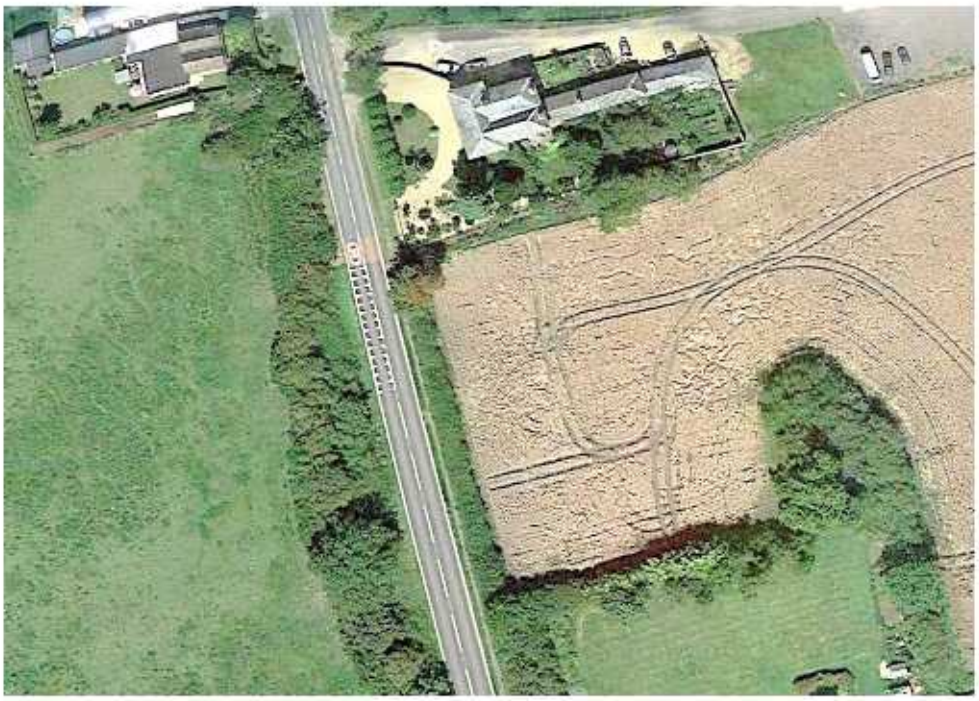
BIODIVERSITY NET GAIN (BNG) ASSESSMENT

PROPOSED NEW ACCESS

AT

HALL FARM, WARBOYS ROAD, BURY, HUNTINGDON, PE26 2NU



Report produced by:		Produced for:	
Eco-Check Consultancy Ltd, White House Cottage Knapton Green North Walsham Norfolk, NR28 0RU		Acorus Rural Property Services Ltd. Old Market Office 10 Risbygate Street Bury St Edmunds Suffolk IP33 3AA	
Tel/ 01263 722199 -07914 130493		Louise Gregory	
ecocheckconsultancy@gmail.com		Louise.gregory@acorus.co.uk	
Author:	Date:	Reviewed by:	Date:
James Hodson	28/03/2025	Cherece Snook	31/03/2025

March 2025-Rev B

Biodiversity Net Gain- Hall Farm, Warboys Road, Bury, Huntingdon, PE26 2NU

1. Introduction

1.1 Eco-Check were commissioned by Acorus Rural Property Services in regard to ecological matters relating to a planning application submitted to Huntingdonshire District Council for the proposed removal of a section of roadside hedgerow (H1) along the west site boundary to form a new farm access onto the B1040 Warboys Road from the farm complex. The length of hedge section which will require removal is approximately 10m including required visibility splays for a National Speed Limit of 60mph. The length of the new access across the arable field is approximately 135m. It is proposed that a native species rich double staggered row hedgerow approximately 40m long to be planted along the realigned hedgerow boundary and additional tree and grassland planting. The site is centered at grid reference TL288835 and the application area extends to approximately 1,287m^2 or 0.12ha.

1.2 Biodiversity Net Gain- Paragraph 170 of the National Planning Policy Framework (NPPF-2021) states that 'Planning policies and decisions should contribute to and enhance the natural and local environment by … minimising impacts on biodiversity and providing net gains for biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures.' Furthermore, Huntingdonshire Core Strategy (2009) and Local Plan (2019) requires developments to demonstrate that a biodiversity net gain can be achieved.

1.3 In order to demonstrate measurable biodiversity net gain, the statutory Defra Metric Calculation Tool V1.2.2 (24.07.24) has been used to calculate the biodiversity value of the Site both for the pre-development and post-development scenarios. The statutory Biodiversity Defra Metric is considered to be the emerging national standard and therefore appropriate to apply for this proposed development. There is also no existing locally derived metric that can be applied. The small sites metric is applicable for this application which for non-residential schemes, a small site is defined as where the floor space that is to be created is less than 1,000m^2 or where the site area is less than one hectare. The application site area is 0.12ha and no new floor space is being created. An additional biodiversity net gain enhancement area is shown by a second red line boundary which extends to 343m^2.

2. Site Description

2.1 The hedgerow and arable field falls within the farmstead of Hall Farm and is located on the east side of the B1040 Warboys Road and approximately 500m south-east of the village and civil parish of Bury in the Huntingdonshire District of Cambridge. The hedgerow falls outside of the village boundaries and set within a largely arable landscape. The site consists predominantly of arable land bordered by scattered trees, hedgerows and headland margins. There is a single pond marked on the OS map approximately 60m east of the hedgerow.

2.2 The site survey included an assessment of the habitats found within the site and the likely impact of the proposed development on habitats of ecological value and protected and notable species. A site based BNG assessment was undertaken by James Hodson MSc of Eco-Check Ltd, an experienced ecological consultant licensed to undertake bat surveys and to disturb bats under Natural England Level 2 Bat Survey Licence 2017-30927-CLS-CLS, and Great Crested Newt Licence 2018-36283-CLS-CLS. The baseline survey was undertaken on the 26th July 2024 at an optimal time of year for botanical surveys.

2.3 The site is surrounded by a largely flat arable landscape bordered by hedgerows, trees and pockets of woodland including a small orchard to the north of the site. The National Character Area profile for the Bedfordshire and Cambridgeshire Claylands 14, in which the site sits,

describes the local landscape as “lowland plateau dissected by shallow rivers… predominantly an arable and commercially farmed landscape”.

2.4 There are no statutory designated sites within a 1km radius. The proposed development falls outside of any Impact Risk Zones for SSSI’s. The proposed development is likely to have limited impact on nearby designation sites due to the separation distance from the sites and the small scale of the proposed development. There are no priority habitats on or adjacent to the site, there is an area marked as traditional orchard (Priority Habitat) approximately 60m to the north.

3. Baseline Conditions

3.1 A UK Habitats site survey was undertaken in order to complete the pre-development net gain calculation to establish the biodiversity value of the Site, quantified by the number of biodiversity units.

3.2 The site comprised almost entirely temporary grassland on cultivated arable land and within the red line boundary this extends to approximately 1,257m^2. A second red line boundary containing the same habitat is marked to the south-east corner of the field and forms the BNG enhancement area which extends to a further 343m^2.

3.3 Modified Grassland (UK Classification g4): To the west boundary road frontage with Warboys Road is a narrow grassland verge between the road and the hedgerow (H1). The verge is classed as modified grassland, managed (mowing) and had a high proportion (approximately 70% or more) of Perennial Ryegrass (*Lolium perenne*) and rarely occurring Meadow Grasses *Poa sp*. Forbs were recorded to be similarly scattered and rarely occurring and included ground ivy (*Glechoma hederacea*), white clover (*Trifolium repens*), daisy (*Bellis perennis*), bristly oxtongue (*Helminthotheca echioides*), creeping thistle (*Cirsium arvense*), ribwort plantain (*Plantago lanceolata*), docks (*Rumex spp*). and buttercup (*Ranunculus repens*). The grassland had no tussocks, and no ground cracks, crevices or holes which may provide shelter opportunities for small animals.

3.4 *Tall Ruderals (UK Habitat Classification C31)*: Along the north-east boundary where the proposed new access adjoins the farmyard hard standing are some patchy areas of tall ruderal vegetation, typical of disturbed and less frequently managed vegetation. The species noted included spear thistle (*Cirsium vulgare),* nettle *(Urtica dioica)*, mugwort (*Artemsia vulgaris),* hogweed (*Heraclium sphondylium),* cow parsley (*Anthriscus sylvestris)* and rosebay willowherb (*Epilobium angustifolium*).

3.5 *Native Hedgerow-Other (UK Classification h2a6):* To the west boundary with Warboys Road is an intact species poor hedgerow. The hedgerow H1 (taken as a continuous length of the field boundary as marked on historical maps, gaps of less than 20m do not count as gaps) is approximately 170m in length, 1.5m to 2m (variable) in height and 1m wide and has been historically flailed on both sides. The hedgerow is classed as intact as it is considered to be stockproof (although used as arable land). The hedgerow has no connections to any other hedgerows and there is a hedgerow parallel to it to the west side of the B1040. The hedge section to be removed (H1) is only approximately 10m long and comprises almost entirely hawthorn (*Crataegus monogyna*), blackthorn (*Prunus spinosa*), bramble (*Rubus fructose*) and field maple (*Acer campestre*). The only tree within the hedgerow is one early mature specimen of Horse Chestnut (*Aesculus hippocastanum)* to the north but outside of the red line boundary. The hedgerow over time has been degraded as a result of over-cutting and encroachment of the hedge base.

4. BNG Assessment

4.1 Baseline habitat survey information and the proposed site layout plan have been used to calculate the post-development scenario calculation in accordance with the scaled drawings provided in Appendix 1. The small sites metric does not require a habitat condition assessment to be submitted.

4.2 Relevant policies and policy maps, particularly those concerning green infrastructure provision and habitat connectivity / wildlife corridors, that might affect the positioning and type of habitat created were also reviewed. Taken together, the above calculations will identify the net gain/loss in 'biodiversity unit' (BU) terms. Following the initial calculation, the proposed development is reviewed to help achieve further BU through habitat retention, creation and enhancement, both within and off-site (if appropriate). The outcome of the above process then determines whether the proposed development is likely to result in an overall BU loss or gain.

4.3 Drawings showing the existing site and proposed layout are included at Appendix 1 and calculation using the statutory Biodiversity Defra Metric V1.2.2 (supporting Excel worksheet provided-24.07.24).

5. Habitat Loss

5.1 Approximately 30m^2 of modified grassland on the verge between the hedgerow H1 and Warboys Road and a further 590m^2 of temporary grass on arable land will be lost and levelled for the new access. A 10m length of the hedgerow will be lost to the new access and visibility splays.

6. Habitat Creation/Enhancement

6.1 A range of habitat creations is proposed and includes two 20m lengths of native hedging either side of the new access and connected to the existing hedge. The remaining area of 704m^2 of temporary grass will be retained as 'modified grassland'. To the south-east corner of the field will be a fenced off area which will be seeded with a species rich grass seed mix such as Emorsgate EM4 meadow mix and managed as other neutral grassland in good condition.

Pending planning consent a Habitat Management and Monitoring Plan (HMMP) will be produced to detail the creation and subsequent management and monitoring of these habitats.

7. Habitat Creation/Enhancement

7.1 Grassland Seeding:

The area of land covering approximately 343m^2 to the south-east field corner within the proposed BNG enhancement area will be seeded with a suitable species rich grass seed mix, such as Emorsgate EM4, essentially enhancing the grassland habitat to ONG.

7.2 Hedge Planting

In order to off-set the loss of the removed hedge section and enhance the retained hedge sections which have become gappy and degraded, new hedging will be planted along the post and rail fence to the north and south of the access and connecting to the existing hedgerow and to be planted following guidance below. The value of the new hedging in the short-term (0-5 years) is low. The proposed planting schedule should contain native species as specified below. Any new hedge planting should be double row staggered at 0.5m spacings with spiral guards and supports and maintained until established. The proposed hedgerow mix and planting to the following specification in Table 1. Hedging will be planted between October and

April when the ground is moist and free from frost, set out in a staggered pattern in two rows 40cms apart. The hedgerow mix below is beneficial to wildlife and planting to the following specification:

PLANTING SCHEDULE				
HEDGEROW MIX (as necessary)				
SPECIES	DENSITY	AGE	ROOT	HEIGHT
50% Hawthorn (*Crataegus monogyna)*	0.45m	1+1 or 1/1	BR	40-60cm
30% Field maple (*Acer campestre)*	0.45m	1+1 or 1/1	BR	40-60cm
5% Dog Wood (*Cornus sanguinea)*	0.45m	1+1 or 1/1	BR	20-30cm
5% Holly (*Ilex aquifolium)*	0.45m	1+1 or 1/1	CG-3l	40-60cm
5% Spindle (*Viburnum opulus)*	0.45m	1+1 or 1/1	BR	40-60cm
5% Hornbeam (*Carpinus betulus*)	0.45m	1+1 or 1/1	BR	40-60cm

Table 1. Hedgerow Planting Mix

7.3 *Faunal Enhancement:*

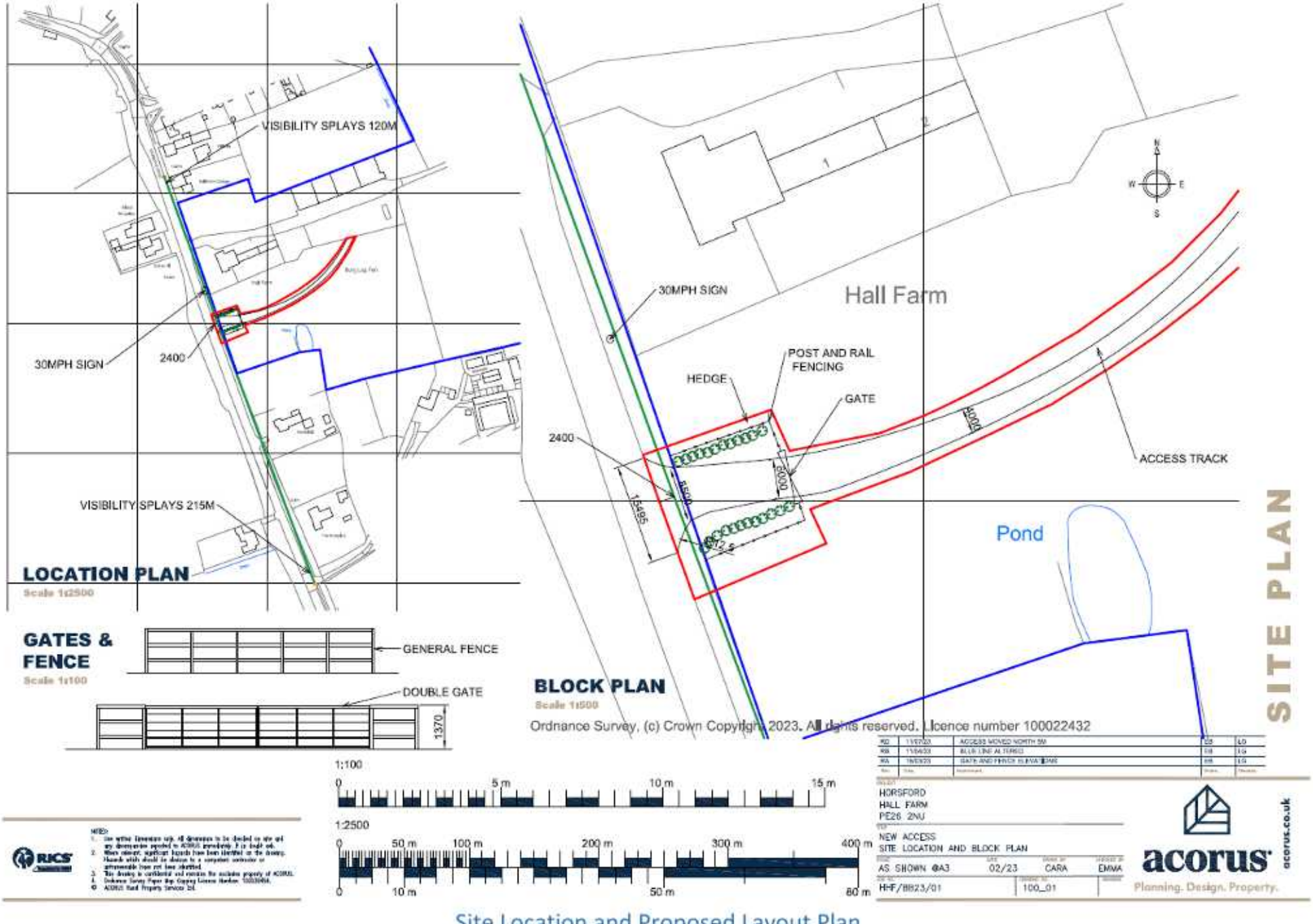
It is proposed that a range of bird and bat boxes be incorporated into the site and could include:

- Eco-Roost Bird Box (32mm) www.eco-roost.co.uk
- Eco-Roost Bird Box (28mm)
- Eco-Roost deep nest box for robins
- Eco-Roost house sparrow box
- Eco roost/Schwegler Kent bat box

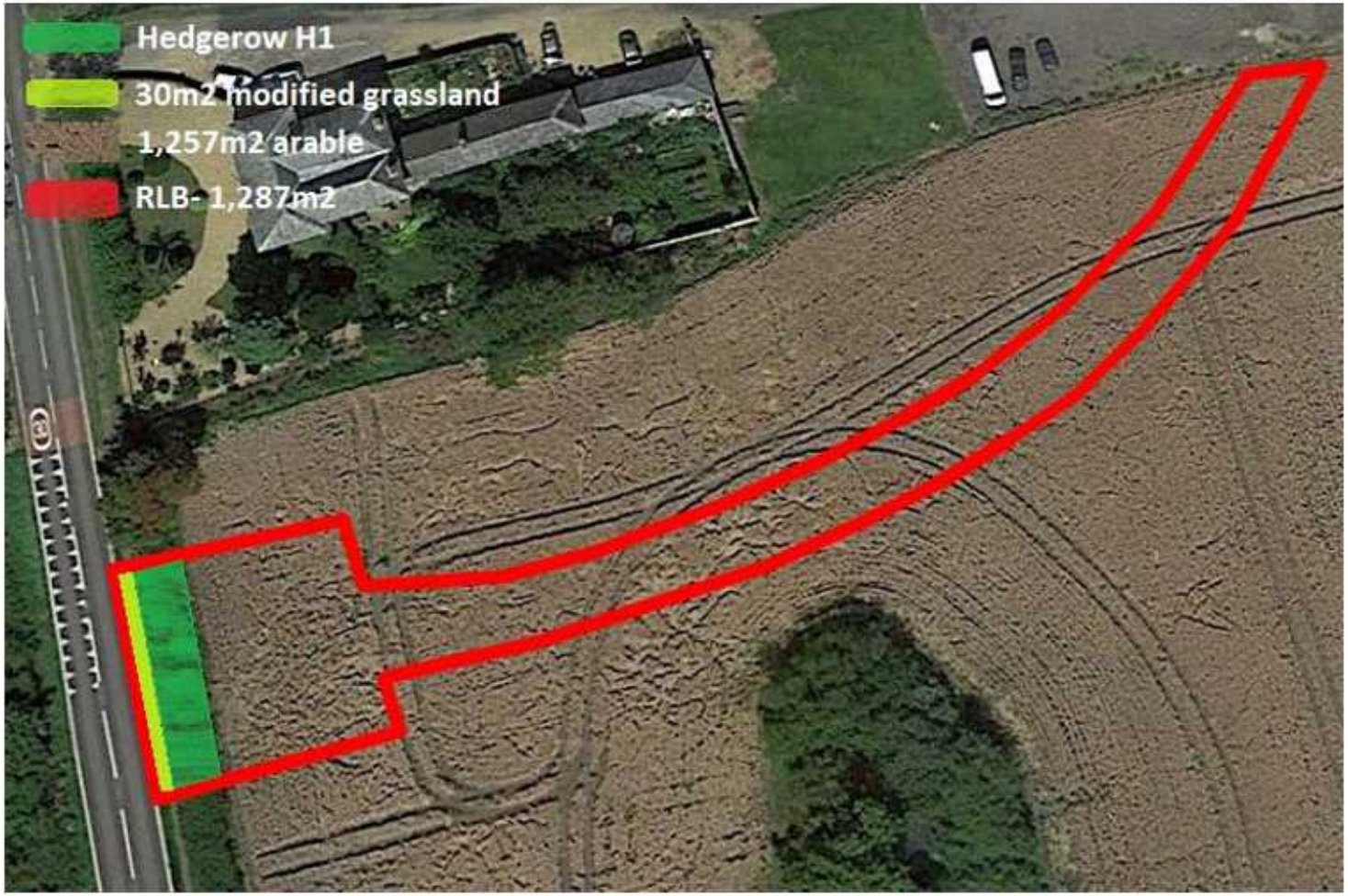
8. BNG Result

8.1 Implementation of the above habitat enhancements shows a biodiversity net gain of approximately **+23% (+0.07) habitat units** and for hedgerows a net gain of approximately **+234%** (+**0.09**). The scheme is therefore considered to be policy compliant with the BNG net gain target of 10%. Pending planning consent the proposed BNG targets will be secured through a Habitat Management and Monitoring Plan (HMMP) which will detail the creation of the habitat, management of them to achieve target condition and monitoring to assess the successful implementation.

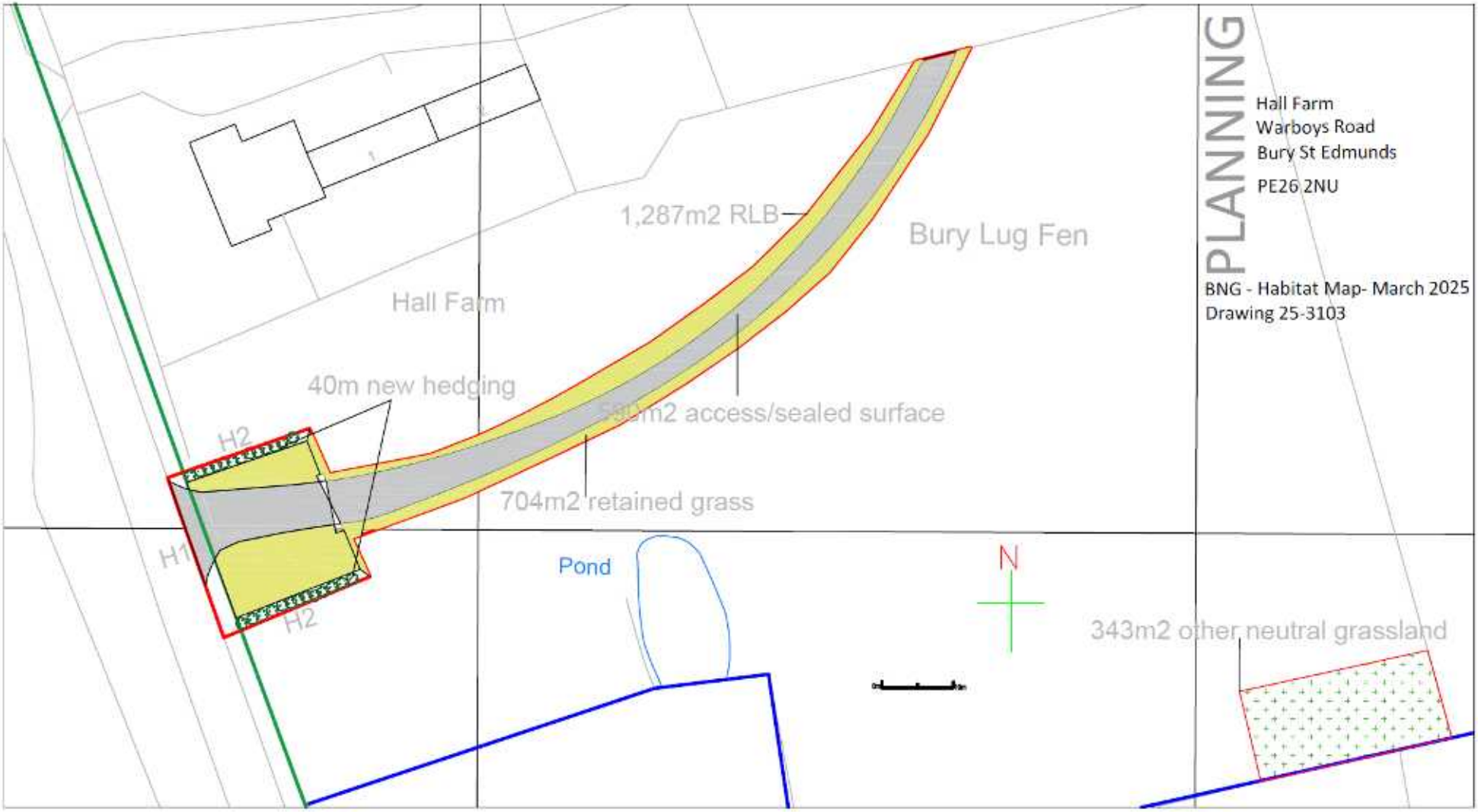
APPENDIX 1



Site Location and Proposed Layout Plan



Proposed development site location (Google Earth, April 2021)- Existing Habitat Baseline and Red Line Boundary



Post Development Habitat Map and Red Line Boundary

Photos of site and habitats



Temporary grassland on arable land



Hedgerow H1

APPENDIX 2- BNG Results Summary (See Excel Metric for full details)

Sheet Name	Site Details
1. Planning authority:	Huntingdonshire District Council
2. Site name:	Hall Farm, Warboys Road
3. Applicant:	Acorus Rural Property Services
4. Planning application type:	Full planning consent
5. Planning application reference:	
6. Metric completed by (name & job title):	James Hodson-Senior Ecologist
7. Date of metric completion:	27 March 2025
8. Revision number:	Rev B
9. Masterplan document title / drawing number:	HHF/BB23/01

Net Gain Targets

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

11. Optional target increase in units if baseline value is zero	*11a. Habitat units*	0.00
	11b. Hedgerow units	0.00
	11c. Watercourse units	0.00

Site Name:	Hall Farm, Warboys Road	
Sheet Name	Desktop Assessment	

Development

14. Select the type of proposed development. If Other provide details at Q.25 below	Other	Site area must be less than 10,000 m2
15. Site area (m^2)	1630	
N/A		
N/A		

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	Traditional Orchard 60m north	
21. Information sources used for assessment of designated sites and priority habitats (See guidance)	CPERC and Magic	

European protected species

22. Any european protected species present on site	No	

Site walkover

23. Site walkover completed?	Walkover completed by qualified ecologist	
24. Date of site walkover - DD/MM/YY	26/07/2024	Site walkover data valid until 26/01/25
25. Who completed the walkover? (Name and job title)	James Hodson-Senior Ecologist	

Site Name	Hall Farm, Warboys Road
Sheet Name	Headline Results

Headline Results

Headline	BNG Targets Met ✓
Trading Rules	Trading Rules Satisfied ✓
Next steps	Check for input errors/rule breaks present in the metric ⚠

Baseline Units	*Habitat units*	0.3320	
	Hedgerow units	0.0400	
	Watercourse units	Zero Units Baseline	
Post-development Units	*Habitat units*	0.4104	
	Hedgerow units	0.1339	
	Watercourse units	0.0000	
Total net unit change	*Habitat units*	0.0784	✓
	Hedgerow units	0.0939	✓
	Watercourse units	0.0000	
Total net % change	*Habitat units*	23.62%	✓
	Hedgerow units	234.73%	✓
	Watercourse units	% target not appropriate	

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

Site Name	Hall Farm, Warboys Road
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 Id. Tree and hedgerow data

All Key Rules Satisfied ✓

Retained Units	0.1408
Lost Units	0.1226
Created Units	0.0000
Enhancement Units	0.2036
Net Change	0.0784

1a. Baseline habitats

Ref	Habitat		Strategic significance	Area (m²)			Baseline results			Comments	
	A. Broad Habitat	B. Habitat type	C. Strategic significance	D. Total Area	E. Area retained	F. Area enhanced	Total habitat units	Area Lost	Units lost	User comments	LPA comments
1	Grassland	Modified grassland	Area compensation not in local strategy/not local strategy	30.00	0.00	0.00	0.01	30.00	0.012	Grass verge along Harbour Road. Area lost to upgraded access on to	
2	Cropland	Temporary grass and clover leys	Area compensation not in local strategy/not local strategy	1267.00	704.00	0.00	0.08	563.00	0.111	Area of arable field with temporary grass. Retained area of grass to either side of access will be PEI to be retained as modified grassland in good	
3	Cropland	Temporary grass and clover leys	Area compensation not in local strategy/not local strategy	243.00	0.00	243.00	0.07	0.00	0.000	PEI Small area to the south-east corner forming area of arable to be grass to be enhanced to OMC	
4											
5											
6											
7											
8											
9											
10											
11											
12											
13											
14											
15											
16											
17											
18											
19											
20											
Trees	Individual trees	Urban habitat	Formal recreation/ local strategy	0.00	0.00		0.0000	0.00	0.0000		
				1530.00	704.00	243.00	0.3809	593.00	0.1235		
			Error Check 1	Areas Acceptable ✓							
			Error Check 2	Areas Acceptable ✓							
			Error Check 3	Areas Acceptable ✓							

1b. Habitats to be created

Ref	Habitat		Condition Assessment		Strategic significance	Total Area (m²)	Habitat units created on site	Comments	
	A. Broad Habitat	B. Habitat type	Acceptable condition options	C. Target condition	D. Strategic significance	E. Total Area (m²)	Habitat units created on site	User comments	LPA comments
1									
2	Urban	Developed land; sealed surface	N/A - Other	N/A - Other	Area compensation not in local strategy/not local strategy	563.00	0.0000	Proposed access track requires Kerbing/Edging and form hardstanding	
3									
4									
5									
6									
7									
8									
9									
10									
11									
12									
13									
14									
15									
16									
17									
18									
19									
20									
Trees	Individual trees	Urban habitat	Moderate	Moderate	Area compensation not in local strategy/not local strategy	0.00	0.0000		
						563.00	0.0000		
					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											
2											
3	Crop land	Temporary grass and clover leys	Distinctiveness	Other neutral grassland	Area/compensation not in local strategy/ no local strategy	243.00	Good	0.2616	0.2010	South-west corner of arable field to form the PNG enhancement area. Temporary grass cover to be enhanced to other neutral grassland and managed to good condition through the approved SSM	
4											
5											
6											
7											
8											
9											
10											
11											
12											
13											
14											
15											
16											
17											
18											
19											
20											
					Totals (areas - elm lines, green walls and intertidal	243.00		0.2616	0.2010		

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	Area/compensation not in local strategy/ no local strategy	10.00	0.00	0.00	0.0400	10.00	0.0400	Length of hedgerow H1 to be removed	

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	Native hedgerow	Moderate, Good	Moderate	Area/compensation not in local strategy/ no local strategy	40.00	0.1339	Two 20m lengths of native hedging to be planted to north and south of access as indicated and linked to existing hedg	

1e . Trading Summary

Broad Habitat Type - Medium Distinctiveness Habitats	Trading Rules Satisfied ✓
Medium and Low Distinctiveness Band	Trading Rules Satisfied ✓

1f . Habitat trading assessment

Broad habitat types	Distinctiveness band	Baseline units	Onsite provision	Net change	Trading satisfied?
Cropland	Low	0.3200	0.1408	-0.1792	-
	Medium	0.0000	0.0000	0.0000	N/A
Grassland	Low	0.0120	0.0000	-0.0120	-
	Medium	0.0000	0.2696	0.2696	N/A
Heathland and shrub	Low	0.0000	0.0000	0.0000	-
	Medium	0.0000	0.0000	0.0000	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	0.0000	0.0000	0.0000	-
	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	0.0000	0.0000	0.0000	N/A

Distinctiveness band	Baseline units	Onsite provision	Net change	Trading satisfied?
Medium distinctiveness	0.0000	0.270	0.2696	Yes ✓
Low distinctiveness	0.3320	0.141	-0.1912	Yes ✓
Surplus area habitat biodiversity units after offsetting low distinctiveness units	0.0784			Yes ✓