

Unit 6, The Wincombe Business Centre, Shaftesbury, Dorset, SP7 9QJ Email: info@darwin-ecology.co.uk www.darwin-ecology.co.uk

# Biodiversity Net Gain Assessment

Mampitts Community Hub Mampitts Green Shaftesbury SP7 8GR

May 2024

Darwin Ecology Ltd Registered Office: 8 Layton Lane, Shaftesbury, Dorset SP7 8EY Company No. 07654823

1.	EXECUTIVE SUMMARY	4
2.	INTRODUCTION AND BACKGROUND	6
3.	LEGISLATIVE AND POLICY BACKGROUND	7
	National Planning Policy	7
	Dorset Biodiversity Strategy	9
4.	METHODOLOGY	11
5.	BIODIVERSITY NET GAIN ASSESSMENT	13
6.	RESULTS AND EVALUATION	20
7.	REFERENCES	21
	APPENDICES	

QUALITY CONTROL						
The information which we have prepared and provided is true, and has been prepared and provided in accordance with the Chartered Institute of Ecology and Environmental Management's Code of Professional Conduct.						
Prepared by	Ecologist Agnes Rutter BSc MSc	29 May 2024				
Reviewed by	Senior Ecologist Jessie Forster BSc (Hons)	30 May 2024				
This report remains valid for 12 months from date of issue. Survey data are valid for 12-24 months from the date the survey was undertaken.						

Copyright Darwin Ecology Ltd.

This report is intended for the commissioning party only and should not be copied or reproduced in any way without prior written permission from Darwin Ecology Ltd.

This report has been prepared for the sole use of the client. Any third party referring to this report or relying on the information contained herein, does so entirely at their own risk.

Whilst every effort has been made to guarantee the accuracy of this report, it should be noted that living creatures are capable of migration and whilst protected species may not have been located during the survey duration, their presence may be found on site at a later date.

The views and opinions contained within the document are based on a reasonable timeframe between the completion of the survey and the commencement of any works. If there is any delay between the commencement of works that may conflict with timeframes laid out within this document, or have the potential to allow the ingress of protected species, a suitably qualified ecologist should be consulted.

It is the duty of care of the landowner/developer to act responsibly and comply with current environmental legislation if protected species are suspected or found prior to works.

# 1. EXECUTIVE SUMMARY

- 1.1. This report has been produced to provide the results of the Biodiversity Net Gain calculation at Mampitts Green, Shaftesbury SP7 8GR in order to ensure compliance with the *National Planning Policy Framework (2023)* (NPFF) regarding no net-loss of biodiversity.
- 1.2. The site proposals at Mampitts Green comprise construction of a Community Hub building, associated parking and improvements to the open space to the east Mampitts Meadow. Additional native mixed scrub, species rich hedgerow with trees and individual tree planting, along with enhanced management of modified grassland to good condition and other neutral grassland is also proposed to achieve biodiversity net gain for the site.
- 1.3. Biodiversity Net Gain Assessments calculate the change in ecological value at a site by comparing the number of 'biodiversity units' within the site pre- and post-construction, for both linear habitats and areas of habitat, and demonstrating measurable loss or gain. The ecological value of the site is expressed as a percentage change in total Biodiversity Units following implementation of the proposals. Various forms of the metric are available, the most current being *DEFRA: The Biodiversity Metric 4.0*, which has been used to complete this assessment.
- 1.4. Baseline habitats include modified grassland, bramble scrub and mixed scrub. One section of the modified grassland will be lost to the building and driveway and one large section of modified grassland will be retained and enhanced for biodiversity gain, all other habitats will be retained as a result of the development. Proposed habitats include developed land (buildings), modified grassland, other neutral grassland, mixed scrub and individual urban and rural trees.
- FINAL RESULTS 0.74 Habitat units Total net unit change 0.32 Hedgerow units (Including all on-site & off-site habitat retention, creation & enhancement) Watercourse units 0.00 Habitat units 19.80% **Total net % change** 11.25% Hedgerow units (Including all on-site & off-site habitat retention, creation & enhancement) 0.00% Watercourse units **Trading rules satisfied?** Yes 🗸
- 1.5. The results of the metric can be summarised as follows:

1.6. The Biodiversity Metric 4.0 demonstrates +19.80% change in habitats units and +11.25% change in hedgerow units.

1.7. Provided the proposed habitats are managed competently, the proposed development will be in compliance with the NPPF. It is recommended that a biodiversity management plan is prepared to ensure the habitats created meet their target distinctiveness and condition.

# 2. INTRODUCTION AND BACKGROUND

- 2.1. This report has been produced to provide the results of the Biodiversity Net Gain Calculations for Mampitts Green, Shaftesbury SP7 8GR<sup>1</sup> in order to ensure compliance with the *National Planning Policy Framework (2023)* regarding no net-loss of biodiversity.
- 2.2. The site proposals at Mampitts Green comprise construction of a Community Hub building, associated parking and improvements to the open space to the east Mampitts Meadow.
- 2.3. This assessment is based on the landscape proposals as shown in **Appendix 1**.

## Site Overview

2.4. The site is located in Shaftesbury, a market town in Dorset. Surrounding the site to the north, west and south are suburban houses with medium sized gardens and some recreational parks throughout the area. There is a large network of agricultural fields to the east of the site with areas of woodland (see **Figure 1**).



Figure 1: Site location within the local landscape Copyright Google Earth Pro (April 2024)

<sup>1</sup> OS Grid ST 87503 23018

#### 3. LEGISLATIVE AND POLICY BACKGROUND

#### **National Planning Policy**

- 3.1. The National Planning Policy Framework (2023) aims to minimise impacts on biodiversity and provide net gains in biodiversity where possible, contributing to the Government's commitment to halt the overall decline in biodiversity. Chapter 15 'Conserving and enhancing the natural environment' details what local planning policies should seek to consider with regard to planning applications.
- 3.2. Planning policies and decisions should contribute to and enhance the natural and local environment by:

*174 a)* Protecting and enhancing valued landscapes, sites of biodiversity or geological value and soils (in a manner commensurate with their statutory status or identified quality in the development plan);

174 b) Recognising the intrinsic character and beauty of the countryside, and the wider benefits from natural capital and ecosystem services – including the economic and other benefits of the best and most versatile agricultural land, and of trees and woodland;

*174 d)* Minimising impacts on and providing net gains for biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures;

175) Plans should: distinguish between the hierarchy of international, national and local designated sites; allocate land with the lease environmental or amenity value, where consistent with other policies in this Framework; take a strategic approach to maintaining and enhancing networks of habitats and green infrastructure; and plan for the enhancement of natural capital at a catchment or landscape scale across local authority boundaries;

176) Great weight should be given to conserving and enhancing landscape and scenic beauty in National Parks, the Broads and Areas of Outstanding Natural beauty which have the highest status of protection in relation to these issues. The conservation and enhancement of wildlife and cultural heritage are also important considerations in these areas, and should be given great weight in National Parks and Broads. The scale and extent of development within all these designated areas should be limited, while development within their settings should be sensitively located and designed to avoid or minimise adverse impacts on the designated area.

3.3. Specific policies regarding habitats and biodiversity comprise:

179) To protect and enhance biodiversity and geodiversity, plans should:

*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.

*180)* When determining planning applications, local planning authorities should apply the following principles:

*a)* If significant harm to biodiversity resulting from a development cannot be avoid (through locating on an alternative site with less harmful impacts), adequately mitigated, or, as a last resort, compensated for, then planning permission should be refused;

*b)* Development on land within or outside of Sites of Special Scientific Interest, and which is likely to have an adverse effect on it (either individually or in combination with other developments), should not normally be permitted. The only exception is where the benefits of the development in the location proposed clearly outweigh both its likely impact on the feature of the site that make it of special scientific interest, and any broader impacts on the national network of Sites of Special Scientific Interest;

*c)* Development resulting in the loss or deterioration of irreplaceable habitats (such as ancient woodland and ancient or veteran trees) should be refused, unless there are wholly exceptional reasons and a suitable compensation strategy exists; and

*d)* Development whose primary objective is to conserved or enhance biodiversity should be supported; while opportunities to improve biodiversity in and around development should be integrated as part of their design, especially where this can secure measurable net gains for biodiversity or enhance public access to nature where this is appropriate.

181) The following should be given the same protection as habitats sites:

*a)* Potential Special Protection Areas and possible Special Areas of Conservation;

b) Listed or proposed Ramsar sites; and

*c)* sites identified, or required, as compensatory measures for adverse effects on habitats sites, potential Special Protection Areas, possible Special Areas of Conservation, and listed or proposed Ramsar sites.

#### **Dorset Biodiversity Strategy**

- 3.4. The Dorset Biodiversity Strategy was published in 2003 by the Dorset Biodiversity Partnership. In line with the national UK Biodiversity Action Plan (UK BAP), 32 of the 45 UK Priority Habitats were identified as occurring in Dorset. In addition, a third of the 560 UK BAP Priority Species occur in Dorset.
- 3.5. The Dorset Biodiversity Audit (2003) also identified local priority species based on local threat, decline, rarity and the significance of the local population. Several species are either extinct or possibly extinct in the county, but are included within the assessment. Where these species persist elsewhere they may return of their own accord if conditions are suitable.
- 3.6. The Dorset Biodiversity Strategy aims to achieve the following:
  - Translate national targets for species and habitats, as specified in the UK BAP into effective action at the local level.
  - Identify conservation targets for species and habitats appropriate to the local area, and reflecting the values of people locally.
  - Develop local partnerships to ensure that programmes for biodiversity conservation are maintained in the long term.
  - Provide a basis for monitoring progress in biodiversity conservation, at both local and national levels.

Key Biodiversity Principles

- 3.7. In order to enhance the overall ecological quality, extent, capacity, structure and functioning of the ecological network the following principles should be followed:
  - Manage existing, restored, enhanced, and newly created habitats of importance for wildlife.
  - Avoid changing land-use of sites where this would;
    - directly affect the habitat resulting in a reduction or loss of habitat quality and species present.
    - indirectly impact on surrounding habitats
    - lead to further fragmentation of semi natural habitat.
  - Restore and, where possible, buffer, link, connect and extend habitats of importance to wildlife. Examples include; corridors (e.g. hedges), or 'stepping stones' (e.g. ponds and

small woods), through which species can move, to create a habitat matrix essential to many species;

- help protect special sites by creating buffer zones to guard against threats such as pollution or changes in water level
- create large areas for wildlife, where nature conservation is the primary objective
- target effort around key areas e.g. designated sites/ Sites of Nature Conservation Importance, and areas which link and buffer these sites.
- Monitor existing, restored, enhanced and newly created habitats of importance for wildlife to ensure;
  - policies/ activities are effective, and adjusted if not
  - the Strategy adapts to changing circumstances
  - existing wildlife interest is not neglected in favour of new projects
  - data are gathered, collated and disseminated to maintain and enhance our knowledge of Dorset's wildlife.

## Dorset Biodiversity Appraisal Protocol

- 3.8. The Dorset Biodiversity Appraisal Protocol (DBAP) assists in addressing the impacts on biodiversity from planning applications. The DBAP is designed to meet the requirements of Natural England Protected Species Standing Advice and to address the mitigation hierarchy as set out in the National Planning Policy Framework (2021). Development must avoid, mitigate, and compensate impacts on biodiversity, and requires development to provide biodiversity net gain. Dorset Council have committed to the principle of net gain for biodiversity and require enhancements to be clearly over and above the required mitigation and compensation:
  - All householder applications for alterations and extensions must provide a minimum of one nest box for birds or one built-in tube for bats.
  - All new houses / buildings on the edge of developments backing onto open countryside must have built-in bat roosting tubes.
  - All new residential developments must include bird nesting and bat roosting provisions built-into the fabric of new buildings with 50% of all new houses on residential developments having built-in provision for bats such as tiles, tubes, bricks and boxes mounted within lofts and 50% of all new houses on residential developments having built-in boxes for birds reliant upon buildings such as swift, swallow and house martin.
  - Residential developments must also include suitable lighting schemes, hedgehog friendly gaps in garden fencing between houses, bee bricks (for developments of a single new dwelling upward; a minimum of two bee bricks per dwelling) and fruit trees.

# 4. METHODOLOGY

#### **Biodiversity Net Gain Assessment**

- 4.1. Biodiversity Net Gain Assessments calculate the change in ecological value at a site by comparing the number of 'Biodiversity Units' within the site pre and post construction for both linear habitats and areas of other habitats. The ecological value of the site is expressed as a percentage change in total Biodiversity Units following the completion of the proposed development. This is an indicator of what the proposed development's impact would be on the site's existing ecological value and will establish if a net loss of biodiversity has been avoided.
- 4.2. The biodiversity calculations were undertaken using the Biodiversity Metric 4.0, the User Guide, Technical Supplement and Condition Assessment Sheets.

#### **Calculation Components**

- 4.3. The Biodiversity Metric 4.0 takes account of all the habitats on site prior to development and post development using UK Habitat Classification System (UKHabs). Using this metric, area habitats are measured in hectares and inputted to three decimal places. Linear habitats are measured in Kilometres to the nearest three decimal places.
- 4.4. The Biodiversity Metric further assesses all habitats using the following:
- 4.5. *Distinctiveness* Habitats are automatically given a distinctiveness score based on habitat type. This ranges from 'High' to 'Low'. 'High' distinctiveness habitats include those listed as Habitats of Principal Importance under the NERC act. Habitats of low wildlife value (such as ornamental planting) are given a 'Low' distinctiveness score.
- *4.6. Condition-* Habitat conditions are assessed for each individual habitat type using the technical supplement. Habitat condition uses criteria such as botanical diversity and invasive species cover.
- 4.7. Strategic Significance- This relates to the spacial location of a habitat type and if the location is 'ecologically desirable'. Habitats located in areas considered desirable are given larger weighting within the metric.
- 4.8. Once the post-development Biodiversity Units have been calculated, the mitigation hierarchy is applied. Application of the mitigation hierarchy is one of the guiding principles for biodiversity no net loss / net gain proposals. Through its application, the hierarchy highlights actions to avoid, minimise or restore biodiversity losses on site, and account for unavoidable losses off site.
- 4.9. The difference between the baseline Biodiversity Units and those calculated on the proposed development design indicate the number of units that would be needed to deliver no net loss or a net gain for biodiversity. Using this information the habitat types and the

size of the area that would be needed off site to deliver no net loss or net gain can be identified if required.

- 4.10. The area calculations of existing and proposed habitat areas are made using QGIS.
- 4.11. The proposed habitats were calculated from the site landscaping proposals.

#### **Good Practice Principles**

- 4.12. Good practice principles for biodiversity net gain are set out in Table 1.1 of the Biodiversity Net Gain: Good Practice Principles for Development (Baker *et al, 2019*). The key principles include:
  - Apply the Mitigation Hierarchy (CIEEM, 2018) and be additional by achieving outcomes that exceed existing obligations.
  - Avoid losing biodiversity which cannot be off-sett elsewhere for example irreplaceable habitats such as ancient woodland.
  - Address any risk (e.g. difficulty of achieving habitat creation or enhancement for net gain.
  - Make a measurable net gain contribution for the site and ensure it is achievable.

#### **Assumptions and Limitations**

- 4.13. The accuracy of the habitat area measurements is limited by the form of the baseline data collection and resolution of development proposals plans. In this instance the baseline habitats for the site have been calculated by cross referencing illustrative habitat plans and aerial imagery. Post development habitats have been measured using QGIS by georeferencing the proposed layout to the baseline dataset.
- 4.14. The proposed habitat baseline is calculated using both the landscaping plans and professional opinion on the target conditions that can be attained for each habitat type with proficient management. Therefore, all proposed habitat types rely on implementation of a long-term management plan and planting in line with the provided landscape proposals. Further information on this is provided in the conclusion.

# 5. BIODIVERSITY NET GAIN ASSESSMENT

#### **Baseline Habitats**

5.1. Below is a summary of the habitats and condition assessments recorded on site during the Phase 1 habitat survey conducted by Principle Ecologist Mike Cummings MSc (Hons) MCIEEM and Ecologist Elvin Delaney BSc (Hons) on 15 March 2023, and an update walkover survey and BNG condition assessment carried out by Assistant Ecologist Jonathan Bayliss BSc (Hons) on 29 September 2023.

#### Modified Grassland (UKHABS g4)

- 5.2. The dominant habitat within the proposed site is g4 modified grassland. This was separated in to two areas onsite, both of which contained similar species but were differentiated by the way in which they had been managed, one area had been kept to a short sward and the other left to grow to a longer sward length, forming a rough grassland area.
- 5.3. Species recorded included perennial rye grass *Lolieum perrene*, cocks foot *Dactylus glomerata*, white clover *Trifolium repens*, creeping buttercup *Ranunculus repens*, dandelion *taraxacum officinale*; broad leaved dock *Rumex obtusifolius*; hogweed *Heracleum sphodylium*, plantain *Plantago major*, spear thistle *Cirsium vulgare*, cranesbill *Geranium pratense*.
- 5.4. An area of tall ruderal vegetation was also present along and within a dry ditch on the southern boundary at the edge of the modified grassland. Species consist nettle *Urtica dioica*, white clover, cleavers *Galium aparine*, dandelion and curly dock *Rumex crispus*.
- 5.5. The short sward area forms an amenity grassland area in the west of the site between the hedgerow (running north-south) and road. It was cut short (below 20 cm) at the time of survey and appears to be regularly maintained at a short sward height for recreation and highways purposes.
- 5.6. As such the western part of the modified grassland was condition assessed as **poor condition.**
- 5.7. The longer sward was evident in the rest of the site ('Mampitts Meadow') to the east of the native hedgerow (running north to south) and formed a tussocky, rough grassland habitat.
- 5.8. This is a low distinctiveness habitat and was condition assessed as **good condition**.

#### Bramble scrub (UKHABS h3d)

5.9. Several fragmented patches of bramble scrub have encroached upon the grassland at the edges of the site.

- 5.10. A small area of bramble scrub was enclosed by a close boarded fence to the south east of the site, this had very recently been cut back to ground height to enable a topographical survey.
- 5.11. This is a medium distinctiveness habitat, and a condition assessment is not applicable.

#### Mixed scrub (UKHABS h3h)

- 5.12. An area of mixed scrub is present along the southern boundary and forms a link with ruderal area of grassland. This habitat has likely developed from the species rich native hedgerow (with mature field maple trees) that runs along a raised bank within it (parallel to the road). It presently reaches a width of approximately 10-12 m between the grassland and the road.
- 5.13. Species recorded included ash *Fraxinus excelsior*, hawthorn *Craetagus monogyna*, blackthorn *Prunus spinosa*, hazel *Corylus avellana*, dogwood *Cornus sanguinea*, crab apple *Malus sylvestnis*, field maple *Acer campestre*, spindle *Euonymus europeaus and* elder *sambucus nigra*.
- 5.14. This is a medium distinctiveness habitat, and was assessed as moderate condition.

#### **Baseline Linear Habitats**

#### Species Rich Native hedgerow (UKHABS h2a5)

- 5.15. A species rich native hedgerow runs north-south on a raised bank between the amenity grass area and the rough grass area. This hedgerow had a number of large gaps formed by informal walkways and a gateway. A hedgerow is also present along the southern boundary of the site on a raised bank within the mixed scrub area which also contains a number of mature field maple trees.
- 5.16. Species recorded included ash, hawthorn, blackthorn, hazel, dogwood, crab apple, field maple. The more mature trees consist of field maple and multi stemmed ash.
- 5.17. Species rich native hedgerow with trees and associated with a bank is a high distinctiveness habitat. Both hedgerows were assessed as **good condition**.

#### Watercourse Habitats

5.18. No baseline watercourse habitats are present.

#### **Baseline Summary**

5.19. The total area of pre-development habitat is 0.72 ha, the total length of predevelopment linear habitat is 0.13 km with a total of <u>3.76 baseline habitat units and 2.84 baseline linear units.</u> The site proposals at Mampitts Green comprise construction of a Community Hub building, associated parking and improvements to the open space to the east. Additional native mixed scrub, species rich hedgerow with trees and individual tree planting, along with enhanced management of modified grassland to good condition and other

neutral grassland is also proposed to achieve biodiversity net gain for the site. The proposals will retain 0.38 ha of modified grassland and mixed scrub. Overall, the proposals would result in the loss of 0.21 ha of habitats which reduces the biodiversity value of the site by 0.95 habitat units. All hedgerows will be retained.







**Project:** Mampitts Community Hub

Figure 2: Baseline habitats

integrating nature conservation

Info@darwin-ecology.co.uk www.darwin-ecology.co.uk Date: May 2024

Contains OS data © Crown copyright (2024) **NOTE:** Areas are indicative and are not shown to exact scale.

#### **Post Development Habitats**

5.20. The post-development proposals for the site comprise construction of a Community Hub building, associated parking and improvements to the open space to the east. Existing habitat will be retained or enhanced where possible, including enhanced management of modified grassland to good condition and other neutral grassland. Additional native mixed scrub, species rich hedgerow with trees and individual tree planting is also proposed to achieve biodiversity net gain for the site.

#### Developed land; sealed surface

5.21. A total of 0.06 hectares of modified grassland will be lost to the construction of the community hub and driveway under developed land habitat. Developed land; sealed surface is a very low distinctiveness habitat and a condition assessment is not applicable. Therefore this habitat will contribute <u>+0.00 habitat units for the site.</u>

#### Modified grassland

5.22. The majority of the modified grassland at the east of the site (Mampitts Meadow) will be retained and managed in good condition. Several small areas (<0.03 ha in total) will also be converted to modified grassland and one area will be enhanced from poor to good condition which will provide <u>+0.17 habitat units for the site</u>.

#### Other neutral grassland

5.23. One area of modified grassland (0.06 ha) will be fenced off and enhanced to other neutral grassland for biodiversity net gain under a management plan. This management will enhance the distinctiveness of the grassland from low to medium. The condition of the grassland will be managed at good condition. This will achieve <u>+0.64 habitat units for the site.</u>

#### Bramble scrub

5.24. One small area of bramble scrub will be retained. This is a medium distinctiveness habitat, and a condition assessment is not applicable.

#### Mixed scrub

5.25. Five areas of native mixed scrub (totalling 0.12 ha) will be planted in the meadow area. One area of bramble scrub will also be enhanced to mixed native scrub. This is a medium distinctiveness habitat, the condition of the scrub will be managed at moderate condition. This will achieve +0.91 habitat units for the site.

#### Individual trees

5.26. A total of five urban trees will be planted in the driveway/ parking area which is the equivalent of 0.02 ha of habitat. A total of 29 rural individual trees will be planted around the

meadow, which is the equivalent of 0.12 ha of habitat. Newly planted trees are allocated as small and **poor condition**. This will achieve **+0.39 habitat units for the site**.

#### Post Development Hedgerow

#### Species Rich Native Hedgerow with Trees

5.27. A species rich native hedgerow with trees will be planted bordering the scrub at the northern boundary. The hedge will be total of 0.04 km and will achieve <u>+0.32 hedgerow</u> <u>units for the site</u>.







integrating nature conservation

Info@darwin-ecology.co.uk www.darwin-ecology.co.uk

**Project:** Mampitts Community Hub

Figure 3: Proposed habitats

Date: May 2024

Contains OS data © Crown copyright (2024) **NOTE:** Areas are indicative and are not shown to exact scale.

# 6. RESULTS AND EVALUATION

6.1. Overall, the site will achieve <u>+19.80% change in habitat units and +11.25% change in linear units</u> within the site based on the current proposals as set out in Appendix 1. A summary of these results within the metric can be found below:

FINAL RESULTS					
Matal act whith the sec	Habitat units	0.74			
Total net unit change (Including all on-site & off-site habitat retention, creation & enhancement)	Hedgerow units	0.32			
	Watercourse units	0.00			
	Habitat units	19.80%			
Total net % change	Hedgerow units	11.25%			
(Including all on-site & off-site habitat retention, creation & enhancement)	Watercourse units	0.00%			
Trading rules satisfied?	¥es ✓				

6.2. The Metric 4.0 in an excel spreadsheet will also be provided along with comments where deemed necessary.

#### **Further Recommendations**

6.3. A biodiversity management plan should be written for the site to ensure that all habitats created obtain their target scores. The Biodiversity Net Gain Principles document stipulates that created habitats must be maintained over a period of at least 25-30 years, along with providing monitoring and review, therefore any management plan must take this into account.

# 7. REFERENCES

CIEEM (2018) Guidelines for Ecological Impact Assessment in the UK and Ireland.

The Biodiversity Metric 4.0 - User Guide https://publications.naturalengland.org.uk/ publication/6049804846366720

The Biodiversity Metric 4.0 - Technical Annex 1 - Condition Assessment Sheets and Methodology https://publications.naturalengland.org.uk/publication/6049804846366720

CIRIA, CIEEM, IEMA (2016) Biodiversity Net Gain: Good Practice Principles for Development [Available https://cieem.net/wpcontent/uploads/2019/02/Biodiversity-Net-Gain-Principles.pdf]

# **APPENDIX 1: LANDSCAPE PLANS**



Notes: Not serve a probability and the server in the server on Serverse server and a ferrer server in the server is and the server of the server in the server is and the server in the server is a server in the server is and the server the server is a server is a server in the server is a server the server is a server is a server in the server is a server is a server in the server is a server i
SUPT LANDSCARMENTY
Sponse run anality and, rapide to a wepont
time to a series and the series of the serie
Topologie angle president frequence, 7 or 3 rule pet genuer
Address area
California and a submittee and a submittee
Proposit doctors into ratio species
The stand stand balls, taken appelos
Eveloping Trace and hardparticle 8 has referred and protected
HARD LANDING HTML REV.
Begans maker beam same
Papers manuel
Twitter peol, and lief forms in protect barin
Total party landide at latticedry
Tortian taxoning unit arris and blast an settimating privat base
The same and some part is not being
Realition and and the part is indicated by
financia and magnetia latitation
The log
Perce



\*\*\*



#### ARCHITECTS | TO

月18月1日 -----