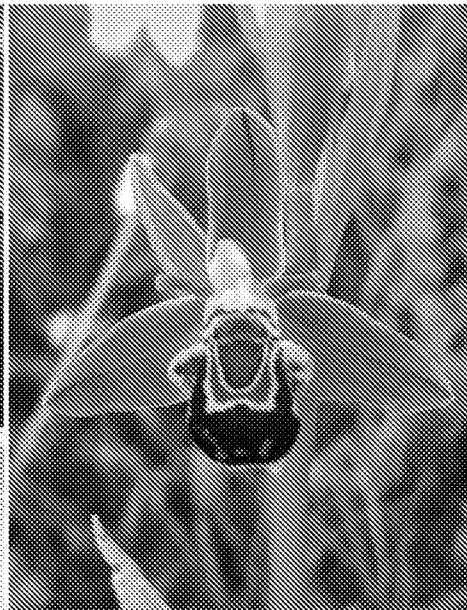




Land west of Bilsham
Road, Yapton,

Biodiversity Net Gain
Assessment

For:
Landlink Estates

Ref:
December 2021
Final

Land west of Bilsham Road, Yapton Biodiversity Net Gain Assessment

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Land west of Bilsham Road, Yapton Biodiversity Net Gain Assessment

1.0 Introduction

- 1.1 Landlink Estates Ltd has submitted a hybrid planning application (HPA) for residential development on land west of Bilsham Road, Yapton. Phase 1 comprises a full application for 30 residential dwellings, new access from Bilsham Road, public open space, landscaping, sustainable urban drainage and associated works. The balance of the scheme is addressed through an outline planning application for further residential phases of up to 110 dwellings and associated infrastructure (with all matters reserved).
- 1.2 This report has been prepared to provide information in support of the planning application and addresses Biodiversity Net Gain (BNG) for the proposed scheme. The report provides an overview of relevant policy and reports the results of a BNG calculation carried out for the site, focussed on the BNG that will be delivered through creation of new habitats. The report uses the results of the BNG calculation to:
- assess the contribution of the proposals to increasing and improving measures of biodiversity with respect to the expectations set by the Environment Act 2021, and;
 - review the measured gains in biodiversity against the National Planning Policy Framework¹ (NPPF) and environmental policies of the Local Plan².
 - provide an analysis of the biodiversity gains against best practice guidance.

2.0 Legislative and policy background

The Environment Act 2021

- 2.1. The Environment Act 2021 received Royal Assent on 9th November 2021 and provides the basis for the legal creation of the Office for Environmental Protection (OEP). The Act also sets out a framework for the provision of targets, plans and policies for improving the natural environment and ensuring environmental protection.
- 2.2. The enactment of the Environment Act triggers a 2-year transition period prior to a mandate requiring that all development (with a few exceptions) must secure 10% gain in biodiversity, secured for a minimum of thirty years, to receive planning consent. This transition period will allow local planning authorities the time to establish a policy framework setting out an approach to securing this net gain within their local area.

¹ <https://www.gov.uk/government/publications/national-planning-policy-framework--2>

² Chichester District Council. Adopted Chichester Local Plan (2014-2029).
<https://www.chichester.gov.uk/newlocalplan>

- 2.3. In the meantime, BNG is already established as a planning principle in the National Planning Policy Framework (NPPF) and National Planning Practice Guidance, and is frequently a requirement of Local Planning Policy.

National Planning Policy Framework (NPPF)

- 2.4. Paragraph 179 of the NPPF³ states that Local Plans should 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. It provides the basis with which Local Plans must address the need to secure biodiversity gains.

Adopted Arun Local Plan (2011-2031)

- 2.5. The Arun Local Plan 2011-2031⁴ acts on the requirement of the NPPF through Policies ENV SP1, ENV DM1, ENV DM2, ENV DM3, ENV DM5 and to a lesser extent ENV DM4, which collectively address biodiversity across the District. The importance of biodiversity to the Council is clear, with the Local Plan including a specific and strategic objective to ensure that development properly takes account of biodiversity through the planning process. This requires the Council *'to plan for climate change and work in harmony with the environment to conserve natural resources and increase biodiversity'*.
- 2.6. Policy ENV DM1 addresses the protection of statutorily and non-statutorily designated sites, with Policy ENV DM2 amplifying this for Pagham Harbour, which receives the highest level of protection under the Conservation of Habitats & Species Regulations 2017 (as amended) (the Habitats Regulations). Policy ENV DM3 anticipates that development represents an opportunity for biodiversity and sets out the expectations of all new build, with particular requirements for development falling within Biodiversity Opportunity Areas, as follows:

³ Ministry of Housing, Communities and Local Government, 2021. National Planning Policy Framework.

⁴ Arun District Council. Adoption Arun Local Plan 2011-2031

Policy ENV DM3

Biodiversity Opportunity Areas

Development shall:

- a. Retain and sympathetically incorporate locally valued and important habitats, including wildlife corridors and stepping stones
- b. Be designed in order to minimise disturbance to habitats

Development proposals that do not reasonably address opportunities for enhancing these through their design, layout and landscaping or access/management shall not be permitted. Where a development scheme would result in a habitat loss, mitigation measures will be proposed as part of the proposed scheme and such measures agreed with the Local Planning Authority prior to the determination of any planning application. Within Biodiversity Opportunity Areas (BOAs) identified on the Policies Maps or where likely to have an impact on species or habitats within the BOAs, any application for planning permission shall include a properly conducted survey of the presence of that species and habitat and impact(s) that development may have on the BOA.

- 2.7. Policy ENV DM4 deals with the protection of trees, whilst Policy ENV DM5 sets out explicit requirements of new development, requiring that schemes should seek to achieve a net gain in biodiversity and protect existing habitats and statutorily protected species established as present on site.

Policy ENV DM5

Development and biodiversity

Development schemes shall, in the first instance, seek to achieve a net gain in biodiversity and protect existing habitats on site. They shall also however incorporate elements of biodiversity including green walls, roofs, bat and bird boxes as well as landscape features minimising adverse impacts on existing habitats (whether designated or not). Development schemes shall also be appropriately designed to facilitate the emergence of new habitats through the creation of links between habitat areas and open spaces. Together, these provide a network of green spaces which serve to reconnect isolated sites and facilitate species movement.

Where there is evidence of a protected species on a proposed development site, planning applications shall include a detailed survey of the subject species, with details of measures to be incorporated into the development scheme to avoid loss of the species. This involves consideration of any impacts that will affect the species directly or indirectly, whether within the application site or in an area outside of the site, which may be indirectly affected by the proposals. All surveys shall be carried out at an appropriate time of year and shall be undertaken by a qualified and, where appropriate, suitably licensed person.

All developments shall have regard to Natural England's standing advice for protected species.

- 2.8. Whilst this policy guidance is not as strong or as definitive as the requirements that will be enacted in due course, it provides a basis on which to build BNG into the planning application, responding to the growing awareness of the importance on biodiversity and the need to safeguard it through the planning process.

Industry guidance

- 2.9. Whilst adopted policy often lags, best practice guidance has an important role in shaping development proposals to best effect. Joint guidance published by CIEEM, CIRIA & IEMA^{5,6} (CIEEM guidance) is helpful in setting expectations for a site and provide a framework to conserve and enhance on-site biodiversity and show that they are following good practice. The guidance sets out ten principles to guide the delivery of BNG through the planning process:

Biodiversity Net Gain - Good practice principles for development

Principle 1. Apply the Mitigation Hierarchy

Principle 2. Avoid losing biodiversity that cannot be offset by gains elsewhere

Principle 3. Be inclusive and equitable

Principle 4. Address risks

Principle 5. Make a measurable Net Gain contribution

Principle 6. Achieve the best outcomes for biodiversity

Principle 7. Be additional

Principle 8. Create a Net Gain legacy

Principle 9. Optimise sustainability

Principle 10. Be transparent

- 2.10. These provide a measurable basis against which the effectiveness of a scheme in delivering BNG can be assessed. Section 4.0 of this paper sets out an analysis to this effect.

⁵ CIEEM, CIRIA, IEMA, 2016. Biodiversity Net gain: Good practice principles for development.

⁶ CIEEM, CIRIA, IEMA, 2019. Biodiversity Net gain: Good practice principles for development. A practical guide.

3.0 Assessment of Biodiversity Net Gain

Defra Metric calculation

- 3.1. A biodiversity net gain calculation has been carried out for the HPA. The recently published Defra metric 3.0, informed by the User Guide⁷ has been used to calculate a baseline score for both habitat, river and hedgerow units for the proposals, for comparison against units characterising the new habitats that will be created as part of the proposal.
- 3.2. The calculation draws on the Landscape Masterplan for the scheme (Appendix 1), which has been extrapolated into a post development habitat scenario for the purpose of measurement of habitat areas (Appendix 2). These areas form the basis of the inputs into the metric.
- 3.3. The metric is submitted separately to this paper to allow full visibility of the workings and analysis. The headline results are shown below.

On-site baseline	Habitat units	20.80
	Hedgerow units	4.33
	River units	0.00
On-site post-intervention (including habitat retention, creation & enhancement)	Habitat units	23.31
	Hedgerow units	8.31
	River units	0.00
On-site net % change (including habitat retention, creation & enhancement)	Habitat units	10.18%
	Hedgerow units	93.01%
	River units	0.00%
Off-site baseline	Habitat units	0.00
	Hedgerow units	0.00
	River units	0.00
Off-site post-intervention (including habitat retention, creation & enhancement)	Habitat units	0.00
	Hedgerow units	0.00
	River units	0.00
Total net unit change (including all on-site & off-site habitat retention, creation & enhancement)	Habitat units	2.31
	Hedgerow units	4.33
	River units	0.00
Total on-site net % change plus off-site surplus (including all on-site & off-site habitat retention, creation & enhancement)	Habitat units	10.15%
	Hedgerow units	93.01%
	River units	0.00%
Trading rules Satisfied?	Yes	

- 3.4. The proposals will result in the conversion of arable field of low ecological value to a residential area with areas of public open space with wildflower areas, an attenuation pond and a Biodiversity Improvement Area, all designed to deliver an overall net gain in biodiversity. The metric quantifies the uplift in overall biodiversity and measures a significant increase in habitat units for the site (10.2% increase). This reflects the current low ecological value of the site as a

⁷ Stephen Panks, Nick White, Amanda Newsome, Jack Potter, Matt Heydon, Edward Mayhew, Maria Alvarez, Trudy Russell, Sarah J. Scott, Max Heaven, Sarah H. Scott, Jo Treweek, Bill Butcher and Dave Stone 2021. Biodiversity Metric 3.0: Auditing And Accounting For Biodiversity – User Guide. Natural England.

whole (primarily arable, bounded by hedgerows and a line of trees), relative to the ecological value of the scrub and grassland matrix of the Biodiversity Improvement Area, which is quick to mature, and the attenuation pond and wildflower grassland that will develop over time.

- 3.5. The metric also records an increase in hedgerow units, (93.1%), reflecting hedgerow planting to infill and enhance continuity of existing hedgerows, as well as the creation of new hedgerows along the western boundary and the boundary separating the main residential site from the Biodiversity Improvement Area. It concludes that the proposals satisfy the trading rules.

Analysis against best practice CIEEM guidance

- 3.6. In addition to the measurable gains in biodiversity provided by the metric, the joint BNG guidance issued by CIEEM, CIRIA and IEMA provides a set of ten principles against which good practice can be measured. The table on the following page sets out an analysis of the proposals against of each of the principles identified.

Table 1 Analysis of biodiversity gains against CIEEM guidance

Net Gain Principle	✓/x	Comment
Principle 1 Apply the Mitigation Hierarchy	✓	The Ecological Appraisal ⁸ states that the proposed development has been carefully designed to avoid the majority of potential ecological impacts by avoiding boundary features and confining development to the interior of the field (i.e. the arable land). <i>Conclusion: proposals consistent with Principle 1</i>
Principle 2 Avoid losing biodiversity that cannot be offset by gains elsewhere	✓	With the site of limited ecological value, the retention of boundary features and grassland margins, and protection through construction and operation through the use of appropriate mitigation, no biodiversity interest will be lost from the site. <i>Conclusion: proposals consistent with Principle 2</i>
Principle 3 Be inclusive and equitable	-	Principle 3 is not relevant to how this planning application has come forward.
Principle 4 Address risks	✓	The primary strategy in reducing risk has been to avoid direct impact on all on and offsite features of ecological interest. The secondary strategy relies on implementation of a CEMP, required by standard condition, to avoid construction impacts through effective control. This is established protocol and can be secured through condition, addressing the risk of irresponsible construction. <i>Conclusion: proposals consistent with Principle 4</i>
Principle 5 Make a measurable Net Gain contribution	✓	The proposals offer a meaningful opportunity to deliver biodiversity net gain. The Defra metric demonstrates overall gains in excess of the 10% gain that will become relevant under the Environment Act 2021 in due course. <i>Conclusion: proposals consistent with Principle 5</i>
Principle 6 Achieve the best outcomes for biodiversity	✓	The biodiversity gains for the site are ecologically appropriate, enhancing and support existing habitats. The new attenuation pond will support the ecological function of the offsite network of local rifes, whilst the scrub matrix and woodland planting will replace arable land of negligible ecological value, establishing a more

⁸ The Landmark Practice, August, 2021. Charmans Field, Runcion. Ecological Appraisal. For Landlink Estates Ltd.

		diverse habitat that will evolve in structural complexity and species diversity over time. <i>Conclusion: proposals consistent with Principle 6</i>
Principle 7 Be additional	✓	The landscaping proposals have been developed with BNG as a key design objective such that the BNG delivered by the proposals are genuinely additional and will deliver outcomes that would not otherwise have occurred were this not explicitly the case. The BNG demonstrably exceeds existing obligations, as well as exceeding future mandates to significant degree. <i>Conclusion: proposals consistent with Principle 7</i>
Principle 8 Create Net Gain legacy	✓	The biodiversity gains will be secured for the lifetime of the project. This will be set out in a Landscape & Ecological Management Plan (LEMP), to be secured through condition. <i>Conclusion: proposals consistent with Principle 8</i>
Principle 9 Optimise sustainability	✓	The delivery of biodiversity net gain has been a key driver in the design of the project. All created habitats will be managed to ensure effective establishment and development over time. <i>Conclusion: proposals consistent with Principle 9</i>
Principle 10. Be transparent	✓	The objective of this paper is to ensure that all net gain activity provided by the proposal is effectively communicated. The paper also provides access to the BNG calculations so that they can be scrutinised and tested as required. <i>Conclusion: proposals consistent with Principle 10</i>

Analysis against policy

- 3.7. The analyses above provide a standard and industry accepted basis on which to establish the extent of biodiversity gains that are to be delivered by a scheme. The assessments allow quantitative and qualitative measures of BNG and in turn, allow an assessment of how the scheme delivers against policy noting that the policy interpretation of biodiversity is generally broader than the habitat driven metric used to demonstrate the 10% net gain that the Environment Act 2021 will eventually require.
- 3.8. The following assessment broadens out the concept of BNG to address the compliance of the scheme against the policy framework set out in paragraphs 2.4 to 2.7.
- 3.9. Policy ENV DM3 requires that for development sites falling within Biodiversity Opportunity Areas (BOA's), any application for planning permission must include a properly conducted ecological survey to establish the impacts of the proposals on species and habitats for which the BOA is identified.
- 3.10. The land west of Bilsham Road does not fall within a BOA.
- 3.11. Policy ENV DM3 also sets out specific requirements of development coming forward within the District. Table 2 below reviews the scheme against these requirements, as well as those set out under Policy ENV DM5 of the Local Plan.

Table 2 Analysis of new habitat against Local Plan biodiversity policy

Policy ENV DM3 requirement		Comment
Retain and sympathetically incorporate locally valued and important habitats, including wildlife corridors and stepping stones	✓	The Defra Metric 3.0 calculation and analysis against Principles 1 & 2 of the CIEEM guidance identifies that existing biodiversity is protected and afforded significant enhancement in ways that are ecologically appropriate and material in their contribution to the ecological function of the site and immediate area. Conclusion: criterion addressed
Be designed in order to minimise disturbance to habitats	✓	Strict adherence to the mitigation hierarchy has avoided direct impacts on boundary features of ecological interest and ensured that indirect impacts arising from construction are effectively mitigated. Conclusion: criterion addressed
Policy ENV DM5 requirement		Comment
Seek to achieve a net gain in biodiversity and protect existing habitats on site.	✓	The scheme includes the creation of a scrub matrix, hedgerow planting, wildflower areas and an attenuation pond. In addition, the impact on boundary features has been minimised. The scheme has included BNG as a key design criterion such that it forms an inherent part of the scheme design rather than a 'bolt on' extra. Quantification of the biodiversity gain by the Defra Metric shows material gains in line with the 10% figure indicated appropriate within the Environment Act 2021. Conclusion: criterion addressed
Incorporate elements of biodiversity including green walls, roofs, bat and bird boxes as well as landscape features to minimise adverse impacts on existing habitats	✓	The existing arable nature of the site means that current habitats are of low ecological value. Boundary features such as hedgerows and trees are retained with little exception. Landscape features are included within the proposals to diversify habitats and support and enhance those already present (see above). Conclusion: criterion addressed
Schemes shall be appropriately designed to facilitate the emergence of new habitats through the creation of links between habitat areas and open spaces.	✓	The site sits in an agricultural context, primarily arable sitting alongside existing urban built areas. The scheme introduces new habitats to the site and supports existing, boundary habitats and the local ecological context. Conclusion: criterion addressed
Where there is evidence of a protected species on a proposed development site, planning applications shall include a detailed survey of the subject species, with details of measures to be incorporated into the development scheme to avoid loss of the species.	✓	A full suite of ecological surveys has been carried out for the site, and reported with an EcIA ⁹ , for submission in support of the application. The EcIA includes a full scheme of mitigation to ensure that all statutorily protected species are appropriately addressed through the development of the site. Conclusion: criterion not relevant
All developments shall have regard to Natural England's standing advice for protected species.	✓	The EcIA is prepared on the basis of CIEEM best practice guidance and all relevant standing advice provided by Natural England. Conclusion: criterion not relevant

⁹ Lindsay Carrington Ecological Services, December 2021. Land west of Bilsham road, Yapton. Ecological Impact Assessment. For Landlink Estates.

- 3.12. The analysis in Table 2 draws on the Ecological Appraisal for the scheme and the information presented in this document to show that the scheme is policy compliant with respect to Policies ENV DM3 & DM5. From this it follows that the scheme is also compliant with the overall objective set by the Local Plan requiring that the scheme works '*in harmony with the environment to conserve natural resources and [to] increase biodiversity*'. The proposals will provide new habitat that buffer and support existing, retained habitats and will create habitat at a level that generates a material and significant uplift in the biodiversity value of the site.

4.0 Conclusion

- 4.1. The Defra metric calculation of the biodiversity budget for the site shows an increase in habitat and hedgerow units for the site. Without targets in either the NPPF or the policies of the Local Plan, it is not possible to say that specific thresholds are met, but a gain of 10.1% habitat units and 93.1% hedgerow units respectively represents a substantive and material gain, satisfies the trading rules of the metric and is a gain that overall, is in excess of the 10% gain for mandate through the Environment Act in due course.
- 4.2. In addition, analysis against CIEEM guidance shows that the proposals perform well against all relevant principles. Whilst this is a more subjective analysis, described in qualitative rather than quantitative terms, it does demonstrate that the proposals are comprehensive and consistent in their response to a design brief that has included BNG from the outset.
- 4.3. Overall therefore, and by all measures, this analysis shows that the decision to establish BNG as a key design objective from the outset has been fully effective in securing a deliverable and meaningful biodiversity benefit for the scheme. In so doing, the scheme is policy compliant and offers more biodiversity gain than required by policy.



KEY

- Redline boundary
- Defunct hedgerow
- New hedgerow
- Amenity grassland
- Developed land
- Mixed woodland
- Native scrub
- Reedbed
- Semi-improved grassland
- Waterbody



0 50 100 m

Google Satellite Map Data © Google 2021

Land west of Bilsham Road

Figure 1:

Title: Post development habitats

Appendix 1

Landscape masterplan

GENERAL NOTES:
This drawing is subject to copyright.

INDIGO



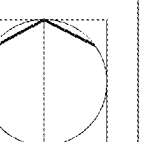
KEY

- | | |
|------------------------------------|----------------------|
| — The Site | Wildflower areas |
| — Phase I area | Attenuation pond |
| Existing vegetation to be retained | Swales |
| Existing tree to be removed | Private rear gardens |
| Tree planting | Roads |
| Woodland planting | Footways |
| Hedgerow planting | Driveways |
| Shrub and groundcover planting | Patios |
| Amenity grass areas | Benches |
| Mown paths | |

ILLUSTRATIVE

SCALE 0 20 40 60 80 100m
1:1000 @ A1
RGB Aerial Photography © Bluesky International Limited

NORTH



B	Minor amendments	2021-12-16	MH	MG
A	ISSUED FOR PLANNING	2021-12-15	MH	MG
-	FIRST ISSUE	2021-12-10	MH/WD	MG
rev	description	date	by	chk

project
LAND WEST OF BILSHAM ROAD

client
LANDLINK ESTATES LTD

drawing title
ILLUSTRATIVE LANDSCAPE MASTERPLAN

drawing number	revision	status	scale
964-MP-01	B	PLANNING	1:1000@A1

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