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Gradwell Ecology

Kennels, The Melrose, Dowsdale Bank, PE12 0TZ

BNG Assessment

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Gradwell Ecology

Biodiversity Net Gain Assessment

Report Release Sheet

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Provided no significant changes are made to the proposals or on the site (e.g. significant changes to management practices or habitats present) subsequent to the report's issue; this report can be considered valid for 12 months from the date of issue.

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1. Introduction

- 1.1 Midnorth Ecology was commissioned by Gradwell Group Ltd to provide a Biodiversity Net Gain (BNG) Assessment for a site located at Mundicao Kennels, land off Dowsdale Bank, Shepeau Stow, Peterborough, PE12 0TZ (TF 29790 11673). BNG calculations are based on the information provided from a site assessment (Midnorth Ecology, 2025) and the BNG metrics calculation tool (Midnorth Ecology, 2025).
- 1.2 The site had potential to support roosting bats and nesting birds and therefore would not fall under the de minimis exemption. Considering this a full BNG assessment was provided. For details of protected species assessment please see results section.
- 1.3 The report will also provide an overview of the Biodiversity Net Gain Good Practice Principles (Baker, Hoskin & Butterworth, 2019) and legislation and planning policy.
- 1.4 The work proposals include the extension of one of the existing kennels, this extension would be situated on hardstanding. A further kennel is also proposed to be installed on grassland in front of the existing kennels.
- 1.5 The National Planning Policy Framework (NPPF) 1 emphasises the importance of protecting and enhancing the natural environment. The NPPF approach to BNG is set out in Paragraph 179b, which is to:

"Promote the conservation, restoration and enhancement of priority habitats, ecological networks and the protection and recovery of priority species; and identify and pursue opportunities for securing measurable net gains for biodiversity."

2. Methodology

- 2.1** A site visit was completed on 23/07/2025 by William Parkinson BSc (hons) an ecologist with 5 years' experience who is competent at completing phase 1 and UK Habs habitat surveys, habitats were classified using UK Habs Classification and subsequently mapped using GIS software.
- 2.2** Areas (measured in hectares (ha)) of proposed habitat creation and retained habitats for each pre and post plans. The landscape habitat types were then translated into the relevant metric habitat types. Lengths, measured in kilometres (km), were calculated for hedgerows and ditches, where present.
- 2.3** Target condition scores for the proposed restoration habitats have been assigned based on professional judgement and the realistic likelihood of achieving the target condition. Condition scores reflect the quality of a habitat and follow the criteria for habitat in 'Good' 'Moderate' or 'Poor' condition as set out in the Technical Supplement of Statutory Biodiversity Metric.
- 2.4** Achieving these target conditions will require appropriate management and monitoring for the duration of the time set by Natural England within Biodiversity Metric for a habitat to reach its target condition. The assumptions made when assigning a target condition for the proposed habitats, which require a condition assessment based on the relevant criteria set out in the Technical Supplement of Statutory Biodiversity Metric.
- 2.5** Biodiversity Metric uses a number of measures to quantify the biodiversity value for each habitat type within a site boundary. These measures include the habitats' intrinsic value (i.e., its distinctiveness), its condition and its area/ length (ha/ km). In addition, the local strategic significance of a site and/ or the habitats within it is taken into account by applying a spatial multiplier.
- 2.6** Area-based habitat features, linear hedgerow features (which includes lines of trees) and linear river features (which includes rivers, streams, ditches and canals) are measured as separate components in the metric and the delivery of units, including the overall net unit change for a site, are reported separately.

2.7 A habitat's distinctiveness score is derived from its intrinsic biodiversity value, reflecting the rarity of the plant community, the time it takes to reach maturity, its value to fauna, and its ecosystem function. This score is pre-assigned and is pre-populated in the metric.

2.8 Post-intervention biodiversity units are calculated the same way but with the addition of risk multipliers that take into account the difficulty and time it takes to create new habitat or enhance existing habitat. These temporal and risk related multipliers are set by Natural England within the metric and cannot be changed (full details are provided in the Technical Supplement). Where habitat creation or enhancement is off-site, a spatial risk multiplier is applied based on the distance of habitat creation or enhancement to the site of habitat loss. No off-site habitat creation or enhancement is currently proposed for the Scheme.

2.9 The metric also takes into account whether habitat creation or enhancement is delivered in advance of any impact it is compensating for or whether there will be any significant delay in an intervention relative to the impact. If taken into account, the standard temporal risk multiplier is adjusted accordingly.

3. Results

3.1 The site survey and condition assessments were completed in suitable weather (Rain: 0, Cloud: 4, Wind: 1 and Temperature: 22⁰c). The survey was completed during daylight hours with good visibility and all areas of the site were accessed.

Baseline results for the site comprise a total site area of 0.7678 ha and consisted of the following habitats;

Table 3.1 Baseline habitat results

Habitat	UK Habs code	Condition Assessment result	Area (ha)	Retained (ha)
Developed land; sealed surface (buildings)	u1b5	N/A	0.0570	0.0570
Developed land; sealed surface (hardstanding)	u1b6	N/A	0.1815	0.1775
Modified grassland	g4	Poor	0.4824	0.4722
Modified grassland/vegetated garden	g4 828	Poor	0.03118	0.03118

3.2 Baseline biodiversity units are therefore calculated at 1.03 for the areas of the habitats present.

3.3 Linear habitats included a length of leylandii hedgerow, all other hedgerows were adjacent to the site boundary so were not included in the calculations.

Habitat	UK code	Habs	Condition Assessment result	Length (m)	Retained (m)
Non-native and ornamental hedgerow		h2b	Poor	35	35

3.4 Baseline biodiversity units are therefore calculated at 0.04 for the length of the hedgerows present.

3.5 No watercourses were present within the site boundary and therefore this element was not included in the assessment.

3.6 Post development results for the site consisted of the following additional habitats to those retained;

Table 3.3 Post Development habitat proposals

Habitat created	UKHabs code	Area (ha)
Developed and sealed surface – new extension	u1b5	0.00142

3.7 Comparing the baseline ecological conditions with the proposed plans through the biodiversity metric calculations, concluded that the site would result in a biodiversity net loss of 1.99% net loss post development for habitats and 0% net loss for hedgerows.

4. Conclusions and options

4.1 The proposals result in 1.99% net loss in biodiversity units for habitats and a 0% change in hedgerow units if the proposals go ahead. The biodiversity metric tool automatically sets a target of 10% net gain for each of these habitats. Therefore, based on the current design it is considered that the onsite biodiversity target value will not be achieved through current proposals.

4.2 Trading rules were not met as the same distinctiveness or better habitat according to proposals will not replace the habitat lost. To satisfy trading rules habitat replacement must comprise habitats of the same or better distinctiveness.

4.3 With the current proposals trading rules were not met and a 1.99% net loss of biodiversity units for habitats and 0% change in hedgerow units will occur if the development goes ahead. This results in a 0.25 biodiversity unit shortfall for habitats and 0.01 unit shortfall for hedgerows due to the development.

Options to create the 10% or greater target for habitats and hedgerows

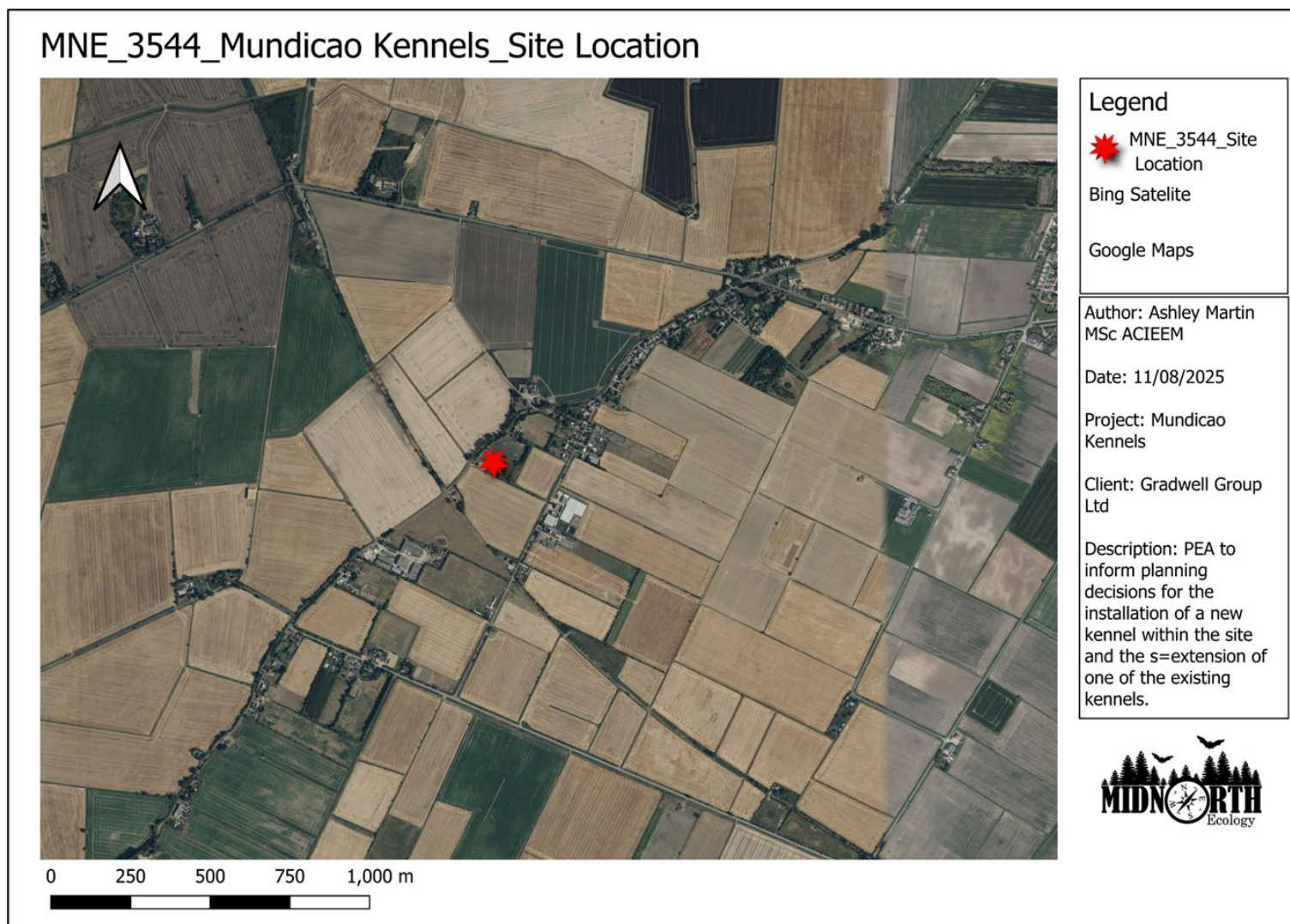
4.4 To create a biodiversity net gain on site options would include creating an area of other neutral grassland by managing and reseeded an area of 30m² of modified grassland within the site boundary, this would create an 11.73% biodiversity net gain for habitats. Additionally, a length of 5m of native hedgerow could be planted within the site boundary which would create a 47.82% biodiversity net gain for hedgerows.

4.5 If off-site net gain is not possible on owned additional land a 10% biodiversity net gain could be delivered via a financial contribution to a third-party habitat bank in the locality. However, if these options are not feasible then purchase of statutory credits may be an option but this should be a last resort.

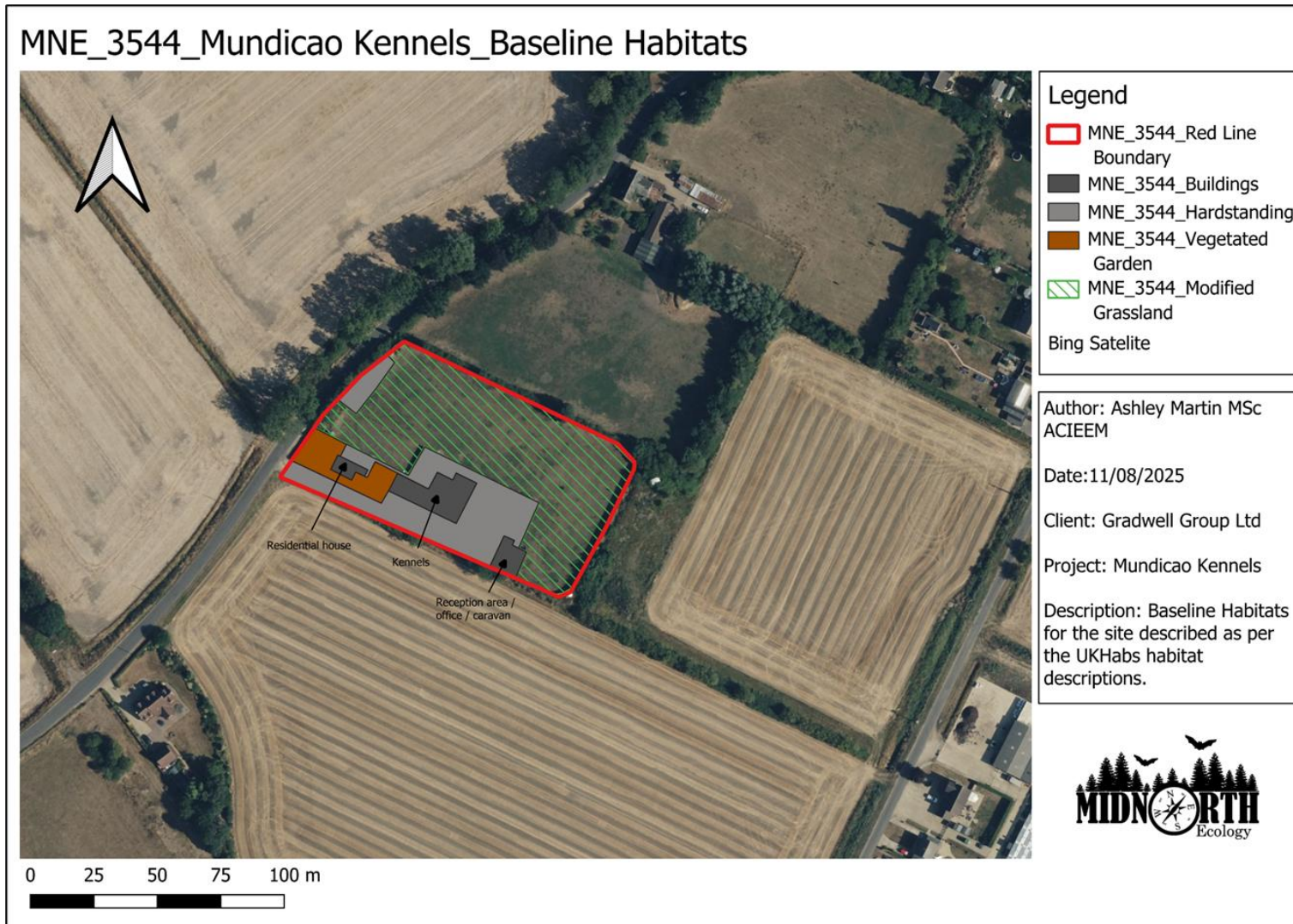
4.6 Therefore, off-site contributions must be made to a third-party environment bank or statutory credits purchased to make up this shortfall before planning can be granted from a BNG perspective.

4.7 However, statutory credits must only be used as a last resort and the preferred option for this project would be to purchase the shortfall of units through a third-party environment bank. At least three suppliers must be contacted before statutory credits can be purchased.

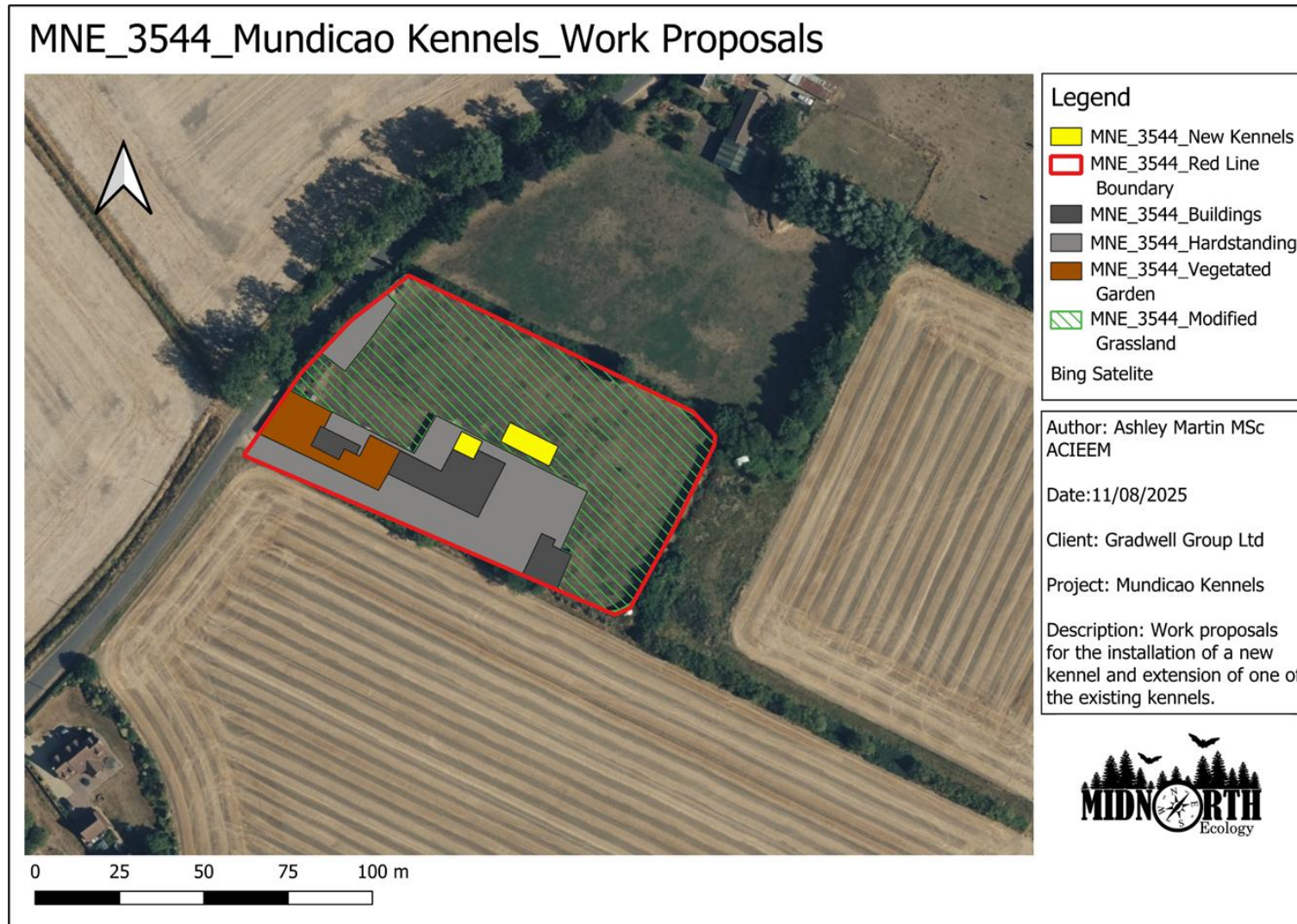
Appendix 1: Site location



Appendix 2: Baseline Habitat Plan



Appendix 3: Post development plans



Appendix 4: Biodiversity Metric Calculation Results (current proposals)

FINAL RESULTS			
Total net unit change <small>(Including all on-site & off-site habitat retention, creation & enhancement)</small>	<i>Habitat units</i>	-0.02	
	<i>Hedgerow units</i>	0.00	
	<i>Watercourse units</i>	0.00	
Total net % change <small>(Including all on-site & off-site habitat retention, creation & enhancement)</small>	<i>Habitat units</i>	-1.99%	Total net gain achieved is less than target set ▲
	<i>Hedgerow units</i>	0.00%	Total net gain achieved is less than target set ▲
	<i>Watercourse units</i>	0.00%	
Trading rules satisfied?	No - Check Trading Summaries ▲		

Appendix 5: Option to create the target BNG on site



Appendix 6: References

Baker, J, Hoskin, R, Butterworth, T. (2019). Biodiversity net gain. Good practice principles for development. CIRIA, London

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