



Biodiversity Net Gain Assessment

St Stephens Church, Hamsland, Horsted Keynes

On behalf of: RDP Construction

Issue: 02

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Version Control

Date	Issue	Description
20/04/2026	01	First issue
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Issue to:

RDP Construction

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Reviewed by: Dr Stephanie Harper BSc PhD

Harper Environmental Limited

<http://www.harper.eco>

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1 Key Information for a Planning Submission

1.1 Version of the Metric used

Version 1.0.4 dated 3rd July 2025.

1.2 Baseline habitat units of the Site prior to development

0.58 habitat units.

1.3 Confirmation that no works have been undertaken prior to submission of this planning application

Individual trees onsite have been removed since the date of the PEA. This does not affect the baseline value as these trees were present at the time of survey.

1.4 Are there any irreplaceable habitats onsite

None present.

2 Introduction

2.1 Background

RDP Construction (“the client”) instructed Harper Environmental Ltd to carry out a Biodiversity Net Gain (BNG) assessment (‘the report’) for a proposed development at St Stephens Church, Hamsland, Horsted Keynes, RH17 7DX (hereafter called ‘the Site’). The central Ordnance grid reference for the Site is TQ 38377 27893.

BNG is mandatory for new development from 12 February 2024.

A Preliminary Ecological Appraisal (PEA) has been produced separately by Arbtech.

2.2 Competence

Oliver Huxley completed the BNG assessment and wrote this report. Oliver is a consultant ecologist with a master’s degree in environmental science from the University of Leeds. He has three seasons of experience in ecological consultancy and has completed BNG assessments for projects of varying sizes. Oliver also has a Great Crested Newt Level 1 Survey class Licence (CL08) from Natural England.

Dr Stephanie Harper reviewed this report. Stephanie has been working in ecological consultancy since 2007 and has completed BNG assessments since 2014 initially using the Warwickshire bespoke assessment calculator, and later using each iteration of the developing UK metric (versions 1.0 through to 4.0) until the current Statutory Metric was adopted in February 2024. In late 2023 Stephanie undertook refresher BNG training with Dr Julia Baker (metric version 3.1 was applicable at the time), one of the UK’s foremost experts on BNG, as well as training in the UKHab classification with Bill Butcher, one of the UKHab authors. Stephanie has been designing and monitoring biodiversity enhancement schemes from the ecological perspective since 2010.

2.3 Enhancement strategy

The landscaping plan includes the establishment of new grassland areas, along with the introduction of shrubs and tree planting.

As per BNG guidance for domestic gardens, new planted trees have not been counted within the Metric.

The baseline habitats (also provided in the PEA) are shown below in Figure 1; the landscaping plan for the proposed development is provided below as Figure 2.

ST STEPHENS CHURCH

Legend

- Red Line Boundary
- Individual Tree Baseline
 - Existing Medium Urban Tree
 - Existing Small Urban Tree
- Habitats Baseline
 - Developed land; sealed surface
 - Other neutral grassland

Google Satellite

Title: Baseline Habitats
Drawn by: Oliver Huxley
Date: 14/04/2026

Reviewed by: Stephanie Harper
Date: 14/04/2026



Figure 1: Baseline habitats onsite prior to development



ST STEPHENS CHURCH

Legend

- Red Line Boundary
- Individual Tree Proposed
 - Lost Urban Tree
- Habitats Proposed
 - Developed land; sealed surface
 - Introduced shrub
 - Modified grassland

Google Satellite

Title: Proposed Habitats
Drawn by: Oliver Huxley
Date: 22/04/2026
Reviewed by: Stephanie Harper
Date: 22/04/2026



Figure 2: Proposed habitats post-development

3 Methodology

The BNG assessment was undertaken using the Statutory Biodiversity Metric¹ (hereafter ‘the Metric’). **The completed Metric has been provided as a separate Excel spreadsheet for detailed review.**

The onsite habitat baseline (i.e. the habitats present prior to development) was taken from site surveys in June 2025 and reported in the associated PEA by Arbtech. A condition assessment of the grassland and individual trees was also provided in the Arbtech PEA.

Areas for the Metric were calculated from maps of the existing (baseline) and proposed (new development) habitats using QGIS.

To inform the BNG assessment, condition assessments (provided as two separate excel spreadsheets) have been completed for:

- baseline – Other neutral grassland, individual trees
- future proposed habitat creation and enhancement – modified grassland

Condition assessments are not required for the other existing or proposed habitat types within red line boundaries as condition either does not apply or a default value is assigned within the Metric.

¹ [Statutory biodiversity metric tools and guides - GOV.UK \(www.gov.uk\)](https://www.gov.uk/guidance/statutory-biodiversity-metric)

4 Results

4.1 Habitat units

The onsite habitat baseline is calculated as **0.58 habitat units** provided by other neutral grassland and individual trees.

Following proposed development there will be an onsite loss of **0.35 habitat units**, representing a **60.03% net loss**.

4.2 Hedgerow units

There are no existing hedgerow units and none will be provided.

4.3 Watercourse units

There are no watercourses onsite.

4.4 Trading rules

Trading rules are **not satisfied** by the landscaping proposals.

4.5 Summary

The proposed development results in a net biodiversity loss of **-60.03%**.

To provide the statutory requirement of 10% net gain, **0.41 habitat units** must therefore be provided as offsite credits.

The credits can be purchased from a third-party provider or statutory credits purchased although this is a last option.