’ (in line with CIEEM Guidelines for Ecological Impact Assessment (EclA)) (CIEEM, 2018) and be ‘additional’ by achieving outcomes that exceed existing obligations.
 - Avoid losing biodiversity which cannot be off-set elsewhere (e.g. irreplaceable habitats).
 - Address risk (e.g. difficulty of achieving habitat creation / enhancement for net gain).
 - Make a ‘measurable’ net gain contribution (e.g. calculated using an appropriate metric) and ensure that calculations consistent and transparent (i.e. limitations and assumptions are clearly identified).
 - Ensure that net gain design achieves the best outcome for biodiversity (this may require both quantitative and qualitative assessment) and create a net gain legacy for long-term benefits.

3.2 Desk study

- 3.2.1 In order to inform an assessment of the habitat types and condition, a desk study was undertaken.
- 3.2.2 Table 1 summarises the various sources of information utilised for the desk study and the information that was obtained.

Table 1: Sources of Information

Source	Information Obtained
Ordnance Survey mapping and online aerial imagery (from Magic Maps; Google Earth)	Aerial photography published on commonly used websites will be studied to: place habitats present within the site in the wider context and to assess changes to habitats since baseline information was recorded so that an assessment of reliability can be made.
Land off Hempsted Lane, Gloucester – Preliminary Ecological Appraisal Report (Wardell Armstrong, September 2019)	Preliminary Ecological Appraisal, produced prior to the Ecological Impact Assessment, was used to obtain recent desk study data and previous baseline habitat data.
Land off Hempsted Lane, Gloucester – Ecological Impact Assessment – (Wardell Armstrong, March 2020)	Ecological Impact Assessment submitted as part of the previous planning application was used to obtain recent desk study data and previous baseline habitat data.

3.3 Extended Phase 1 Habitat Survey

- 3.3.1 To inform the Ecological Appraisal, an extended Phase 1 Habitat Survey was undertaken on 1st April 2022 by a suitably qualified ecologist from Wardell Armstrong. Previous surveys were undertaken May / June 2019. In addition, a detailed botanical survey and condition assessment of the on-site habitats was undertaken on 5th April 2021 by Henry Gunning BSc, MSc, ACIEEM. Any significant changes to baseline habitats were also noted. Weather conditions during the survey were overcast.
- 3.3.2 The habitats within the survey area were mapped and are shown at an appropriate scale on the Phase 1 Habitat Plan (Wardell Armstrong, 2021) within APPENDIX A.

- 3.3.3 The Biodiversity Metric 3.1 works best where habitat types are classified using UK Habitats Classification methodology (UKHab Working Group, 2020). As such, tab G-9 'Translation Phase 1' of the Metric was used to translate Phase 1 habitats into UKHab codes provided within the Metric. This informed the calculation of baseline biodiversity units.

3.4 Condition Assessment

- 3.4.1 Habitat condition was assigned following guidance from the 'Technical Supplement' document (Natural England, 2021) which accompanies the Biodiversity Metric 3.1 Assessment criteria. Full condition assessments for baseline habitats are provided in Appendix C.

3.5 Calculation of Biodiversity Units

- 3.5.1 The Biodiversity Metric 3.1 (April 2022) was used to calculate the change in biodiversity units and the overall percentage of gain / loss achieved.
- 3.5.2 Metric calculations have been undertaken by Senior Ecologist, Henry Gunning ACIEEM.
- 3.5.3 Pre-development baseline habitat areas were calculated using measurements taken from measuring the baseline habitats illustrated on the Habitats Plan in Appendix A. Post-development habitats were calculated based on the Development Framework Plan shown in Appendix B.
- 3.5.4 Habitat condition for created habitats was assigned taking a precautionary approach and with consideration of biotic and operational phase conditions (i.e. those which may limit the extent to which 'good' condition is likely to be reached).
- 3.5.5 The Biodiversity Metric 3.1 calculator should be read in conjunction with this report.

3.6 Strategic Significance

- 3.6.1 The criteria within the Biodiversity Metric 3.1 was assessed by determining if habitat areas within the site occur within any strategic locations for biodiversity, form part of a designated site for nature conservation or are identified within local plans such as Ecological Networks (MAGIC).

3.7 Trading Summary

- 3.7.1 'Trading Up' is a concept which requires 'conserving through offset components of biodiversity that are of a higher conservation priority (for example, because they are more irreplaceable and vulnerable) than those affected by the development project for which the offset is envisaged' (BBOP, 2018). For example, should non-irreplaceable habitats be lost / impacted as a result of proposed development, offsets should be achieved through the creation / enhancement of habitat of the same or higher distinctiveness, where environmental conditions are appropriate and where it generates the greatest benefits for biodiversity.

3.8 Assumptions & Limitations

- 3.8.1 It should be noted that the accuracy of habitat area measurement is limited by the form of baseline data collection and resolution of development proposal plans. In this instance baseline habitat areas have been calculated by cross referencing the illustrative Habitats Plan (Appendix A) with aerial imagery. Post-development habitat areas have been measured from the Development Framework Plan (Appendix B).
- 3.8.2 River units have not been assessed within this report as no development footprint occurs within the watercourse or within 10m of the riparian zone. The closest developable areas are greater than 60m from the stream. The hedgerow which runs along the top of the bank will be retained and semi-natural habitats will be created in place of arable crop. Therefore, no impacts are anticipated on river habitats and the development will provide net gains on adjacent habitats (as illustrated on the Development Framework Plan – Appendix B)
- 3.8.3 The Development Framework Plan is indicative at this stage of the planning process and is subject to change. The Development Framework Plan does not illustrate, at this stage, all habitat types and condition which are represented in this report and therefore assumptions have been made on the sizes of different habitat parcels. However, this report can be used for further iterations of the Development

Framework Plan as the project evolves into detailed design.

4 RESULTS

4.1 Existing Habitats Condition Assessment

Cropland – Temporary grass and clover leys

Habitat Description

- 4.1.1 Most of the site comprised sown arable land with narrow poor semi-improved grassland margins. During the most recent survey, on 5th April, the fields were recently sown with a single species grassland ley.
- 4.1.2 This habitat was categorised as arable (Phase 1 Habitats Survey classification), which equates to ‘Cropland – Temporary grass and clover leys’ under UKHabs classification.

Habitat Condition

- 4.1.3 The condition of Cropland – Temporary grass and clover leys is already pre-defined in the metric which is stipulated as N/A – Agricultural. This gives a score of 1.

Ponds (Non-priority Habitat)

Habitat Description

- 4.1.4 A large pond (c. 1700m²) was recorded within the southern extent of the site. The pond was surrounded by the arable habitat and 15m from the southern hedgerow (H1). In previous surveys the pond was dry and included species indicative of damp conditions such as Bulrush (*Typha latifolia*) and Soft-rush (*Juncus effuses*) were present. Marginal species including Great Willowherb (*Epilobium hirsutum*), Hoary Willowherb (*Epilobium parviflorum*), Redshank (*Persicaria maculosa*), Common Sorrel (*Rumex acetosa*) and Thistle (*Asteraceae* sp.). During the update habitat condition survey in April 2022, the pond contained very shallow water (c. 20mm) appeared to have been cleared recently of vegetation and had common reed and rushes starting to emerge.

Habitat Condition

- 4.1.5 Due to the various anthropogenic influences described above, the pond only passes 3 of 9 condition criteria as per the BNG technical supplement (criteria 6, 7 & 9). Thus, the pond is assessed as being in poor condition.

Hedgerows

- 4.1.6 There are seven hedgerows within the survey area which are predominately located around the boundaries of the site (H1, H3, H4, H6 and H7). H5 extends partway into the site from the northern boundary and H2 partway into the site from the southern boundary. Note that the hedgerows for this document are labelled differently from the previous EclA (Wardell Armstrong, 2019). These have been illustrated on the Phase 1 Habitat Plan in Appendix A.
- 4.1.7 Table 2 below provides a classification, description and condition of each hedgerow:

Table 2: Hedgerow Condition Assessment

Hedgeorw	UKHabs Classification	Description	Condition
H1	Native Hedgerow with trees - Associated with bank or ditch	A 1m x 1m intact, natvie sponceis-poor hedgerow with trees. The hedgerow is adjacent to the stream and spans across the entire south boundary and around the residential buildings in the south west corner. Elm and Blackthorn were dominant species throughout. Hawthron was recorded less frequently and a single	Fails 5 of 10 attributes (with trees) – Moderate Condition

Hedgeorw	UKHabs Classification	Description	Condition
		mature Oak and Ash tree were observed.	
H2	Native Hedgerow - Associated with bank or ditch	A 2m x 1.5m intact, native species-poor hedgerow with trees. The hedgerow has a ditch running along the western edge. Blackthorn and Elm were the dominant species. Elder was recorded rarely.	Fails 2 of 8 attributes – Good Condition
H3	Native Hedgerow - Associated with bank or ditch	A 2.5m x 1.5m intact, native species-poor hedgerow along the western boundary adjacent to Rea Lane. Dominated by Elm with occasional Elder.	Fails 3 of 8 attributes – Moderate Condition
H4	Native Hedgerow	A 1.5m x 2m intact, native species-poor hedgerow along the northern boundary. The hedgerow backs onto residential properties to the north. Species included Elm, Hawthorn and Blackthorn	Fails 3 of 8 attributes – Moderate Condition
H5	Native Hedgerow - Associated with bank or ditch	A 1m x 1m intact, native species-poor hedgerow. The hedgerow runs from the northern boundary into the centre of the site. Species included Elm, Hawthorn, Elder and Blackthorn. Shallow ditch runs along the eastern edge of the hedgerow.	Fails 5 of 8 attributes – Poor Condition
H6	Native Species Rich Hedgerow with Trees	A 1.5m x 1.5m defunct, native species-rich hedgerow with trees. Backs onto the northern boundary and residential gardens. Species are a mix of native and ornamental trees including Garden Pivet, Hawthron, Magnolia, Elm, Holly, Field Maple, Beech and Yew.	Fails 4 of 10 attributes (with trees). However, fails both attributes in core groups B & C – Poor Condition
H7	Native Species Rich Hedgerow with Trees	A 1.5m x 1.5m intact, native species-rich hedgerow with trees. The hedgerow runs along the eastern boundary adjacent to Hempsted Lane. Species included Elm, Field Maple, Hawthorn, Blackthorn and Silver Birch.	Fails 3 of 8 attributes – Moderate Condition

4.2 On-site Post-intervention Habitat Creation and Enhancement

4.2.1 Post-intervention habitat creation and enhancement which will be delivered alongside development (as illustrated on the Development Framework Plan) includes the following:

- Retention of the existing hedgerows throughout the site. Minor losses of hedgerow will occur at H2, H5 and H7 due to vehicular and pedestrian access through the site. Following the mitigation hierarchy, the proposed development has retained, where possible, priority hedgerow habitat.

Thus, no hedgerow is completely lost to development.

- Hedgerow H5 and H6 are in poor condition as per the Technical Supplement guidance and have therefore been enhanced within the metric. There are sufficient gaps to warrant the opportunity to enhance H6 with infill planting of native species. It is assumed that all hedgerows will benefit from the removal of agricultural practices and the addition of adjacent semi-natural habitat. Also, there is scope to also increase species-richness in various hedgerows through infill planting of a variety of native species.
- Creation of 0.26km of hedgerow is proposed, an extension of H2. Based on the Development Framework Plan, it is assumed that all of the new hedgerow can be Native Species Rich Hedgerow with trees - Associated with bank or ditch.
- Creation of 1.84ha of thicket planting (mixed scrub - native shrub and tree Mix) along the south and west boundaries of the site. A target condition of 'moderate' has been assigned.
- Creation of c. 1.76ha of wildflower grassland (other neutral grassland). All wildflower grassland has a target condition of poor, although there is scope for this to be increased through sufficient management and protection from footfall. In this instance, a higher condition is currently not required to achieve a 10% net gain. This is proposed through a combination of species-rich grassland seeding and sowing a wet tolerant, species-rich grassland within the SuDs basin, see below.
- Retention of the pond in the southern extent of the site. Enhanced from poor to moderate condition and seeded with a species rich, wet tolerant grassland mix.
- Creation of a sustainable drainage feature (SuDS) is proposed. This basin is to be seeded with a wildflower seed mix, tolerant of wet conditions. Thus, has been assessed as other neutral grassland, as above.
- Creation of c. 4.30ha of amenity grassland (modified grassland) within the development. This includes c. 2.12ha of Public Open Space (POS) amenity grassland, c. 1.71ha of vegetated gardens (70:30 split with developable area as per BNG Metric 3.1 Technical Guidance) and bioswales proposed across the site (c. 0.47ha).
- Creation of 0.47ha of bioswale between the development parcels. This has been assigned a poor condition.
- Planting of 160 small (c. 0.07ha) of native trees planted within, and around the periphery of the site. A target condition of 'moderate' has been assigned to this new habitat.

4.3 Biodiversity Unit Calculations

4.3.1 Biodiversity Metric calculations have been based on the above assumptions in terms of habitat creation and enhancement.

4.3.2 Based on the Biodiversity Metric 3.1 calculations, the proposed development alone (inclusive of on-site intervention) would result in an overall gain of 3.43 habitat units (13.84% net gain) and a gain of 3.92 hedgerow units (31.81% net gain). A summary of changes in habitat areas / hedgerow length is provided in Table 3 below

Table 3: Quantitative Assessment of Biodiversity Impact

Factor	Habitats (ha)	Hedgerows (km)
Total on site area / length (baseline)	12.22 ha	1.34
Total site units (baseline)	24.78	12.32

Factor	Habitats (ha)	Hedgerows (km)
Area / length retained	0.00	1.00
Units retained	0.00	10.36
Area / length enhanced	0.18	0.30
Baseline units enhanced	0.70	1.62
Area / length lost	12.04	0.04
Units lost	24.08	0.34
Post-intervention Units On-site	28.21	16.24
Net Project Units	3.43	2.09
Total project % change	13.84%	31.81%

4.3.3 In terms of area habitats, the Scheme will not result in any loss of ‘very high’, ‘high’ or medium distinctiveness habitats; with the loss of 12.04ha of ‘low’ distinctiveness habitats (cropland).

4.3.4 In terms of linear habitats, the Scheme will result in small losses of ‘high’ and ‘medium’ distinctiveness habitats (c. 0.02km and 0.015km, respectively).

4.4 Trading Summary

4.4.1 The losses of ‘low’ distinctiveness habitats can be offset by provision of habitats of the same or higher distinctiveness. Thus, the loss of cropland has been offset by creating greater distinctiveness habitats including new wildflower meadow (other neutral grassland) and thicket planting (mixed scrub) in addition to habitats of the same distinctiveness such as amenity grassland. A target of moderate condition has been set for newly created habitats such as mixed scrub which is considered to be an achievable objective within the context of the new development with the exception of more conventional poor condition habitats found within development schemes such as vegetated gardens and amenity grassland. Thus, the trading rules have been satisfied.

4.5 Ecological Functionality

4.5.1 A qualitative assessment of the biodiversity impact of the scheme is provided in Table 4 below. The Biodiversity Net Gain was assessed to ensure that the scheme design delivers the best and most appropriate habitat measures which maintain and enhance ecological functionality of a site and deliver benefits for local biodiversity.

4.5.2 The proposed scheme was compiled in close liaison with the design team to retain and protect key

corridors where possible and create new areas of open space, whilst maintaining viability. The scheme design has been informed by a full suite of habitat and protected species surveys (Wardell Armstrong, Ecological Impact Assessment, 2020).

Table 4: Qualitative Assessment of Biodiversity Impact

Baseline Habitat	Ecological Functionality	Impact	Post-development
Cropland	Sub-optimal habitat for biodiversity, although provides some roosting and nesting opportunities for ground nesting birds.	Loss of 12.04ha	Areas of thicket scrub, hedgerow and wildflower planting will be created around the south and west extent of the site. This new resource will maintain a sufficient biodiverse corridor and increase floral diversity, improving invertebrate diversity and provide new opportunities for birds, bats and other mammal species.
Hedgerows	Provide shelter, foraging and nesting resource.	Loss of 0.04km	Creation and enhancements to existing hedgerows will improve connectivity, foraging and nesting resources. Creation of mixed scrub (as above) will further compliment and strengthen existing boundaries.

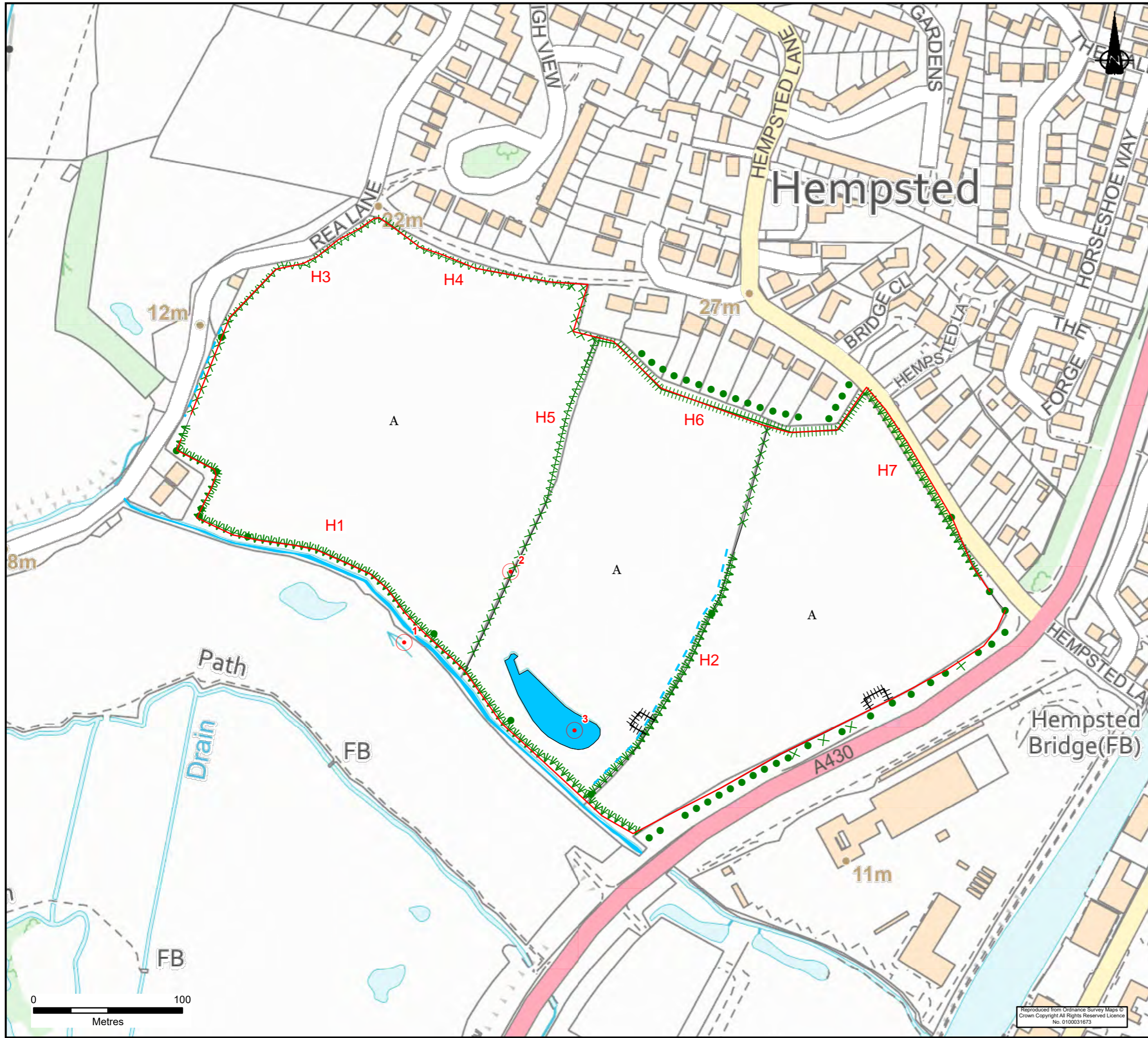
5 DISCUSSION

- 5.1.1 Biodiversity Net Gain calculations, using the Biodiversity Metric 3.1 (April 2022) have been undertaken for the proposed development at Land off Hempsted Lane, Gloucester. Baseline habitat calculations have been informed by Phase 1 habitat survey work and a desk-stop study. Post-development calculations have been made based on the indicative Development Framework Plan. Assumptions and limitations to the assessment have been highlighted where relevant and identified in the Metric calculator which should be reviewed in conjunction with this report.
- 5.1.2 A unit gain of 3.43 habitat units (13.84% net gain) was identified following the completion of baseline and on-site post intervention calculations. This score was achieved through the creation of significant areas of semi-natural habitat within the scheme. Creation and enhancement of existing hedgerows has resulted in a gain of 3.92 hedgerow units (31.81% net gain).
- 5.1.3 As such the scheme has the potential to exceed the 10% net increase in biodiversity, in line with Chapter 15, paragraph 174 of the NPPF and the Environment Act 2021.
- 5.1.4 It is recommended that these calculations are revisited at the detailed design stage of the project when further information will be available. Implementing biodiversity net gain is often secured via a planning condition requiring the submission of a 'Biodiversity Gain Plan' which reflects the habitats to be created and enhanced to achieve a net gain along with a 30 year maintenance programme.

6 REFERENCES

- Baker, J., (2016). Biodiversity Net Gain: Good practice principles for development. CIEEM, CIRIA & IEMA.
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- Chartered Institute of Ecology and Environmental Management, 2018. Guidelines for Ecological Impact Assessment in the UK and Ireland: Terrestrial, Freshwater, Coastal and Marine version 1.1. Winchester: CIEEM.
- National Planning Policy Framework (2021). Ministry of Housing, Communities and Local Government.
- UKHAB Working Group (2020). UK Habitats Classification Habitat Definitions Version 1.1.

APPENDIX A – Habitats Plan



KEY

- Site Boundary
- Dry Pond
- Stream
- A Cultivated/disturbed land - arable
- XXX Scrub - scattered
- Broadleaved Parkland/scattered trees
- VVV Intact hedge - native species-rich
- VVV Hedge with trees - native species-rich
- HHHHH Hedge with trees - species-poor
- HHHHH Fence
- Dry ditch
- Target Notes

Classifications in accordance with Handbook for Phase 1 Habitat Survey - A technique for Environmental Audit (JNCC 2010)

REV	Removal of Target Notes relating to badger activity	20/09/2019	EF	AB	AB
REVISION	DETAILS	DATE	DRAWN	CHKD	APPD
CLIENT					
GLADMAN DEVELOPMENTS LTD					
PROJECT					
HEMPSTED LANE, GLOUCESTER					
DRAWING TITLE					
PHASE 1 HABITAT PLAN					
DRG No.	GM10710-002		REV	B	
DRG SIZE	A3	SCALE	1:2,500	DATE	20/09/2019
DRAWN BY	EF	CHECKED BY	KW	APPROVED BY	AB

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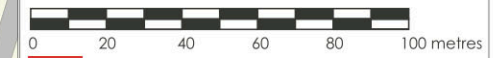
- BIRMINGHAM
- BOLTON
- CARDIFF
- CARLISLE
- EDINBURGH
- GLASGOW
- LONDON
- MANCHESTER
- SHEFFIELD
- STOKE ON TRENT

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APPENDIX B – Development Framework Plan



CD2.5



- Site Boundary: **12.22ha**
- Residential development: **5ha**
(190 dwellings @ 38 dph)
- Low density residential development: **0.71ha**
(23 dwellings @ 32 dph)
- Green Infrastructure: **6.51ha**
- Existing trees and hedgerows retained
- Proposed thicket/woodland planting
- Street trees
- Native tree planting
- Wildflower/long grass
- Existing drainage basin
- Existing watercourses
- Proposed swales
- Proposed drainage basin
- Bridleway
- Public footpath
- Cycle way
- Spine street
- Secondary streets
- Private drives
- Recreational footways
- Play areas
(LEAP: Locally Equipped Area of Play
NEAP: Neighbourhood Equipped Area of Play)
- Contours

Structural landscaping incorporated in the west of the Site, to filter views of the built form from the west

Recreational footways will link to the existing public rights of way within and adjoining the Site

Proposed swales will convey surface water run-off into the drainage basin

Existing hedgerows retained within green corridors within the proposed development

Secondary streets to be tree-lined on at least one side, to break up the built form and create an attractive environment

Spine street to be tree-lined on both sides, to break up the built form and create an attractive environment

Proposed access off Hemsted Lane. New native hedgerow and tree planting incorporated behind the access radii and visibility splays

A LEAP and NEAP will be provided within the new parkland area, to provide play space for children

Lower density housing within the south of the development, to create an appropriate transition to the countryside to the south

Large new area of informal parkland created in the south of the Site, incorporating new thicket and woodland planting, as well as new areas of native trees and wildflower, and recreational footways. This parkland will create a transitional area between the built form to the north and the countryside to the south, and filter views of the new homes

Existing drainage basin retained, and seeded with long grass/meadow mix

Proposed swales will convey surface water run-off into the drainage basin

A	04.04.22	JC	Minor updates
Rev	Date	By	Description

CSA
environmental

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Ashwell, Hertfordshire SG7 5NT

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e ashwell@csaenvironmental.co.uk
w csaenvironmental.co.uk

Project	Land off Hempsted Lane, Gloucester		
Title	Development Framework Plan 2022		
Client	Gladman Developments Ltd		
Scale	1:2000 @ A3	Drawn	SG
Date	April 2022	Checked	RR
Drawing No.	CSA/6036/103	Rev	A

APPENDIX C – Habitat Condition Assessments

Lakes – Ponds (non-priority habitat) Condition Assessment Criteria		Pass / Fail
1	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.	Fail
2	There is semi-natural habitat (i.e. moderate distinctiveness or above) for at least 10 m from the pond edge.	Fail
3	Less than 10% of the pond is covered with duckweed or filamentous algae	Fail
4	The pond is not artificially connected to other waterbodies, either via streams, ditches or artificial pipework.	Fail
5	Pond water levels should be able to fluctuate naturally throughout the year. No obvious dams, pumps or pipework.	Fail
6	There is an absence of non-native plant and animal species.	Pass
7	The pond is not artificially stocked with fish. If the pond naturally contains fish, it is a native fish assemblage at low densities.	Pass
8	In non-woodland ponds, plants, be they emergent, submerged or floating (excluding duckweeds), should cover at least 50% of the pond area that is less than 3 m deep.	Pass
9	The surface of non-woodland ponds is no more than 50% shaded by woody bankside species.	Pass

Condition Assessment Result	Condition Assessment Score	
If 3 criteria assessed:		
<ul style="list-style-type: none"> • Passes 9 of 9 score criteria; 	Good (3)	Condition score – Poor
<ul style="list-style-type: none"> • Passes 6, 7 or 8 of 9 	Moderate (2)	
<ul style="list-style-type: none"> • Passes 0, 1, 2, 3, 4 or 5 of 9 criteria 	Poor (1)	