Ecological Appraisal – Final Report

For proposed development at:

Land North Of Malting Lane, Braughing, Ware, Hertfordshire, SG11 2QZ

Survey and Report by:
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Director

6th July 2023
Project Ref: 17513

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1 Summary

Site:	Land at Malting Lane, Braughing, Herts, SG11 2QZ
Grid Reference (from the centre of the site):	TL 39394 25148
Report Commissioned by:	Logan Homes Ltd.
Date of Phase 1 Habitat Survey:	9th March 2020
Date of updated Phase 1 Habitat Survey:	22nd March 2023

Considerations	Description	Timings and potential impacts
Statutory wildlife sites:	None known	No impacts are predicted
Non-statutory sites within 2km:	None known	No impacts are predicted
Phase 2 surveys:	Not required	Not applicable
Precautionary methods:	Commuting and foraging bats.	No direct lighting (during or post-construction) to the retained mature trees, new planted trees, boundary vegetation.
	[redacted] hedgehogs and other nocturnal animals.	Escape planks to be secured within any deep holes or foundations.
	Nesting Birds	Any vegetation clearance/works should be carried out outside of the bird breeding season (March to August inclusive), or a pre works breeding bird assessment should be undertaken.
	Reptiles and Amphibians	Supervised removal of manure / compost heap and ruderal vegetation during the active season between September and October.
Habitat types:	Vegetation within the application site comprises of Improved Grass, Amenity Gardens, Ruderal, Mature and Semi Mature Trees and Hedgerow.	

Contents

2 Introduction

2.1 Background

Bright Green Environmental was originally commissioned by Logan Homes Ltd. to undertake an ecological survey of and at Land North Of Malting Lane, Braughing, Ware, Hertfordshire, SG11 2QZ. As required under Condition 19 of the approved planning permission 3/20/0793/FUL an updated site survey was undertaken on 22nd March 2023 and results of which are incorporated herein.

This report details the findings of an Extended Phase 1 Habitat Survey to identify the potential for presence of species protected under European Legislation (Conservation of Habitats and Species Regulations 2017, as amended), UK legislation (Wildlife and Countryside Act 1981; Protection of Badgers Act 1992), and other priority species and habitats which are a consideration under the National Planning Policy Framework (NPPF). Where best practice guidelines exist, these have been used to assess the likelihood that individual species will be present, for example Bat Surveys: Good Practice Guidelines (BCT 2015) and Habitat Suitability Index for Great Crested Newt (Oldham et al, 2000).

The Natural Environment and Rural Communities (NERC) Act 2017, under Section 41, lists Species of Principal Importance for Conservation of biodiversity in England (SPIE species). Protected and UK SPIE species are a material consideration for individual planning consents under the NPPF, which promotes the enhancement of natural and local environments through planning and encourages a move towards achieving net gains for biodiversity where possible (DCLG, 2015).

The site survey is supported by a desk study, to identify records of any protected species, which could be impacted by development of the site.

2.2 Proposed Development

The proposed development is understood to be as detailed in figure 2.1 below. It will involve the 'Change of use of land and erection of 2no. single-storey dwellings, 7no. two-storey dwellings, associated ancillary outbuildings, shared vehicular access and improvements to the public highway.

Figure 2.1 Proposed layout of development

2.3 Scope of Survey

This Preliminary Ecological Appraisal is based on the initial site survey and update survey as detailed herein and provides an overview of the likelihood of protected species occurring on the site. Where no evidence is found, this does not mean that species are not present, or using the site. Further surveys are only recommended if there is a significant likelihood that protected species may be present and impacted by the proposed development, based on the suitability of the habitat and any direct evidence.

The Phase 1 habitat survey does not constitute a full botanical survey or a detailed Phase 2 survey for protected or notable species.

The protected species assessment provides a preliminary view of the likelihood of protected species occurring on the site, based on the suitability of the habitat and any direct evidence on the site. It should not be taken as providing a full and definitive survey of any protected species group. It is only valid at the time the survey was carried out. Additional surveys may be recommended if, based on the preliminary assessment or during subsequent surveys, it is considered reasonably likely that other protected species may be present.

3 Survey Methodology

3.1 Habitat Survey

The survey involved a site visit to record and map habitat types and ecological features on the site. The survey was undertaken in accordance with Guidelines for Preliminary Ecological Assessment produced by the Chartered Institute of Ecology and Environmental Management (CIEEM, 2012), and the general principles and methods outlined in the Handbook for Phase 1 Habitat Survey (JNCC 2010). Features of interest were identified as target notes and included with photographs in Table 4.1.

The potential for presence of protected species was assessed as follows:

Amphibians - Known ponds within 250m of the site (unless ecologically separated by significant barriers) were assessed for potential to support breeding protected amphibians, such as great crested newts or toads.

Bats - Trees within, and adjacent to, the site boundary were assessed from the ground for potential to support roosting bats. The buildings were surveyed externally for their potential to support roosting bats. Habitat was also assessed for foraging and commuting potential, aided by aerial photographs of the surrounding landscape.

Dormice - Any scrub or woodland areas were assessed for potential to support dormice: Good under-storey/shrub layer, arboreal connectivity, and a range of food sources throughout the active dormouse season.

Reptiles - The presence of suitable reptile habitat was assessed according to the criteria described in the Herpetofauna Workers' Manual (Gent and Gibson 1998) and Froglife guidelines (Froglife 1999).

Invertebrates - The site was surveyed for high quality aquatic, dead-wood or other habitats which could be used by significant assemblages of invertebrates.

Flora and habitats - Habitats and dominant plant species which were identifiable at the time of the survey were recorded, including Wildlife and Countryside Act Schedule 9 invasive plant species, such as Japanese knotweed *Fallopia japonica* and giant hogweed *Heracleum mantegazzianum*.

[redacted]

Birds - A visual survey of bird activity and suitable nesting habitat was carried out, to determine if any areas would be suitable for WCA Schedule 1 birds, Birds of Conservation Concern (BoCC), SPIE or other common and widespread nesting birds.

Adjacent habitat - Aerial photographs, maps and field observation were used to identify habitats in the wider landscape which could be impacted by development of the site.

3.2 Desk Study

Due to the physical nature of the proposed development site being a grazed paddock and the availability of data in the public domain a full data search was not undertaken. Data was obtained from the following sources: Braughing Parish Neighbourhood Plan.

3.2.1 NBN Atlas

The National Biodiversity Network Atlas was accessed on 8th March 2020, to identify the presence of protected species, within a 2km radius of the site.

3.2.2 Braughing Parish Neighbourhood Plan

The Braughing Parish Neighbourhood Plan was reviewed on 8th March 2020 as this provides good quality local biodiversity data for the local area.

3.2.3 Statutory Designated Sites

The Multi-Agency Geographic Information for the Countryside (MAGIC), was accessed on 8th March 2020, to identify the presence of statutory designated sites within a 2km radius.

3.3 Surveyor Details

The initial site survey was undertaken by Tony Hargreaves BSc (Hons) AIEMA Ecologist at Bright Green Environmental, on 9th March 2020. During the survey, the temperature was 15°C; there was a light breeze (Beaufort scale 0-1), clear skies and good visibility. Th update survey was undertaken by Tony Hargreaves BSc (Hons) AIEMA Ecologist at Bright Green Environmental, on 22nd March 2023. During the survey, the temperature was 16°C; there was a light breeze (Beaufort scale 0-1), largely clear skies and good visibility.

The surveyor is an associate member of the Chartered Institute of Environmental Management and Assessment (AIEMA) and subject to the IEMA Professional Code of Conduct and licensed by Natural England (No C136620) to survey for bats and great crested newts. He has extensive experience in undertaking various ecological surveys on behalf of public and private sector clients, throughout the UK.

4 Results and Discussion

4.1 Site and Habitat Description

The site is located within the village of Braughing. The application site is a grazed paddock situated on the north side of Malting Lane, Braughing and small part of garden area currently serving the convenience store and post office at 10 Green End. To the west is the continuous row of dwellings on the eastern edge of the carriageway Green End. To the south, is the sunken roadway Malting Lane which is lined by trees and defunct hedgerows. Beyond this a large pasture field. To the north is Fleece Lane, a pedestrian route set below surrounding ground and lined by hedgerows and trees. Beyond this is the rear garden of the public house, The Golden Fleece. The eastern boundary is marked by a timber post and rail fence, with a pasture field to the east. This field is enclosed by the course of the River Quin 65m from the site boundary. The site also shares an eastern boundary with the property Quinford. The boundary is marked by a beech (Fagus sylvatica) hedge and post and rail fence, with some sycamore, a cherry tree and a large European black pine.

The surrounding habitat of the site is largely residential properties and rural businesses associated with Braughing and their associated amenity gardens. In the surrounding area, the land cover is a mix of arable and pasture, with hedgerows and mature trees enclosing medium to large irregular shaped fields. There are numerous woodland patches.

4.2 Target Notes

Target notes from the surveys are detailed in Table 4.1 below and on the Phase I Habitat Map in Appendix C. Where there are any notable differences between the surveys additional dated photos are included for reference.

Table 4.1: Target notes and accompanying photos

Target note	Habitat Description	Photo
1	Proposed access point from Malting Lane through the garden of the village shop and post office, will require removal of the leylandi hedge.	

Target note	Habitat Description	Photo
2	Proposed access route through the garden of the post office which is well maintained as mown lawns with mature shrubs. The garden vegetation had been cleared in advance of the breeding bird season.	March 2020  March 2023 
3	The south western corner of the site where the driveway will come in from the post office garden has a manure heap from the stables which are in current use. The composting manure may offer suitable refugia for reptiles and amphibians, although the regular use is likely to deter them. The coppiced horse chestnut (T20) is proposed to be retained.	

Target note	Habitat Description	Photo
4	The stables within the adjacent property is understood to be retained. They are of timber construction clad in timber weatherboard and have a tin roof with a loft void above and is considered to offer suitable roost opportunities for bats.	
5	The paddock is grazed although typical of grazed pastures there are patches of tussocky grass and areas of nettle and thistle. Top photo is viewed south across the site with the rear boundaries of the residential properties to the right. Bottom photo is the internal edge of the hedge lining Fleece Lane which will be faced up as part of the development. The pasture field downslope of the site beyond the post and rail fence.	 

Target note	Habitat Description	Photo
6	The boundary trees and hedge along Malting Lane and the adjacent property Quinford.	
7	[redacted]	

4.3 Desk Study

4.3.1 Statutory Designated Sites within 2km

There are no known statutory designated sites within 2km. The closest being Plashes Wood SSSI (3.8km south) and Patmore Heath SSSI (4.6km east).

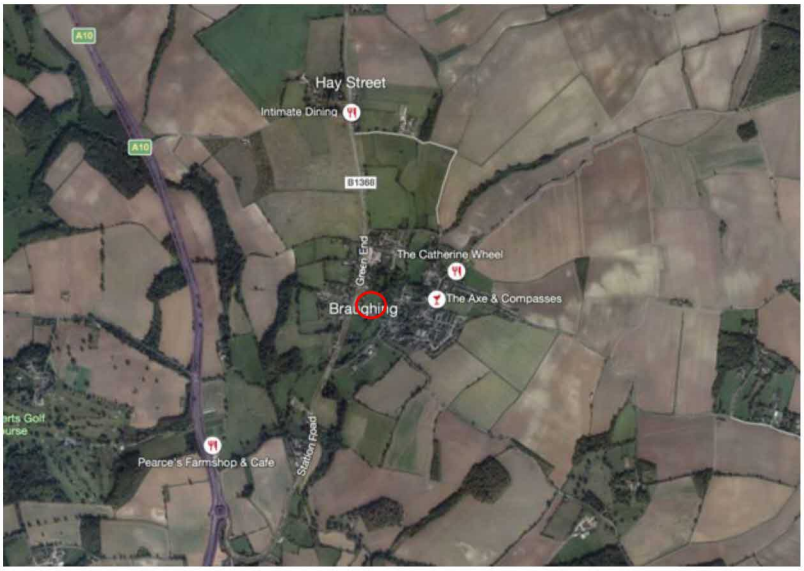
4.3.2 Non-Statutory Designated Sites within 2km

There are no known non-statutory conservation sites within 2km of the site.

4.3.3 Habitat types within 2km

The surrounding habitat of the site is predominantly arable with grazing pastures and parcels of broadleaved woodland, flood plain grazing marsh along the River Rib and semi improved grassland.

Figure 4.1 Aerial image of surrounding habitats (site highlighted in red)



Source: www.bing.com/maps accessed 8th February 2020

4.3.4 Protected, Priority, Rare Species within 2km

There are known records of protected species within 2km of the site.

Bats

There are records of Common Pipistrelle, Soprano Pipistrelle Brown Long Eared, Barbestelle, Daubenton, Whiskered, Natterers, Noctule, Serotine.

Bat EPS Licenses

There is an EPS license (EPSM2013-5862) non breeding for Common Pipistrelle, Brown Long Eared, Barbastelles in the village.

Amphibians

Common Toad, Common Frog, Smooth Newt, Great Crested Newts.

Great Crested Newt EPS Licenses

There is an EPS license (2015-13181-EPS-MIT) non breeding for Great Crested Newts approximately 2km to the east.

Reptiles

Grass Snakes and Common Lizards.

Birds

There are many priority bird species within 2km of the site including Barn Owl, Kestrel, Sparrowhawk, Hobbies, Merlin, Peregrine Falcon, Hen Harrier, Lesser Spotted Woodpecker, Skylark, Common Swift, Swallow, House Martin, Grey Partridge, Lapwing, Corn Bunting, Tree Sparrow, Yellow Wagtail, Starlings.

Other Mammals

Brown Hare [redacted] Weasels, Hedgehogs, Water Vole.

4.4 Potential for Protected Species

The site was assessed to identify whether proposed works within the site boundary could impact on protected or locally rare species, either on the site or within the local area.

4.4.1 Habitats and Species

No protected, BAP, SPIE or locally important plant species were recorded at the site during the survey, which was carried out at a sub-optimal time of year for botanical surveys.

Vegetation within the application site comprised of:

Amenity residential garden of mown lawn, ornamental shrubs and groups of young trees including leyland cypress, lawson cypress, western red cedar, spruce, viburnum, juniper, orange blossom. Including the mature leylandi boundary hedge along Malting Lane

Improved grass in form of the grazed pasture / paddock comprising of common fescue, perennial rye grass, cocksfoot, ragwort, stinging nettle, creeping spear thistle, common dock, cow parsley, creeping buttercup, dandelion, red dead nettle, white dead nettle.

Ruderal there is a small strip of ruderal vegetation with occasional shrubs along the western boundary of the site with the adjacent residential properties comprising of bramble, hawthorn, elder, hornbeam, stinging nettle, spear thistle, cow parsely.

Hedgerows surround the site to the south, north and east. The southern hedge is a species poor gappy hedgerow along the bank top of the sunken Malting Lane comprising of sycamore, hawthorn, blackthorn, bramble and ivy. The northern is predominantly mature hawthorn, blackthorn and elder. There is a short section of boundary hedgerow with the property Quinford which comprises of beech hedge.

Trees are present with the garden of the post office comprising of Leyland cypress, lawson cypress, western red cedar, spruce, there is a mature coppices horse chestnut marking the boundary of the garden and the pasture. There are mature and semi trees around the perimeter of the site. There are no trees within the pasture.

Buildings there are no buildings on the site but there is an adjacent outbuilding stable block associated within the post office garden.

4.4.2 Bats

There are known records of several species of bats within 2km of the site.

4.4.2.1 Roosting Bats - trees

No trees in or adjacent to the site were considered to offer suitable roosting opportunities for bats, there were several along the southern boundary that had light ivy cladding.

4.4.2.2 Roosting Bats - buildings

No buildings are to be affected by the proposed development. The adjacent outbuilding / stable offers potential for bats to roost within the loft void. No works are proposed to this and any potential access points will not be obstructed as there is a landscaping strip proposed along the western boundary.

4.4.2.3 Foraging and Commuting Bats

The southern and northern boundary hedgerows and boundary trees and the general site vegetation are considered to offer suitable foraging habitat.

Both hedgerows form enclosed 'tunnels' over their respective lanes and form linear features in the wider landscape that are likely to support high levels of insects due to their sheltered nature and so present suitable commuting and foraging habitat.

The proposed development will not impact upon the boundary hedgerows and trees as none are being removed. The site is to be enhanced as part of the proposal with the establishment of a buffer strip to the eastern boundary that will improve connectivity between these habitats. The proposed garden landscape will also offer suitable foraging habitat. Therefore, it is not considered that bats use of the site and boundary features will not be adversely affected by the proposals.

However, it is proposed that lighting precautions during and post-construction should be implemented, as detailed in Section 5, to enable any bats to continue to use the site and its boundaries.

4.4.3 Reptiles

There are known reptile records within 2km of the site, specifically grass snakes and common lizards.

The site offers limited opportunity for reptiles, the predominantly short grazed grass with occasional tussocky sward patches does not present suitable cover for reptiles, a small area of ruderal vegetation along the western boundary may offer some refugia. The composting manure heap presents suitable refugia and egg laying habitat for grass snakes. There is connectivity with other suitable habitats to the north and south although separated by banked lanes. However, given the limited area of suitable habitat and that the majority of the site is considered unsuitable it is considered unlikely there would be a significant population on the site. Therefore, a precautionary approach is considered suitable and should be followed during construction as detailed in Section 5, to ensure that any potential for harm to reptiles is avoided.

The proposed buffer strip along the eastern boundary will maintain connectivity with between the suitable habitats to the north and south.

4.4.4 Amphibians (Great Crested Newt and Common Toad)

There are known amphibian records within 2km of the site, specifically common frogs, common toads and smooth newts.

There are no water bodies on the site. There are no known ponds within 250m, although the River Quin runs approximately 65m from the site boundary although flowing waterbodies are not generally utilised by amphibians.

The site offers limited opportunity for amphibians, the predominantly short grazed grass with occasional tussocky sward patches does not present suitable cover for amphibians, a small area of ruderal vegetation along the western boundary may offer some refugia. The composting manure heap presents suitable refugia and foraging habitat for common toads. There is connectivity with other suitable habitats to the north and south although separated by banked lanes. However, given the limited area of suitable habitat and that the majority of the site is considered unsuitable, combined with the distance from waterbodies it is considered unlikely there would be a significant population on the site. Therefore, a precautionary approach is

considered suitable and should be followed during construction as detailed in Section 5, to ensure that any potential for harm to amphibians is avoided.

Therefore, no further surveys are considered necessary. General precautions should be carried out, as detailed in Section 5, to ensure that any potential for harm to amphibians is avoided, during the construction phase.

The proposed buffer strip along the eastern boundary will maintain connectivity with between the suitable habitats to the north and south.

4.4.5 Water Vole

Although there are records for water vole within the village, the site is not considered suitable for water voles due to its distance from the river, as water voles generally remain within 6m of the watercourse.

4.4.6 Birds

Whilst there are significant records of priority bird species within 2km of the site, the proposed development is contained within the boundaries of the site and unlikely to have any impact on the wider farmland landscape that the priority species are associated with.

The site provides nesting and foraging habitat for birds in the boundary trees, hedgerows and ruderal vegetation. The proposed development will involve the clearance of some trees and shrubs through the garden of the post officer however all boundary trees and hedges will be retained.

Therefore, no further surveys are considered necessary. General precautions should be carried out, as detailed in Section 5, to ensure that any potential for harm to birds is avoided, during the construction phase. Any clearance of vegetation as outlined above must be undertaken outside of the breeding bird season (March to August inclusive).

The proposed buffer strip along the eastern boundary will maintain connectivity with between the suitable habitats to the north and south.

4.4.7 [redacted]and Fox

No signs of [redacted] foxes were identified on the site during the survey, [redacted]

Precautions should be carried out, as detailed in Section 5, to ensure that foxes and other nocturnal mammals are not harmed during the construction phase (foxes are protected under the Wild Mammals Protection Act, 1996).

No further surveys necessary.

4.4.8 Dormice

There are no known records of Dormice within 2km of the site. No evidence of dormice was identified during the survey and the site is not considered particularly suitable for dormice, due to the lack of a dense hedgerow or woodland habitat, or connectivity to known populations. The boundary hedgerows are no impacted by the proposed development.

No further surveys necessary.

4.4.9 Hedgehogs or Other Protected, BAP or Rare Species

The site had potential to be used by hedgehogs particularly to the boundary hedges, shrubs in the garden area, ruderal vegetation for refuge, but also across the site for foraging. No direct or indirect impact is likely if precautions recommended for other nocturnal mammals are followed.

Should any hedgehogs be discovered works should cease and the Ecological Clerk of Works (ECoW) should be called for guidance. Any individuals in immediate harm should be moved by hand and placed in a suitably sheltered undisturbed safe position.

Any fencing used at the site should include hedgehog links: Gaps (10cm x 10cm) every 2m along the base of the fence which would allow hedgehogs and other wildlife to move between the site and habitats beyond.

No further surveys are recommended.

4.4.10 Invertebrates

The site is considered likely to support common and widespread invertebrate species typical of the habitats present.

No further surveys necessary.

4.4.11 Non-Native Invasive Species (WCA Schedule 9)

No species that are listed on Schedule 9 of the Wildlife & Countryside Act 1981 were identified during the survey. Species listed on Schedule 9 of the Wildlife & Countryside Act 1981 should be treated/removed/disposed of by an appropriately qualified and licensed contractor to ensure legal compliance and prevent spread of invasive species. Species listed under WCA Schedule 9 should not be spread or moved to other sites during the clearance process.

4.4.12 Impact on Designated Wildlife Sites

There are no designated sites within 2 km. The development is considered to be contained within the site boundaries and is therefore not likely to have any adverse impact upon any designated sites.

4.5 Limitations and Assumptions

The baseline conditions reported and assessed in this document represent those identified at the time of the surveys. All areas of the site were accessible during the surveys.

5 Recommendations

5.1 Key Recommendations and Further Surveys

No further surveys are considered necessary to inform the development.

5.2 Avoidance/Precautionary Methods

Any works to the trees, hedges, ruderal/scrub vegetation must be undertaken outside of the nesting bird season (March to August inclusive). If this is not possible a Breeding Bird Survey must be undertaken during the nesting bird season (March to August inclusive), to avoid infringing legislation which protects all nesting birds (WCA 1981). If an active nest is identified, there will be a delay in this area (and an exclusion zone, as recommended by the project ecologist), until all young birds have left the nest.

To minimise risk of disturbance to potential foraging and commuting bats, during and post development, any external lighting should be minimised as follows:

Any task lighting (during construction) or security lighting should not be directed at boundary vegetation or mature trees.

Any necessary security lighting should be set on short timers and be sensitive to large moving objects only.

Other lighting around the site should be keep to the minimal feasible level and be directed downward and shielded to minimise light spillage.

Hoods, cowls or directional lighting should be used to avoid light directed at the sky or towards boundary vegetation or ditches.

Lighting times should be limited, to provide dark periods.

Low pressure sodium security lights with glass glazing are recommended, as these produce the least amount of UV light. Avoid white and blue wavelengths of the light spectrum. The brightness of the lamps should be kept as low as feasibly possible (ILE/BCT, 2007; BCT interim guidance 2014).

To minimise the risk to any potential reptiles or amphibians, a watching brief/methodology with an Ecological Clerk of Works should be adopted with measures to include:

The grass sward will be maintained to a short sward (<150mm) up until and throughout the development program.

Any clearance of ruderal/scrub vegetation must be undertaken during the active season and after any potential young have become active so between September to October.

Suitable refugia, for example log piles/rubble will be dismantled removed or repositioned carefully under the supervision of the ECoW.

Due to potential for hedgehogs (and other mammals) in the area, any foundations, holes or deep pits which are left overnight should have a secured plank, or other means of escape for mammals, made available.

In the event a non-native invasive species is identified during the works they should be removed from the site/disposed/destroyed of at an approved facility, to avoid spread of WCA Schedule 9 species.

If the above recommendation and precautionary measures are followed, then potential impact of the proposed development on local biodiversity is considered to be minimal.

5.3 Recommended Mitigation

As the surveys have not identified the presence of any priority species on site no mitigation is considered necessary.

5.4 Enhancement Recommendations

There is opportunity to enhance the biodiversity value of the site which has been adopted into the sensitively designed scheme. Since the original report and to address the planning conditions this has been formally included within the Biodiversity Enhancement Strategy (included herein in Appendix D). In summary this has included the following enhancement measures and achieved a Biodiversity Net Gain of 10%:

Establishing the proposed buffer strip to the eastern boundary incorporating a species rich grass sward.
Establishment of scrub habitat to the western boundary, northern boundary and an area to the south of the site adjacent to the southern boundary.
Planting a species rich hedgerow with trees along the eastern boundary to connect the southern and northern boundary hedges and tree lines
Flowering and seed-bearing native trees and shrubs incorporated into the landscaping scheme.
Erection of 2 sparrow terraces on cart lodge and 2 swift boxes on plot 8
Erection of 4no. bat boxes – 2 soffit boxes on the north east elevation of plot 9 and 2 integrated bat boxes on the south east gable elevation of plot 7.
Creation of log piles/hibernacula within the scrub habitat areas for invertebrates, reptiles and amphibians.

6 Conclusion

It is considered that, providing the avoidance, precautionary methods, as detailed in Section 5, are implemented, to protect any potential individuals that may be using parts of the site, the development of the site can proceed with negligible impact on any protected, SPIE or locally important species.

Providing opportunities to enhance the site are incorporated into the landscape design of the proposed development along with the provision of bat roosting and bird nesting boxes then the site has the potential to be enhanced from its current state. This would deliver a net biodiversity gain for the site in accordance with the national planning policy framework.

If you require any further information in relation to the ecology of the site, please do not hesitate to contact Bright Green Environmental.

Survey Conducted and Report written by

[redacted]

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7 References

Conservation of Habitats and Species Regulations 2010 (as amended). HMSO, London.
DCLG (2012). National Planning Policy Framework. Available to download online on the Communities and Local Government website
http://www.communities.gov.uk/publications/planningandbuilding/nppf

Froglife (1999) Reptile Survey: An Introduction to Planning, Conducting and Interpreting Surveys for Snake and Lizard Conservation. Froglife Advice Sheet 10.

Gent, A.H. and Gibson, S.D., eds. (1998) Herpetofauna Workers' Manual. Peterborough, Joint Nature Conservation Committee.

Guidelines for Preliminary Ecological Assessment produced by the Chartered Institute of Ecology and Environmental Management (CIEEM) in July 2012.

HMSO (1992) Protection of Badgers Act, HMSO London.

Hundt, L. (2016). Bat Surveys – Good Practice Guidelines, 3rd Edition. Bat Conservation Trust.
JNCC (2010) Handbook for Phase 1 habitat survey: a technique for environmental audit (revised reprint) JNCC: Peterborough.

MAGIC (2014): Designated site data downloaded from URL http://www.magic.gov.uk.html

Natural Environment and Rural Communities Act (NERC Act) (2006) HMSO London.

Wildlife and Countryside Act (1981). HMSO, London.

Local bird records downloaded from http://www.bto.org

Local biodiversity Action plans

Braughing Parish Neighbourhood Plan

Appendix A – Legislation & Planning Policy

Conservation of Habitat and Species Regulations

The Conservation of Habitats and Species Regulations transpose Council Directive 92/43/EEC on the Conservation of Natural Habitats and Wild Flora and Fauna (Habitats Directive) into English law, making it an offence to deliberately capture, kill or disturb wild animals listed under Schedule 2 of the Regulations. It is also an offence to damage or destroy a breeding site or resting place of such an animal (even if the animal is not present at the time).

Wildlife & Countryside Act

The Wildlife and Countryside Act 1981, as amended by the Countryside and Rights of Way Act (CRoW) 2000 and the Natural Environment and Rural Communities Act (NERC) 2006, consolidates and amends existing national legislation to implement the Convention on the Conservation of European Wildlife and Natural Habitats (Bern Convention) and Council Directive 79/409/EEC on the Conservation of Wild Birds (Birds Directive), making it an offence to:

- Intentionally kill, injure or take any wild bird or their eggs or nests (with certain exceptions) and disturb any bird species listed under Schedule 1 to the Act, or its dependent young while it is nesting;
- Intentionally kill, injure or take any wild animal listed under Schedule 5 to the Act; intentionally or recklessly damage, destroy or obstruct any place used for shelter or protection by any wild animal listed under Schedule 5 to the Act; intentionally or recklessly disturb certain Schedule 5 animal species while they occupy a place used for shelter or protection;
- Pick or uproot any wild plant listed under Schedule 8 of the Act.

Sites of Special Scientific Interest (SSSI) are designated under this Act.
Special Protection Areas (SPA) are strictly protected sites, designated under the Birds Directive, for rare and vulnerable birds and for regularly occurring migratory species.

Natural Environment & Rural Communities Act

The NERC 2006 places a duty on authorities to have due regard for biodiversity and nature conservation during the course of their operations.

National Planning Policy Framework (NPPF)

The NPPF sets out current government policy on biodiversity and nature conservation and places a duty on planners to make material consideration to the effect of a development on legally protected species when considering planning applications. NPPF also promotes sustainable development by ensuring that developments take account of the role and value of biodiversity and that it is conserved and enhanced within a development
NPPF replaced PPS9 in April 2012. NPFF works is considered in conjunction with Government Circular 06/2005 Biodiversity and Geological Conservation - Statutory Obligations and Their Impact within the Planning System.

Biodiversity Action Plans

The UK Biodiversity Action Plan (UKBAP) (Anon, 1995) was organised to fulfil the Rio Convention on Biological Diversity in 1992, to which the UK is a signatory. A list of national priority species and habitats has been produced with all listed species/habitats having specific action plans defining the measures required to ensure their conservation. Regional and local BAPs have also been organised to develop plans for species/habitats of nature conservation importance at regional and local levels.

Local Structure Plans

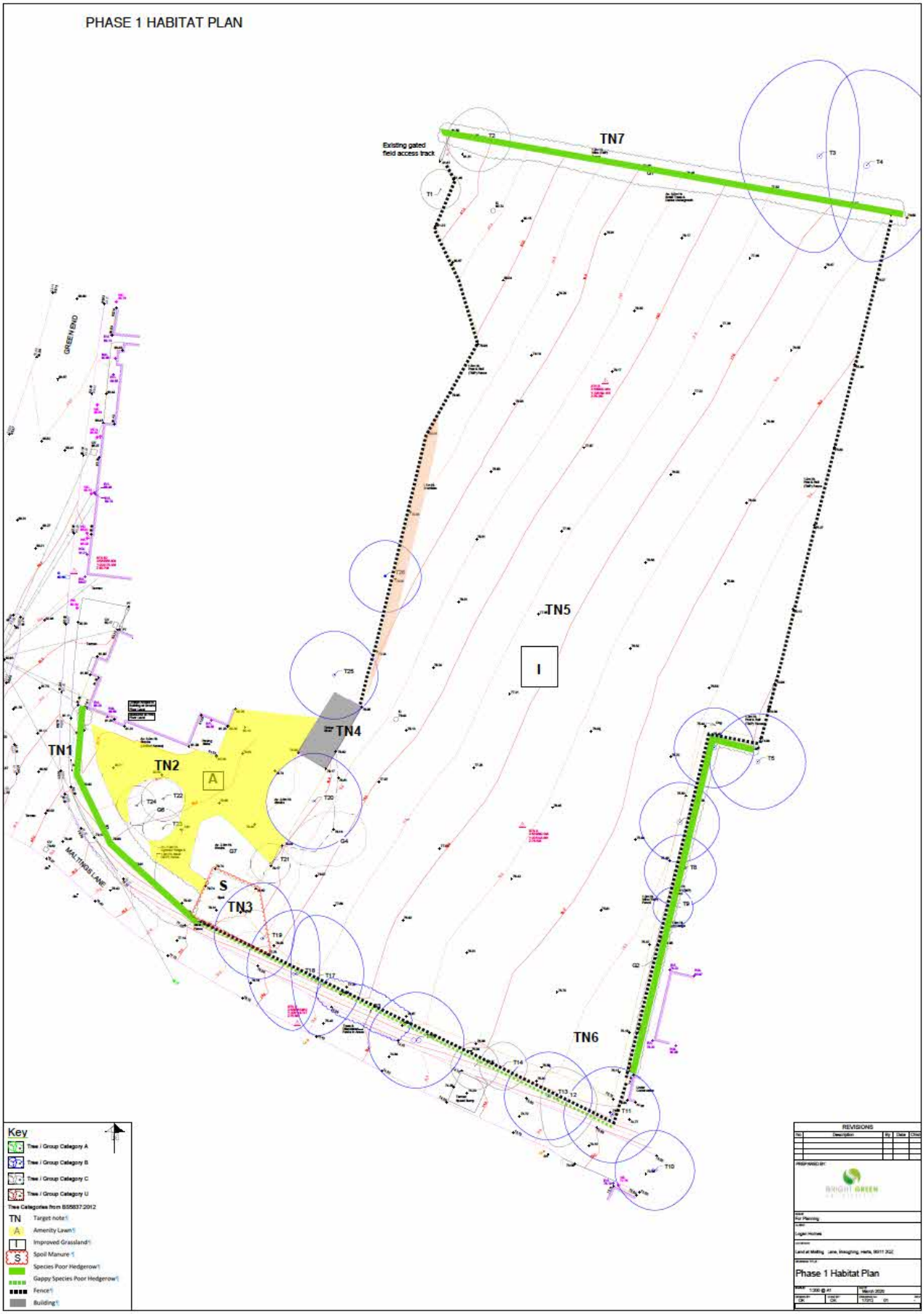
County, District and Local Councils have Structure Plans and other policy documents that include targets and policies which aim to maintain and enhance biodiversity. These are used by Planning Authorities to inform planning decisions.

Natural England Standing Advice

Natural England has adopted national standing advice for protected species. It provides a consistent level of basic advice which can be applied to any planning application that could affect protected species. It replaces some of the individual comments that Natural England has provided in the past to local authorities.

Appendix B – Proposed Development Plan

Appendix C – Phase I Habitat Plan



Appendix D – Biodiversity Enhancement Strategy and BNG

Biodiversity Enhancement Strategy

For proposed development at:

Land North of Malting Lane, Braughing, Ware, Hertfordshire, SG11 2QZ

Survey and Report by:
Tony Hargreaves BSc AIEMA
Director

6th July 2023
Project Ref: 17513

Disclaimer

This statement is prepared by Bright Green Environmental for the sole and exclusive use of Logan Homes, in response to their particular instructions. No liability is accepted for any costs, claims or losses arising from the use of this report or any part thereof for any purpose other than that for which it was specifically prepared or by any other party other than Logan Homes. No information provided in this report can be considered to be legal advice.

Bright Green Environmental cannot be held liable in any way for any legal actions brought against the landowner or developer in connection with this report.

Contents

1 Introduction

1.1.1 Bright Green Environmental was commissioned by Logan Homes. to provide a Biodiversity Enhancement Strategy and Biodiversity Net Gain Calculation to satisfy the requirements of the planning permission 3/20/0793/FUL for the proposed development of 'Change of use of land and erection of 2no. single-storey dwellings, 7no. two-storey dwellings, associated ancillary outbuildings, shared vehicular access and improvements to the public highway, Land North of Malting Lane, Braughing, Ware, Hertfordshire, SG11 2QZ'.

1.1.2 This statement addresses the requirements of the local authority as outlined in the Decision Notice and the following conditions.

18. Prior to the commencement of works above slab level, a detailed Biodiversity Gain plan will be provided to the LPA and agreed upon in writing. This plan must ensure there is a net-gain of at least 10% on site through development, which can be achieved through the implementation of features such as planted areas or bird/bat boxes. The development shall be implemented in accordance with the agreed details.

Reason

In the interest of ensuring the local biodiversity is protected and preserved within the area, in accordance with Policies NE3 and NE4 of East Herts District Plan 2018

1.1.3 This enhancement strategy and the Biodiversity Net Gain Calculations have been supported by the original and updated Preliminary Ecological Appraisal.

1.1.4 The proposed development is understood to be in accordance with the site plan by Thurlow Architects 77487/drg no 600/revp7/dec22 upon which the detailed Biodiversity Enhancement Scheme has been derived.

1.1.5 The methodology for assessing and quantifying the enhancement is the Biodiversity Net Gain (BNG).

1.1.6 The site is classified as a small site of circa 0.6ha and with a development of less than 9 units it meets the criteria for using the Natural England Small Sites Biodiversity Metric 4.0 and its associated guidance were adopted to calculate biodiversity net gain.

1.1.7 The proposed development is understood to be in accordance with the site plan by Thurlow Architects 77487/drg no 600/revp7/dec22 upon which the detailed Biodiversity Enhancement Scheme and Landscape Scheme has been derived.

Figure 1. Proposed Site Plan

2 Existing Biodiversity Value

2.1.1 The existing biodiversity of the site was considered to be of relatively limited value as detailed in the Preliminary Ecological Appraisal report prepared in 2020.

2.1.2 The application site is a grazed paddock situated on the north side of Malting Lane, Braughing and small part of garden area currently serving the convenience store and post office at 10 Green End. To the west is the continuous row of dwellings on the eastern edge of the carriageway Green End. To the south, is the sunken roadway Malting Lane which is lined by trees and defunct hedgerows. Beyond this a large pasture field. To the north is Fleece Lane, a pedestrian route set below surrounding ground and lined by hedgerows and trees. Beyond this is the rear garden of the public house, The Golden Fleece. The eastern boundary is marked by a timber post and rail fence, with a pasture field to the east. This field is enclosed by the course of the River Quin 65m from the site boundary. The site also shares an eastern boundary with the property Quinford. The boundary is marked by a beech (Fagus sylvatica) hedge and post and rail fence, with some sycamore, a cherry tree and a large European black pine.

2.1.3 The site was considered to offer the following:

Foraging and commuting opportunities for bats along northern and southern boundary trees and hedges.

Limited opportunity for reptiles and amphibians.

Nesting and foraging habitat for birds in the boundary trees, hedgerows and ruderal vegetation.

The site had potential to be used by hedgehogs particularly to the boundary hedges, shrubs in the garden area, ruderal vegetation for refuge, but also across the site for foraging.

The site is considered likely to support common and widespread invertebrate species typical of the habitats present.

3 Biodiversity Enhancement Strategy

3.1 This biodiversity enhancement strategy has taken into consideration the existing baseline, surrounding habitats and consultation comments made during the planning application.

3.2 Enhancement

Landscape

3.2.1 The proposed biodiversity enhancement strategy to achieve 10% biodiversity net gain has been adopted into the landscaping scheme as detailed on the Landscape Plan by Bright Green Environmental ref 17513 drg. no 1181-01 and accompanying Landscape Specification and incorporates the following:

Establishing the proposed buffer strip to the eastern boundary incorporating a species rich grass sward. – total area of 948m^2 to be fenced off from the residential garden by a timber post a rail fence comprising of a Wildflower and grasses – General Meadow mix Emorsgate EH1 (or similar)

Establishment of scrub habitat to the western boundary (488m^2), northern boundary (288m^2) and an area to the south of the site adjacent to the southern boundary (240m^2) – comprising of Crataegus monogyna, Euonymus europaeus, Ilex aquifolium, Ligustrum vulgare, Prunus spinosa, Rosa Canina, Viburnum opulus. These will provide floral, fruit and seed interest throughout the year for bird and insects, whilst providing refuge habitat for reptiles, amphibians and mammals. They will also provide foraging habitat for bats.

Planting a species rich hedgerow of 70m with trees along the eastern boundary to connect the southern and northern boundary hedges and tree lines – comprising of Acer campestre, Crataegus monogyna, Ilex aquilifolium, Prunus spinosa, Rosa canina. These will provide floral, fruit and seed interest throughout the year for birds and insects, whilst providing refuge habitat for reptiles, amphibians and mammals. This hedge line will provide ecological connectivity or corridor north – south between the existing habitats. It will also provide foraging and commuting habitat for bats.

Flowering and seed-bearing native trees (no.19) incorporated into the landscaping scheme with 12 planted along the eastern boundary of the site to form hedgerow trees - comprising of Acer campestre, Betula pendula, Carpinus betulus, Sorbus aucuparia. These will provide floral, fruit and seed interest throughout the year for birds and insects, whilst providing refuge habitat for reptiles, amphibians and mammals.

Native species shrubs and plants in borders and beds 160m^2 – comprising of species including Dryopteris filix-mas, Cytisus scoparius, Cornus sanguinea, Digitalis purpurea, Ruscus aculeatus, Lavendula 'Hidcote', Ajuga reptans, Blechnum spicant, Persicaria bistorta 'Superba', Thymus polytrichus, Persicaria bistorta 'Superba', Rosmarius officinalis, Asplenium scolopendrium, Digitalis purpurea, Liriope muscari, Solanum cripen 'Glasnevin', Vitis coignetiae. These will provide floral, fruit and seed interest throughout the year for birds and insects.

Native species hedges of privet dividing plots 2,3,4 (24m)

Floral rich grass mixes to amenity lawns including the visibility splay (257m^2) – comprising of a seed mix such as Wild flora lawn Emorsgate EL1 (or similar). Which can be managed through being cut short (Minimum 40mm) and retaining floral interest for insects.

3.2.2 In addition, all boundary and internal garden fence line will incorporate a gap in the gravel boards (where present) of approximately 13cm diameter to allow for hedgehogs and other small animals to pass through maintaining connectivity with adjacent garden and farmland habitats.

Birds

3.2.3 The installation of 2 no. sparrow terraces on the rear (western) elevation of the car port. The installation of 2 no. swift boxes on the side (north eastern) elevation of plot 8, at 4.3m as the minimum is generally considered 4m. These positions have been chosen to avoid future potential conflict, annoyance or disturbance with the occupiers and adjacent to suitable flight paths and foraging habitat along the establishing scrub and meadow habitat.

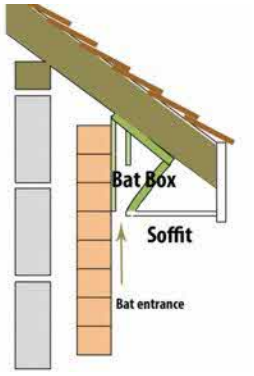
Figure 3.1 specification of bird boxes

Sparrow Terrace	Swift Box
	

Bats

3.2.4 The installation of 4 no. bat boxes on houses – 2 soffit boxes on the north east elevation of plot 9 and 2 integrated bat boxes on the south east gable elevation of plot 7. Positions have been chosen to avoid future potential conflict, annoyance or disturbance with the occupiers and adjacent to what are likely flight paths and foraging habitats where there is the greatest success of their utilisation as roosts.

Figure 3.2 Specification of bat boxes

Bat Box integrated into external brickwork	Bat Soffit Box
	

Reptiles and Amphibians

3.2.5 The creation of log piles 4no. within the scrub habitats to the north, south and west will provide suitable shelter and foraging opportunities for amphibians and reptiles.

Figure 3.3 location of bat and bird boxes.

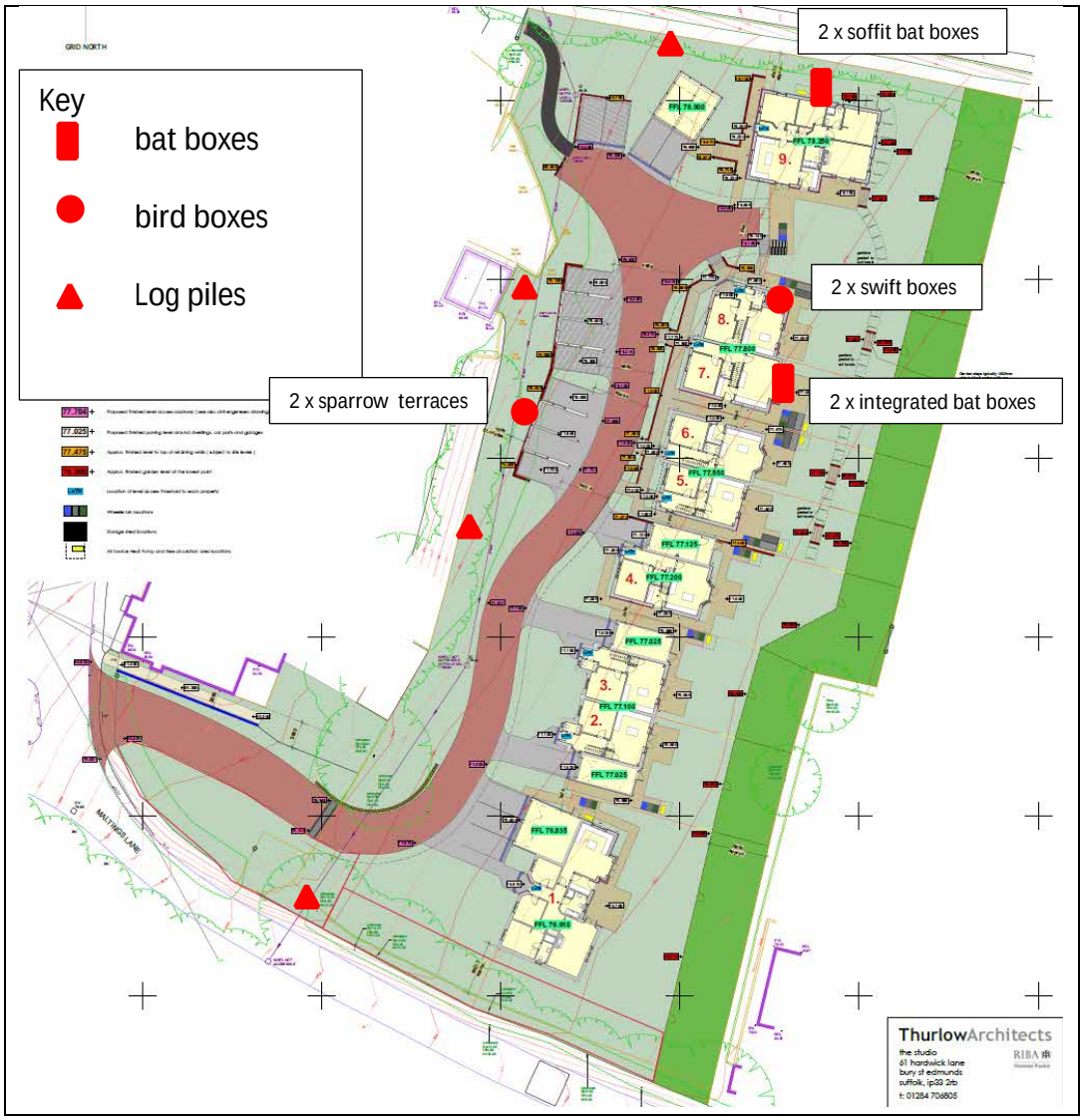
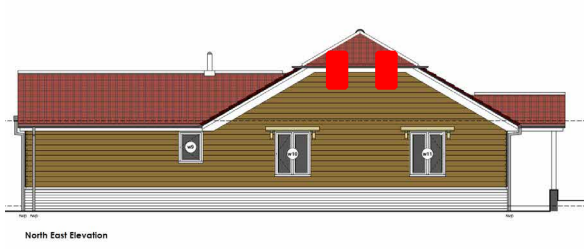
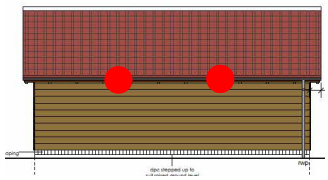


Figure 3.4 elevation plans of bat and bird boxes.

<table>
<tr>
<td>Plot 9 bat soffit boxes (2no.) at 3.9m on NE elevation
 
</td>
<td>Plot 7 bat integrated cavity boxes (2no.) at >6m on SE elevation
 
</td>
</tr>
<tr>
<td>Cart lodges sparrow terrace boxes (2no.) at 1.6m on east elevation.
  </td>
<td>Plot 8 swift boxes (2no.) at 4.3m on NE side elevation
 
</td>
</tr>
</table>

4 Biodiversity Net Gain

4.1.1 The Biodiversity Net Gain (BNG) is a means of quantifying this enhancement.

4.1.2 The site is a small site of circa 0.6ha and with a development of less than 9 units it meets the criteria for using the Natural England Small Sites Biodiversity Metric 4.0 to calculate biodiversity net gain.

4.1.3 The figures used within the biodiversity metric are as detailed within this report.

Baseline:

Site area: 5890m^2

Existing habitats: 5530m^2 of Improved grassland (including negligible area of ruderal vegetation).

Residential garden 360m^2.

Habitat Losses:

Due to the level of works proposed at the site and requirement to spray off the existing vegetation to establish the species rich mixtures of grass and shrubs proposed the whole area of improved grass and residential garden are considered lost.

All boundary hedges and trees are to be retained. With the exception of the loss of the conifer hedge.

Habitats created:

The habitats created are as er those detailed above and represented in the metric extract below.

Urban	Vegetated garden	Condition Assessment N/A	Condition Assessment N/A	Area/compensation not in local strategy/ no local strategy	257.00	0.0496	Species rich lawned amenity areas and visibilty splay
Urban	Vegetated garden	Condition Assessment N/A	Condition Assessment N/A	Area/compensation not in local strategy/ no local strategy	1039.00	0.2005	Rear lawned areas to each plot (less70m2 for hedge to east boundary)
Urban	Developed land; sealed surface	N/A - Other	N/A - Other	Area/compensation not in local strategy/ no local strategy	2358.00	0.0000	built areas - houses, garages/carports drivewy patios
Urban	Introduced shrub	Condition Assessment N/A	Condition Assessment N/A	Area/compensation not in local strategy/ no local strategy	160.00	0.0309	native shrub beds/borders plus 20m2 from south area (4)
Grassland	Other neutral grassland	Moderate, Good	Good	Formally identified in local strategy	948.00	0.9161	Eastern buffer strip (948m2)species rich meadow mix
Heathland and shrub	Mixed scrub	Moderate, Good	Good	Formally identified in local strategy	240.00	0.2319	scrub area to south of site (1)
Heathland and shrub	Mixed scrub	Moderate, Good	Good	Formally identified in local strategy	488.00	0.4716	scrub to western boundary (2)
Heathland and shrub	Mixed scrub	Moderate, Good	Good	Formally identified in local strategy	288.00	0.2783	scrub area to north of plot 5
Urban	Introduced shrub	Condition Assessment N/A	Condition Assessment N/A	Area/compensation not in local strategy/ no local strategy	42.00	0.0081	Area of mixed hedges in site based on 1m width over total 42m length
Heathland and shrub	Mixed scrub	Moderate, Good	Good	Formally identified in local strategy	70.00	0.0676	Area of hedges along eastern boundary based on 1m width over total 70m length

4.1.4 The results of this calculation are broken down into area and linear features, the full calculation is included within the appendices for reference.

4.1.5 The results demonstrate a positive gain of 10.07% on area habitat and 88.53% on hedgerow units. This meets the 10% biodiversity net gain that is required.

4.1.6 In addition to these quantifiable gains the addition of bat and bird boxes and reptile/amphibian refugia in the identified locations will provide enhancement for these priority species.

Figure 4.1 Headline results of Biodiversity Net Gain Natural England Small Sites Biodiversity Metric 4.0.

Site Name	Land North Of Malting Lane Braughing Herts SG11 2QZ
Sheet Name	Headline Results

Headline Results

Headline	BNG Targets Met ✓
Trading Rules	Trading Rules Satisfied ✓
Next steps	Submit metric to LPA

Baseline Units	*Habitat units*	2.9870	
	Hedgerow units	1.0286	
	River units	Zero Units Baseline	
Post-development Units	*Habitat units*	3.2877	
	Hedgerow units	1.9392	
	River units	0.0000	
Total net unit change	*Habitat units*	0.3007	✓
	Hedgerow units	0.9106	✓
	River units	0.0000	✓
Total net % change	*Habitat units*	10.07%	✓
	Hedgerow units	88.53%	✓
	River units	% target not appropriate	

Habitats units required to meet target	0.0000
Hedgerow units required to meet target	0.0000
River units required to meet target	0.0000

5 Conclusion

5.1.1 As the site was formerly largely an improved grass paddock for horse grazing and an area of residential garden the proposed development and the associated planting are considered to provide appropriate enhancement.

5.1.2 The Biodiversity Net Gain (BNG) has been used to quantifying this enhancement with a positive gain of 10% on area habitat and 88% on hedgerow units. This meets the 10% biodiversity net gain that is required.

5.1.3 The enhancements have been incorporated into the formal landscape strategy.

5.1.4 Therefore, the proposed development is considered to comply with the requirements of *Policies NE3 and NE4 of East Herts District Plan 2018.*

If you require any further information in relation to the ecology of the site, please do not hesitate to contact Bright Green Environmental.

Statement prepared by

[redacted]

Tony Hargreaves
Ecological Consultant
Director
Bright Green Environmental

[redacted]

Bright Green Environmental Consultancy Ltd.
Company No: 09047569 Registered Office: 3rd Floor, 207 Regent Street, London W1B 3HH

Appendix A Biodiversity Net Gain Matrix.

Small Sites Metric
(Biodiversity Metric 4.0)

Release Date: March 2023
ISBN: 978-1-7393388-0-0

Cell style conventions

	Enter data
	Automated equation
	Result
	Title cell
	Title cell alt colour
▲	Error
⚠	Attention required
	Use of this cell is not required

Technical Requirements - Excel Versions: 2010, 2013, 2016, 2019, Office 365, Excel for Android

Sheet Name	Site Details
1. Planning authority:	East Hert District Council
2. Site name:	Land North Of Malting Lane Braughing Herts SG11 2QZ
3. Applicant:	Logan Homes Ltd.
4. Planning application type:	Full planning consent
5. Planning application reference:	3/20/0793/FUL
6. Metric completed by (name & job title):	Tony Hargreaves, Ecologist
7. Date of metric completion:	05 June 2023
8. Revision number:	1
9. Masterplan document title / drawing number:	7487-600 P7 Pr Site Plan

Net Gain Targets

10. Targeted % increase in Units	10a. Habitat	10.00
	10b. Hedgerow	10.00
	10c. River	10.00

11. Targeted increase in Units if baseline value is zero - agreed with local planning authority	11a. Habitat units	0.00
	11b. Hedgerow units	0.00
	11c. River units	0.00

For planning authority use only

12. Planning authority reviewer:	
13. Date of planning authority review:	

Site Name:	Land North Of Malting Lane Braughing Herts SG11 2QZ	
Sheet Name	Desktop Assessment	

Development

14. Select the type of proposed development. If Other provide details at Q.24 below	Residential	Site area must be less than 10,000 m2
15. Site area (m^2)	5890	
N/A		
17. Number of dwellings proposed within the development site	Between 1 - 9 dwellings	

Designated sites and priority habitats

18. Any designated sites on or within 500m of the site?	No	
19. Any priority habitats on or within 500m of the site?	Within 500m of site boundary	Consider using main metric tool ⚠
20. List the designated sites and/or priority habitats	Boundary hedgerows to north and south boundary, Rover quin 65m east	
21. Information sources used for assessment of designated sites and priority habitats (See guidance)	Magic.gov.uk, Herts BAP, Google, PEA report.	

Site walkover

22. Site walkover completed?	Walkover completed by qualified ecologist	
23. Date of site walkover - DD/MM/YY	22/03/2023	Site walkover data valid until 22/09/23
24. Who completed the walkover? (Name and job title)	Tony Hargreaves, Ecologist	

Additional details

25. Any additional information or notes	

Site Name	Land North Of Maltings Lane Braughing Herts SG11 2QZ
Sheet Name	5. Area Habitats

Instructions:
1. Enter data into 1a. Baseline habitats table
2. Enter data on habitats to be created into 1b. Habitats to be created
3. Enter data on habitats to be enhanced into 1c. Habitats to be enhanced
4. Enter data on individual trees into 1d. Tree area calculator

All Key Rules Satisfied

Lost Units	2.2840
Created Units	2.5036
Enhancement Units	0.7842
Net Change	0.3007

1a. Baseline habitats

Ref	Habitat		C. Strategic significance	Areas (m²)			Baseline results			Comments	
	A. Broad Habitat	B. Habitat type		D. Total Area	E. Area retained	F. Area enhanced	Total habitat units onsite	Area Lost	Units lost	User comments	LPA comments
1	Grassland	Modified grassland	Area/compensation not in local strategy/ no local strategy	5530.00	0.00	0.00	2.21	5530.00	2.212	grazed horse paddock including negligible ruderal vegetation along boundaries species rich buffer strip to eastern boundary	
2	Urban	Vegetated garden	Area/compensation not in local strategy/ no local strategy	360.00	0.00		0.07	360.00	0.072	garden comprising of mown lawns, shrubs, compost heap.	
3	Grassland	Modified grassland	Area/compensation not in local strategy/ no local strategy			0.00					
4											
5											
6											
7											
8											
9											
10											
11											
12											
13											
14											
15											
16											
17											
18											
19											
20											
Trees	Individual trees	Urban/rural tree	Formally identified in local strategy	764.15	0.00	764.15	0.7030	0.00	0.0000		
			Totals (areas excl. Trees)	5890.00	0.00	0.00	2.2870	5890.00	2.2840		
			Error Check 1	Areas Acceptable							
			Error Check 2	Areas Acceptable							
			Error Check 3	Areas Acceptable							

1b. Habitats to be created

Ref			Condition Assessment		D. Strategic significance	E. Total Area (m²)	Habitat units created onsite	Comments	
	A. Broad Habitat	B. Habitat type	Acceptable condition options	C. Targeted condition				User comments	LPA comments
1									
2	Urban	Vegetated garden	Condition Assessment N/A	Condition Assessment N/A	Area/compensation not in local strategy/ no local strategy	257.00	0.0496	Species rich lawned amenity areas and visibility splay	
3	Urban	Vegetated garden	Condition Assessment N/A	Condition Assessment N/A	Area/compensation not in local strategy/ no local strategy	1039.00	0.2005	Rear lawned areas to each plot (less70m2 for hedge to east boundary)	
4	Urban	Developed land; sealed surface	N/A - Other	N/A - Other	Area/compensation not in local strategy/ no local strategy	2358.00	0.0000	built areas - houses, garages/carports driveway patios	
5	Urban	Introduced shrub	Condition Assessment N/A	Condition Assessment N/A	Area/compensation not in local strategy/ no local strategy	160.00	0.0309	native shrub beds/borders plus 20m2 from south area (4)	
6	Grassland	Other neutral grassland	Moderate, Good	Good	Formally identified in local strategy	948.00	0.9161	Eastern buffer strip (948m2)species rich meadow mix	
7	Heathland and shrub	Mixed scrub	Moderate, Good	Good	Formally identified in local strategy	240.00	0.2319	scrub area to south of site (1)	
8	Heathland and shrub	Mixed scrub	Moderate, Good	Good	Formally identified in local strategy	488.00	0.4716	scrub to western boundary (2)	
9	Heathland and shrub	Mixed scrub	Moderate, Good	Good	Formally identified in local strategy	288.00	0.2783	scrub area to north of plot 9	
10	Urban	Introduced shrub	Condition Assessment N/A	Condition Assessment N/A	Area/compensation not in local strategy/ no local strategy	42.00	0.0081	Area of native species rich hedges in site based on 1m width over total 42m length	
14	Heathland and shrub	Mixed scrub	Moderate, Good	Good	Formally identified in local strategy	70.00	0.0676	Area of native species rich hedges along eastern boundary based on 1m width over total 70m length	
16									
17									
18									
19									
20									
Trees	Individual trees	Urban/rural tree	Moderate	Moderate	Area/compensation not in local strategy/ no local strategy	813.89	0.2488		
					Totals (areas excl. Trees)	5880.00	2.5036		
					Error Check 4	Areas Acceptable			

1c. Habitats to be enhanced

Baseline ref	Existing Habitat Type		Enhanced Habitat type		B. Strategic significance	Area Enhanced	Enhanced Condition	Total Units	Net Improvement	Comments	
	Broad habitat type	Existing habitat type	Enhancement Type	A. Enhanced habitat type						User comments	LPA comments
1			Distinctiveness	Other neutral grassland			Good		Error ▲		
2											
3											
4											
5											
6											
7											
8											
9											
10											
11											
12											
13											
14											
15											
16											
17											
18											
19											
20											
Trees	Individual trees	Urban/rural tree	Condition	Urban/rural tree	Area/compensation not in local strategy/ no local strategy	764.15	Good	0.7842	0.7842		
					Totals (areas excl. Trees)	0.00		0.7842	0.7842		

1d. - Tree area calculator

Tree size (Diameter at breast height)	A. Total number of trees pre development	B. Number of trees retained (but not enhanced)	C. Number of trees enhanced	D. Number of new trees planted post development	Areas			
					Area pre development	Area retained	Area Enhanced by development	Area of new trees planted post development
Small -DBH ≤ 30cm				20	0	0	0	814
Medium - DBH > 30 to ≤ 90cm					0	0	0	0
Large - DBH > 90cm	1		1		764	0	764	0
Total	1	0	1	20	764	0	764	814

Data beyond this row is automated

1e. Trading Summary

Broad Habitat Type	Trading Rules Satisfied
Distinctiveness Band	Trading Rules Satisfied

1f. Habitat trading assessment

Broad habitat types	Distinctiveness band	Baseline units	Onsite provision	Net change	Trading satisfied?
Cropland	Low	0.0000	0.0000	0.0000	-
	Medium	0.0000	0.0000	0.0000	N/A
Grassland	Low	2.2120	0.0000	-2.2120	-
	Medium	0.0000	0.9161	0.9161	N/A
Heathland and shrub	Low	0.0000	0.0000	0.0000	-
	Medium	0.0000	1.0495	1.0495	N/A
Intertidal hard structures	Low	0.0000	0.0000	0.0000	-
	Medium	0.0000	0.0000	0.0000	N/A
Intertidal sediment	Low	0.0000	0.0000	0.0000	-
	Medium	0.0000	0.0000	0.0000	N/A
Lakes	Low	0.0000	0.0000	0.0000	-
	Medium	0.0000	0.0000	0.0000	N/A
Sparsely vegetated land	Low	0.0000	0.0000	0.0000	-
	Medium	0.0000	0.0000	0.0000	N/A
Urban	Low	0.0720	0.2891	0.2171	-
	Medium	0.0000	0.0000	0.0000	N/A
Woodland and forest	Low	0.0000	0.0000	0.0000	-
	Medium	0.0000	0.0000	0.0000	N/A
Coastal saltmarsh	Low	0.0000	0.0000	0.0000	-
	Medium	0.0000	0.0000	0.0000	N/A
Individual trees	Low	0.0000	0.0000	0.0000	-
	Medium	0.7030	1.0330	0.3300	Yes

Distinctiveness band	Baseline units	Onsite provision	Net change	Trading satisfied?
Medium distinctiveness	0.7030	2.999	2.2956	Yes
Low distinctiveness	2.2840	0.289	-1.9949	Yes
Are there sufficient Medium distinctiveness units to cover low distinctiveness losses?	0.3007			Yes

Site Name	Land North Of Maltring Lane Braughing Herts SG11 2QZ
Sheet Name	6. Hedges & Lines of Trees

Instructions:

1. Enter data into 1a. Baseline habitats
2. Enter data on habitats to be created into 1b. Habitats to be created
3. Enter data on habitats to be enhanced into 1c. Habitats to be enhanced

All Key Rules Satisfied

Retained Units	0.9936
Lost Units	0.0350
Created Units	0.9456
Enhancement Units	0.0000
Net Change	0.9106

1a. Baseline habitats

Ref	Habitat		C. Strategic significance	Length (m)			Baseline results			Comments	
	A. Broad Habitat	B. Habitat type		D. Total Length	E. Length retained	F. Length enhanced	Total units onsite	Length Lost	Units lost	User comments	LPA comments
1	Hedgerows and Lines of trees	Native hedgerow	Formally identified in local strategy	60.00	60.00		0.2760	0.00	0.0000	northern boundary hedgerow predominantly blackthorn	
2	Hedgerows and Lines of trees	Native hedgerow with trees	Formally identified in local strategy	53.00	53.00		0.4876	0.00	0.0000	boundary with maltings lane	
3	Hedgerows and Lines of trees	Non-native and ornamental hedgerow	Area/compensation not in local strategy/ no local strategy	35.00	0.00		0.0350	35.00	0.0350	conifer garden hedge along maltings lane	
4	Hedgerows and Lines of trees	Native hedgerow	Formally identified in local strategy	50.00	50.00		0.2300	0.00	0.0000	garden beach hedge to adjacent property to east	
5	Hedgerows and Lines of trees										
6	Hedgerows and Lines of trees										
7	Hedgerows and Lines of trees										
8	Hedgerows and Lines of trees										
9	Hedgerows and Lines of trees										
10	Hedgerows and Lines of trees										
11	Hedgerows and Lines of trees										
12	Hedgerows and Lines of trees										
13	Hedgerows and Lines of trees										
14	Hedgerows and Lines of trees										
15	Hedgerows and Lines of trees										
16	Hedgerows and Lines of trees										
17	Hedgerows and Lines of trees										
18	Hedgerows and Lines of trees										
19	Hedgerows and Lines of trees										
20	Hedgerows and Lines of trees										
			Totals	198.00	163.00	0.00	1.0286	35.00	0.0350		
			Error Check 1	Lengths Acceptable							
			Error Check 2	Lengths Acceptable							

1b. Habitats to be created

Ref			Condition Assessment		D. Strategic significance	E. Total Length created (m)	Units created on-site	Comments	
	A. Broad Habitat	B. Habitat type	Acceptable condition options	C. Targeted condition				User comments	LPA comments
1	Hedgerows and Lines of trees	Species-rich native hedgerow	Moderate, Good	Good	Formally identified in local strategy	42.00	0.3780	species rich hedgerows within the site.	
2	Hedgerows and Lines of trees	Native hedgerow with trees	Moderate, Good	Good	formally identified in local strategy	70.00	0.4737	Eastern boundary hedgerow with trees	
3	Hedgerows and Lines of trees	Native hedgerow	Moderate, Good	Good	Area/compensation not in local strategy/ no local strategy	24.00	0.0939	native privet hedgerow dividing plots 2,3,4	
4	Hedgerows and Lines of trees								
5	Hedgerows and Lines of trees								
6	Hedgerows and Lines of trees								
7	Hedgerows and Lines of trees								
8	Hedgerows and Lines of trees								
9	Hedgerows and Lines of trees								
10	Hedgerows and Lines of trees								
11	Hedgerows and Lines of trees								
12	Hedgerows and Lines of trees								
13	Hedgerows and Lines of trees								
14	Hedgerows and Lines of trees								
15	Hedgerows and Lines of trees								
16	Hedgerows and Lines of trees								
17	Hedgerows and Lines of trees								
18	Hedgerows and Lines of trees								
19	Hedgerows and Lines of trees								
20	Hedgerows and Lines of trees								
					Totals	136.00	0.9456		
					Error Check 1	Lengths Acceptable			

1c. Habitats to be enhanced

Baseline ref	Existing Habitat Type		Enhanced Habitat type		B. Strategic significance	Length Enhanced (m)	Enhanced Condition	Total Units	Net Improvement	Comments	
	Broad habitat type	Existing habitat type	Enhancement Type	A. Enhanced habitat type						User comments	LPA comments
1											
2											
3											
4											
5											
6											
7											
8											
9											
10											
11											
12											
13											
14											
15											
16											
17											
18											
19											
20											
					Totals	0.00		0.0000	0.0000		

Data beyond this row is automated

1e. Trading Summary

Broad Habitat Type	Trading Rules Satisfied
Distinctiveness Band	Trading Rules Satisfied

1f. Habitat trading assessment

Broad habitat types	Distinctiveness band	Baseline units	Onsite provision	Net change	Trading satisfied?
Hedgerows and Lines of trees	Low	0.5060	0.5999	0.0939	Yes
	Medium	0.4876	1.3393	0.8517	Yes

Distinctiveness band	Baseline units	Onsite provision	Net change	Trading satisfied?
Medium distinctiveness	0.4876	1.339	0.8517	Yes
Low distinctiveness	0.5060	0.600	0.0939	Yes
Are there sufficient Medium distinctiveness units to cover low distinctiveness losses?	0.9456			Yes

Site Name	Land North Of Malting Lane Braughing Herts SG11 2QZ
Sheet Name	Headline Results

Headline Results

Headline	BNG Targets Met
Trading Rules	Trading Rules Satisfied
Next steps	Submit metric to LPA

Baseline Units	Habitat units	2.9870
	Hedgerow units	1.0286
	River units	Zero Units Baseline
Post-development Units	Habitat units	3.2877
	Hedgerow units	1.9392
	River units	0.0000
Total net unit change	Habitat units	0.3007
	Hedgerow units	0.9106
	River units	0.0000
Total net % change	Habitat units	10.07%
	Hedgerow units	88.53%
	River units	% target not appropriate

Habitats units required to meet target	0.0000
Hedgerow units required to meet target	0.0000
River units required to meet target	0.0000

Chart 1 - Unit change by habitat group