



Biodiversity Net Gain Assessment
The Drive, Mill Lane, Worthing, BN13 3DF
May 2026
Client: Harlington Homes

Quality Assurance		
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Report conditions:	The content is provided in accordance with the Chartered Institute of Ecology and Environmental Management's Code of Professional Conduct. The methods and recommendations in this report are based on the following: • CIEEM Guidelines for Ecological Report Writing 2017 (CIEEM, 2017) • Biodiversity Net Gain (BNG) Report & Audit Templates Version 1 (CIEEM, July 2021) • Natural England (2024). The Statutory Biodiversity Metric – User Guide Copyright © Imprint Ecology 2026	

Details of Metric Assessment:	
Date the Statutory Metric was published:	21/11/2023
Pre-development biodiversity value of onsite habitats:	Habitat units: 0.54 Hedgerow units: 0.04 Watercourse units: 0 Total: 0.58
Has there been any loss or degradation of any onsite habitat(s), resulting from activities carried out before the date the onsite pre-development biodiversity value was calculated?	No
Does the development site have irreplaceable habitats?	No

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1. Executive Summary

Imprint Ecology was commissioned to undertake an updated Biodiversity Net Gain (BNG) Assessment for land off The Drive, Mill Lane, Worthing, BN13 3DF, where proposals involve the demolition of one dwelling and the construction of two new dwellings. The site comprises a residential garden with ornamental planting, gravel driveway, and trees.

Using the Statutory Biodiversity Metric, the proposed development demonstrates a 10%+ net gain in Habitat Units and a 10%+ net gain in Hedgerow Units, satisfying all BNG trading rules. These gains will be achieved through the creation of modified grassland in poor condition on verges, planting of four native trees, and a native hedgerow in poor condition.

As the uplift required is modest and uses low-risk, low-complexity habitat types that are easily maintained, a Habitat Management and Monitoring Plan (HMMP) is not considered necessary. The scale of intervention is minor, and no high distinctiveness or priority habitats are involved. Long-term success is likely with routine maintenance such as light mowing and rotational hedgerow trimming. As such, the delivery of BNG can be appropriately secured through a standard planning condition.

2. Introduction

2.1 Background

Imprint Ecology was commissioned to undertake an updated Biodiversity Net Gain (BNG) Assessment for land off The Drive, Mill Lane, Worthing, BN13 3DF, where proposals involve the demolition of one dwelling and the construction of two new dwellings. The site comprises a residential garden with ornamental planting, gravel driveway, and trees.

2.2 Personnel

The assessment has been prepared by Emily Luck, BSc (Hons), MCIEEM, MRSB, Director of Imprint Ecology Ltd. Emily holds a Natural England CL18 Level 2 Class Licence for bats and has over seven years' professional experience as an ecological consultant, undertaking and designing surveys, impact assessments and mitigation strategies for protected species across southern England.

2.3 Scope of Assessment

This BNG Assessment is valid for a maximum of one year. If there are any alterations to the site conditions, BNG methodologies, or the proposals, the calculations are likely to become invalid, and an ecologist should be contacted for advice or to carry out a new calculation.

2.4 Site Description

The site is located in Worthing, West Sussex, and covers approximately 0.15 hectares (ha). It comprises a single residential dwelling with small sheds, within a large, vegetated garden. The garden includes areas of introduced shrubs, ornamental hedging, a gravel driveway, and a small number of trees.

The site is situated within a suburban setting, surrounded by similar-sized residential properties with gardens. The wider landscape includes a mosaic of improved and semi-improved grasslands, linear features such as hedgerows and treelines, and cultivated arable land.

3. Legislation and Policy

3.1 Legislation

The Environment Act 2021 requires developments to deliver a minimum of 10% BNG. The requirement applies to most non-householder planning applications that result in the loss of more than 25m² of vegetated habitat. Developers must calculate BNG using the Biodiversity Metric and secure it for a minimum of 30 years. Options for achieving BNG include on-site measures, off-site enhancements recorded in a national biodiversity gain site register, or the purchase of statutory Biodiversity Credits. Secondary legislation under the Act sets out the procedural and technical requirements, including Habitat Condition Assessments using the Department for Environment, Food & Rural Affairs (DEFRA) methodology and the submission of a completed Statutory BNG Metric. Long-term management of BNG must be secured, e.g. through Section 106 agreements or Conservation Covenants.

3.2 National Policy

The latest National Planning Policy Framework (NPPF, 2024) was published in December 2024. Paragraph 187 states that planning policies and decisions must contribute to and enhance biodiversity and the natural environment by:

- Protecting and enhancing valued landscapes, biodiversity sites, geological features, and soils in line with statutory designations.
- Recognising the intrinsic character and beauty of the countryside, including the benefits of trees, woodlands, and agricultural land.
- Maintaining the character of undeveloped coastal areas while improving public access where appropriate.
- Minimising impacts on biodiversity and delivering net gains, including the establishment of resilient ecological networks and features supporting priority species such as swifts, bats, and hedgehogs.
- Preventing environmental harm from soil, air, water, and noise pollution, as well as land instability.
- Improving local environmental conditions, including air and water quality, informed by relevant policies such as river basin management plans.
- Remediating degraded, contaminated, or unstable land to enhance ecological value.

Paragraph 193 states that local planning authorities must apply the following principles when determining planning applications:

- Avoid significant harm to biodiversity where possible; if unavoidable, harm must be mitigated or compensated for, or planning permission should be refused.
- Development that affects Sites of Special Scientific Interest (SSSI) should not be permitted unless benefits clearly outweigh potential harm.
- Loss or deterioration of irreplaceable habitats (e.g., ancient woodland, veteran trees) should be refused unless there are exceptional reasons and a suitable compensation strategy.
- Development that enhances biodiversity should be supported, particularly where it secures measurable net gains or improves public access to nature.

In addition to the NPPF, Circular 06/2005: Biodiversity and Geological Conservation says, *"It is essential that the presence or otherwise of protected species, and the extent that they may be affected by the proposed development, is established before the planning permission is granted, otherwise all relevant material considerations may not have been addressed in making the decision."*

Circular 06/2005 also provides statutory direction on biodiversity protection within the planning system. It clarifies legal obligations under the Wildlife and Countryside Act 1981, the Conservation of Habitats and Species Regulations 2017, and other key legislation. It outlines:

- The importance of ecological surveys and assessments in development proposals.
- The duty of local authorities to consider biodiversity in planning decisions, ensuring compliance with UK and European laws.
- Requirements for the mitigation hierarchy, ensuring avoidance, mitigation, or compensation for biodiversity impacts.
- The need for protected species licences where development affects legally protected species.

3.3 Local Policy

Policy DM18: Biodiversity of the Worthing Local Plan sets out a clear requirement for developments to protect, conserve, and enhance biodiversity. The key provisions relevant to this project are:

- Up-to-date ecological information must inform planning decisions and be submitted before determination.
- The mitigation hierarchy must be applied:

1. Avoid significant harm
2. Mitigate through design or measures
3. Compensate as a last resort

If harm cannot be addressed through this hierarchy, planning permission should be refused.

- Irreplaceable habitats (e.g. ancient woodland, ancient or veteran trees) should not be lost or deteriorated unless wholly exceptional reasons exist, and a suitable compensation strategy is provided.
- Development proposals affecting SSSIs, Local Wildlife Sites, wildlife corridors, stepping stones, Local Geological Sites, or priority habitats/species will only be permitted if the benefits clearly outweigh the biodiversity impacts and the mitigation hierarchy has been followed.
- Coastal development must demonstrate how it addresses potential impacts such as coastal squeeze.
- All new developments (excluding change of use and householder) must deliver a minimum of 10% biodiversity net gain (BNG), preferably on-site.
 - 20%+ BNG is encouraged and required on previously developed land*.
 - BNG should be measured using the latest version of the DEFRA Biodiversity Metric and be secured for a minimum of 30 years, supported by a long-term management plan.
- Planning conditions or obligations will be used to secure enhancement, mitigation, and compensation measures where appropriate.

*The site comprises a single residential dwelling with vegetated garden, ornamental planting, and areas of gravel driveway. As the site consists of private residential garden land, it does not meet the definition of Previously Developed Land (PDL) as set out in the National Planning Policy Framework (NPPF). While the existing house and associated structures are being demolished as part of the proposed development, the primary land use remains residential garden, which is explicitly excluded from the definition of PDL. Therefore, the 20% biodiversity net gain target required for developments on previously developed land under Policy DM18 of the Worthing Local Plan does not apply. A minimum 10% biodiversity net gain will be delivered in accordance with statutory requirements and local policy.

4. Methods

4.1 Desk Study

The Multi-Agency Geographic Information for the Countryside (MAGIC) online resource and Adur and Worthing Councils interactive mapping tool were accessed on 17th March 2025 to search for the following:

- Habitats of Principal Importance listed under the NERC Act within 1km
- Sites of Special Scientific Interest (SSSIs)
- Local Nature Reserves (LNRs)
- Special Protection Areas (SPAs) & Special Areas of Conservation (SACs)
- Priority Habitats and Biodiversity Opportunity Areas
- Conservation Areas and Green Infrastructure Networks

4.2 Site Assessment

A site assessment was originally conducted following the UK Habitat Classification (UKHab) system (Version 2.0) on 6th February 2025 and updated on 12th May 2026 by Emily Luck (see section 2.2). The survey involved a systematic site walkover to identify, classify, and map habitats, supplemented by a review of existing ecological data, aerial imagery, and designated site information. Vegetation communities were assessed against the UKHab Primary Habitat Hierarchy, with dominant species recorded, and habitats categorised using primary and secondary UKHab codes to account for habitat modifications or land-use context. Habitat features were mapped as polygons, lines, or points with spatial references to ensure accurate classification and assessment of ecological value. Within the grassland habitat, six 1m² quadrats were placed in random locations to assess species diversity. The number of species within each quadrat was recorded.

4.3 Biodiversity Metric

Defra's Statutory Biodiversity Metric was used to quantify the proposed changes in biodiversity by comparing the baseline habitats with proposed habitats in terms of their extent, condition, and distinctiveness. Habitat measurements were taken using CADReader and LandApp.

Proposed habitat changes were reviewed against the Metric's risk multipliers, which account for the difficulty of habitat creation or enhancement, the time required to reach the target condition, and spatial risk factors. These multipliers ensure that the compensation for habitat loss is proportional and reflects the ecological value of the affected area. The output of the Metric

provides a robust calculation of BNG, guiding the proposed development to meet statutory requirements and align with local planning policies.

Biodiversity Metric calculations were double checked following the calculations to avoid errors. Habitat calculations were performed to the nearest 10sqm for habitats which is appropriate given the site's scale. Measurements have been accurately transposed into the Site Baseline Habitat Plan and Site Proposed Habitat Plan, both created using LandApp. Where uncertainty remained, habitats were further measured using other detailed scaled drawings and Google Earth Pro.

The completed BNG Metric is provided separately in Excel format and shows the full calculation breakdown for the site. It demonstrates that the trading rules are satisfied and that the site proposals will result in measurable uplift of BNG.

5. Results

Clapham to Burpham Downs BOA lies to the north and east of the site, but the site is not within any Biodiversity Opportunity Areas (BOAs), indicating it has not been identified as a priority for habitat restoration or enhancement within strategic ecological networks. Additionally, no Local Nature Recovery Strategies (LNRSSs) have been published for West Sussex, meaning the site is not incorporated into any current formal conservation framework. All habitats have therefore been assigned low/no Strategic Significance.

A copy of the existing and proposed site habitat plans can be found in Appendix 1 and site photographs in Appendix 4.

5.1 Baseline Habitats On-site

Habitat Type	Condition	Size (ha)	Description	Retained (ha)	Enhanced (ha)
Artificial unvegetated, unsealed surface	N/A - Other	0.072	Compacted gravel driveway that provides vehicle access from the main road to the site. Surface is well-trodden and lacks any vegetation growth. It connects to areas of hardstanding around the dwelling.	0.066	
Developed land; sealed surface	N/A - Other	0.021	The current dwelling is in the centre-west of the site, surrounded by hardstanding, including paved paths and patio areas. These features are constructed of impermeable materials and provide no habitat value.	0.021	
Vegetated garden Secondary codes: 510 (bare ground) 524 (cotoneaster) 857 (introduced shrub)	Condition Assessment N/A	0.0516	The garden comprises ornamental and managed habitats, including introduced shrubs and small trees, with areas of former amenity lawn now largely overgrown. Despite the varied structure, all features fall within a single habitat parcel classified as vegetated garden. Recorded species include yew, bramble, cherry laurel, nettle, daffodil, and dandelion. Cotoneaster is also present and is notable as a species listed on Schedule 9 of the Wildlife and Countryside Act 1981; appropriate control and disposal measures should be undertaken to prevent its spread off-site. Small trees within the garden parcel are not included as separate features within the metric, in line with current guidance in the Biodiversity Metric User Guide.	0.0424	

			The update survey in May 2026 confirmed the site has been largely unmanaged since 2025. The former lawn has grown into a rank sward with garden-escape perennials, and coarse grasses, with forget-me-not, dock, and willowherb among the vegetation. The underlying garden character remains clear however with mature mixed boundary planting and overgrown shrubs enclosing the site throughout.		
Vacant or derelict land	Poor	0.007	An area of bare, compacted soil has developed along the verge of the driveway. This strip appears to have been built up over time due to vehicle use or construction activities. It lacks vegetation due to soil compaction and disturbance.	0	
Rural tree	Good	0.0163	1 medium tree within the garden to be retained.	0.0163	
Rural tree	Good	0.0163	1 medium tree on the driveway verge to be retained.	0.0163	
Rural tree	Moderate	0.0041	1 small tree on the driveway verge to be retained.	0.0041	

5.2 Proposed Habitats On-site

Habitat Type	Condition (Target)	Size (ha)	Description
Developed land; sealed surface	N/A - Other	0.0072	New dwellings and paving.
Modified grassland	Poor	0.0191	Lawns in gardens to the rear of the new dwellings cannot be counted towards BNG. However the verges to the front of the dwellings and the verge alongside The Drive will be managed by the developer and secured. They will easily achieve modified grassland in poor condition with general grass maintenance, with a view to managing the driveway verge as a pollinator strip with the seed mix tailored to the light conditions. Open, sunnier sections will be sown with a general native wildflower and fine grass mix including species such as common knapweed, oxeye daisy, yarrow, birds' foot trefoil, red clover, selfheal, lady's bedstraw, and field scabious, with finer native grasses such as common bent, sweet vernal grass, crested dogs' tail, and red fescue. Sections of the verge falling under tree canopy or alongside the hedgerow, where light levels are lower, will be sown with a shade-tolerant wildflower mix including species such as red campion, foxglove, wood avens, hedge woundwort, betony, primrose, and wild garlic, again with a fine grass component suited to dappled shade. The verges may be left to flower through spring and summer and cut once in late summer or early autumn with arisings removed, with a small uncut refuge retained where space

			allows to support overwintering invertebrates. Edges adjacent to the driveway may be kept slightly shorter for access and visibility without compromising the flowering areas of the verge. Overall the grassland areas are narrow and too small to reliably achieve the forb density and species richness per m2 required for any higher condition grassland such as moderate/good condition under the metric. Poor condition is therefore appropriate.
Rural tree	Moderate	0.0163	Four new trees planted on-site within the grassland to the front of the new dwellings. It is suggested that these will be native, fruiting trees such as rowan, wild cherry, crab apple and hawthorn (or similar native species of equivalent value). Moderate condition is achievable through correct planting (pit-planted with stake, tie and guard), watering through the establishment period, and protection from mowing and strimmer damage by maintaining a clear, mulched base around each tree. Trees will be sourced as healthy, well-formed stock with no signs of disease, pest damage, or structural defects at planting. Responsive maintenance will include formative pruning where required, prompt replacement of any failed trees within the first five years, regular checks and adjustment of stakes and ties to prevent rubbing or girdling, and removal of stakes and guards once trees are established. The trees will not be subject to inappropriate management such as topping or heavy pruning, and the surrounding grassland will be managed to avoid compaction of the rooting zone. As a mix of native, fruiting species set within managed grassland, the trees will contribute pollen, nectar, fruit, and over time deadwood and structural diversity, supporting moderate condition criteria.

5.3 Baseline Hedgerows On-site

Hedgerow Type	Condition	Length (km)	Description	Retained (km)	Enhanced (km)
Non-native and ornamental hedgerow	Poor	0.023	H1 runs along the back (north) boundary of the existing garden. Partially-removed already but the full baseline length recorded pre-removal. Leylandii and cotoneaster which should be removed and replanted.	0.023	
Non-native and ornamental hedgerow	Poor	0.016	H2 is a small dense linear stand of cherry laurel at the entrance to the site, far east at the start of the driveway.	0.016	

5.4 Proposed Hedgerows On-site

Hedgerow Type	Condition	Length (km)	Description
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Native hedgerow	Poor	0.021	New native hedgerow 21m long planted along the driveway. The hedgerow will be planted as a double-staggered row of native whips at five plants per metre, comprising a mix of native species such as hawthorn, blackthorn, hazel, field maple, dog rose, and guelder rose. Poor condition is easily achievable through standard establishment care including watering through the first growing seasons, weed control around the base, mulching to retain moisture and suppress competition, protection from rabbit and deer browsing with guards where needed, and replacement of any failed whips within the first two growing seasons. Maintenance will include allowing the hedgerow to grow up and thicken before any trimming, cutting on a rotation of no more than every two to three years and ideally outside the bird nesting season (between late winter and early spring), and avoiding cutting too tight or too low so that the hedgerow develops a dense base and good height over time. Poor condition has been chosen as the target as the hedgerow is short in length and sits in a context where it may not reliably develop the height, width and structural integrity required for moderate or good condition under the metric. Despite this, the hedgerow will provide nesting and foraging habitat for birds, shelter and corridor value for invertebrates and small mammals.
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5.5 Baseline Watercourses On-site

Watercourse Type	Condition	Length (km)	Description	Retained (ha)	Enhanced (ha)
N/A					

5.6 Proposed Watercourses On-site

Watercourse Type	Condition (Target)	Length (km)	Description
N/A			

5.7 BNG Results Summary

The proposed habitats on-site comprise a small area of modified grassland, four new native trees, and a short length of new native hedgerow. All proposed habitats are targeted at poor or moderate condition, and none are considered to meet the threshold for “significant” habitats. A Habitat Management and Monitoring Plan (HMMP) is not considered to be required for this proposal. HMMPs are intended for sites where significant on-site habitats are being created or enhanced and where long term, structured monitoring is needed to evidence delivery of higher condition targets. The target conditions will be achieved and maintained through management by the developer, including appropriate cutting of grassland, basic care of new tree and hedgerow planting through the establishment period, and removal of non-native species from the retained baseline hedgerow as part of its replanting. These measures are straightforward and sufficient to secure the BNG.

Figure 5.1: Metric Headline Results

Harlington Homes

Headline Results

Scroll down for final results ▲

Return to results menu

On-site baseline	Area habitat units	0.54	
	Hedgerow units	0.04	
	Watercourse units	0.00	
On-site post-intervention (Including habitat retention, creation & enhancement)	Area habitat units	0.60	
	Hedgerow units	0.08	
	Watercourse units	0.00	
On-site net change (units & percentage)	Area habitat units	0.05	10.03%
	Hedgerow units	0.04	94.00%
	Watercourse units	0.00	0.00%

Off-site baseline	Area habitat units	0.00	
	Hedgerow units	0.00	
	Watercourse units	0.00	
Off-site post-intervention (Including habitat retention, creation & enhancement)	Area habitat units	0.00	
	Hedgerow units	0.00	
	Watercourse units	0.00	
Off-site net change (units & percentage)	Area habitat units	0.00	0.00%
	Hedgerow units	0.00	0.00%
	Watercourse units	0.00	0.00%

Combined net unit change (Including all on-site & off-site habitat retention, creation & enhancement)	Area habitat units	0.05	
	Hedgerow units	0.04	
	Watercourse units	0.00	
Spatial risk multiplier (SRM) deductions	Area habitat units	0.00	
	Hedgerow units	0.00	
	Watercourse units	0.00	

FINAL RESULTS

Total net unit change (Including all on-site & off-site habitat retention, creation & enhancement)	Area habitat units	0.05
	Hedgerow units	0.04
	Watercourse units	0.00
Total net % change (Including all on-site & off-site habitat retention, creation & enhancement)	Area habitat units	10.03%
	Hedgerow units	94.00%
	Watercourse units	0.00%
Trading rules satisfied?	Yes ✓	

Unit Type	Target	Baseline Units	Units Required	Unit Deficit	
Area habitat units	10.00%	0.54	0.60	0.00	No additional area habitat units required to meet target ✓
Hedgerow units	10.00%	0.04	0.04	0.00	No additional hedgerow units required to meet target ✓
Watercourse units	10.00%	0.00	0.00	0.00	No additional watercourse units required to meet target ✓

6. Conclusion

This BNG Assessment has demonstrated that the proposed development will deliver a measurable net gain in biodiversity. The scheme exceeds the statutory requirement for a minimum 10% net gain across all relevant habitat types.

The proposals have been informed by a detailed baseline habitat assessment undertaken in accordance with the UK Habitat Classification and Defra's Statutory Biodiversity Metric. All BNG trading rules have been satisfied.

Biodiversity gains will be delivered entirely on-site through the creation and enhancement of habitats selected to provide long-term benefits for local wildlife such as nesting birds, invertebrates, amphibians and other wildlife.

7. References

CIEEM (2021). BNG Report and Audit Templates Chartered Institute of Ecology and Environmental Management, Winchester, UK.

CIEEM (2017) Guidelines for Preliminary Ecological Appraisal, 2nd edition. Chartered Institute of Ecology and Environmental Management, Winchester.

CIEEM (2018) Guidelines for Ecological Impact Assessment, 1st edition. Chartered Institute of Ecology and Environmental Management, Winchester.

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Natural England (2025) The Statutory Biodiversity Metric Calculation Tool, Condition Assessments and User Guide.

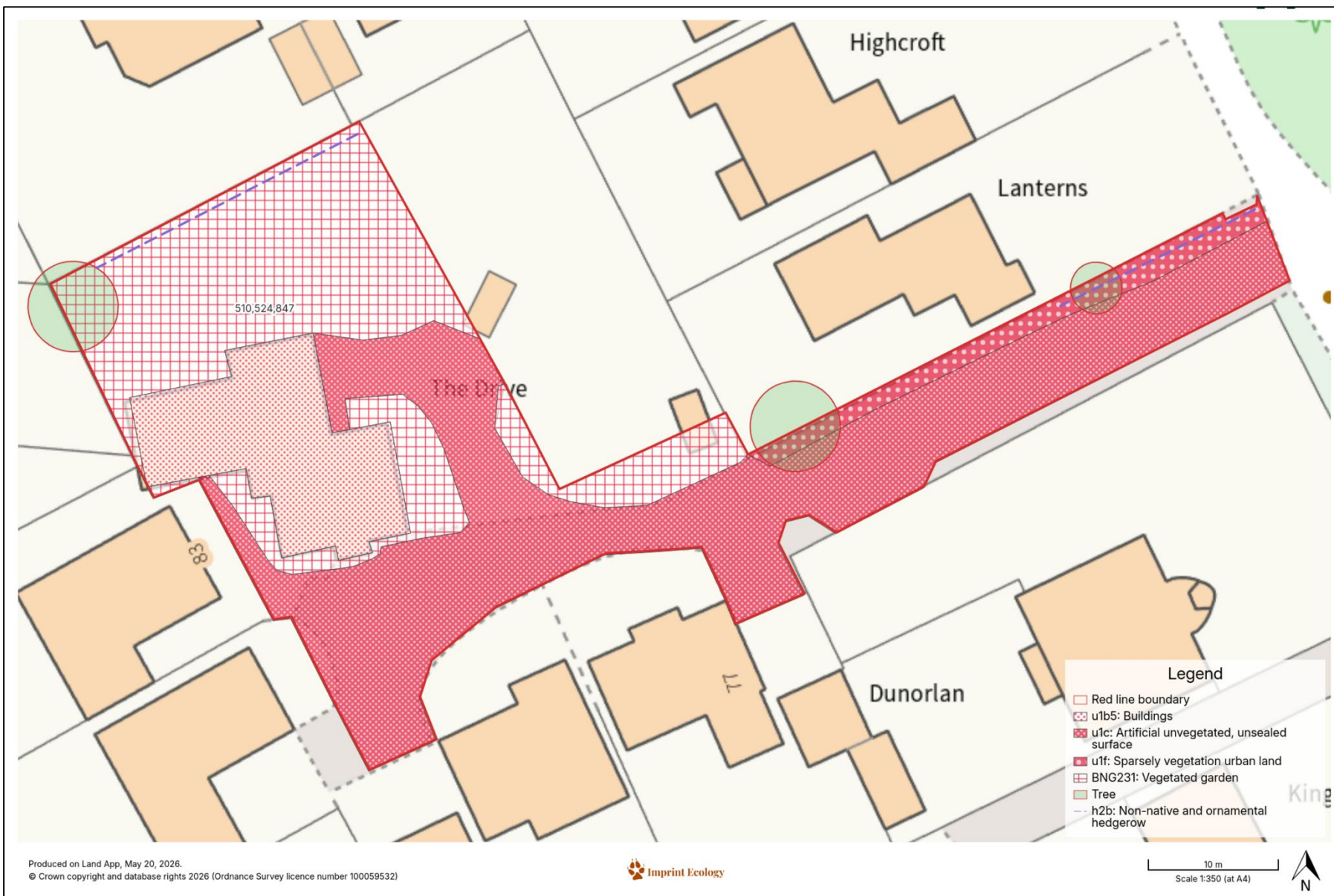
UK Hab Ltd. (2023). The Habitat Classification Version 2.01.

Appendix 1: Proposed Site Plan



Appendix 2: Existing and Proposed Habitat Plans

Existing Habitat Plan



Proposed Habitat Plan



Appendix 3: Site Photographs

Taken February 2025

Photo 1: View along driveway looking east.



Photo 2: Laurel at entrance of site.



Photo 3: View from dwelling looking east



Photo 4: Gravel, hardstanding and garden.



Photo 5: Dwelling.



Photo 6: Rear garden and medium sized oak tree.



Photo 7: Outbuilding in garden.



Photo 8: Rockspray cotoneaster in garden.



Photo 9: Privet hedgerow along east boundary.



Photo 10: Garden plant bulbs emerging.



Taken May 2026

Photo 11: Dwelling and hardstanding.



Photo 12: Rear garden.

