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Biodiversity net gain (BNG) report

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1.0 Introduction

This BNG report was commissioned by Mr Norbury of Gorsthead Mill Farm, Bradnop, to provide supporting information for a planning application of a general-purpose agricultural building and area of hardcore.

The development site is located at Gorsthead Mill Farm (see figures 1 and 2 for aerial image and site location plan). The proposed site lost to development has a total area of 603m² – 167m² of which is the agricultural building with the surrounding 436m² area as hardcore.

The wider landscape consists of agriculture (predominately pastoral fields and scattered farms) dissected by hedgerows and roads/railway along with areas of woodland.



Figure 1 – Aerial image of proposed development site

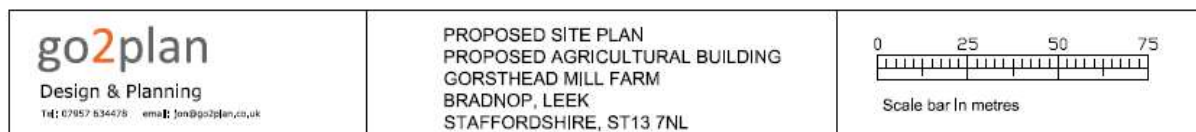
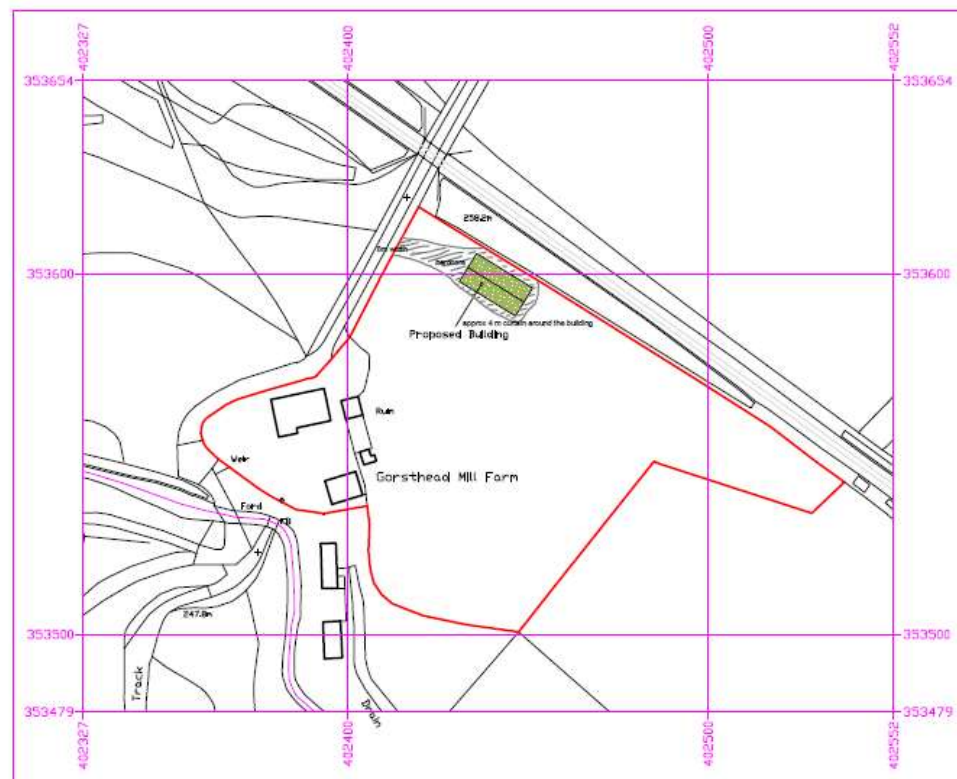


Figure 2. Site location

2.0 Site visit

A walkover of the site (and area immediately surrounding) was performed on 28th January 2025 by Alex Lewis who has over 11 years' experience in ecological survey. A baseline habitat assessment was completed to consider the existing biodiversity value of the site.

It should be noted that the site visit took place during sub-optimal time for plant identification, however species identification is not critical in conditioning assessment for BNG calculation.



Photograph 1 – Proposed location of general-purpose agricultural shed and surrounding hardcore

The proposed development area lies immediately to the north of the Gorsthead Mill Farm smallholding within a parcel of permanent grassland. The field is accessed from Gorsthead Mill Lane and shows signs of compaction and damage from vehicles and stock access (photograph 1). The field is grazed by sheep throughout the year and conditioning assessment of the grass deemed it as species-poor modified grassland (low distinctiveness).

The proposed development area may provide some limited opportunities for foraging animals, but the wider pasture is of much higher ecological value and provides more attractive opportunities for wildlife such as field margins, mature trees and rough pasture in the wider landscape.

There were no protected species on site and there was no evidence of protected species using the site. Furthermore, using the interactive map tool on MAGIC MAP- the nearest SSSI was identified almost 1km away (COMBES VALLEY). Nonetheless the Impact risk zone for SSSIs was investigated to see if there were any considerations. The Impact Risk Zones for Sites of Special Scientific Interest (SSSI IRZs) indicated that at the location selected, the proposed development is unlikely to have a harmful effect on terrestrial Sites of Special Scientific Interest (SSSIs) and the Special Areas of Conservation, with no need to consult Natural England.

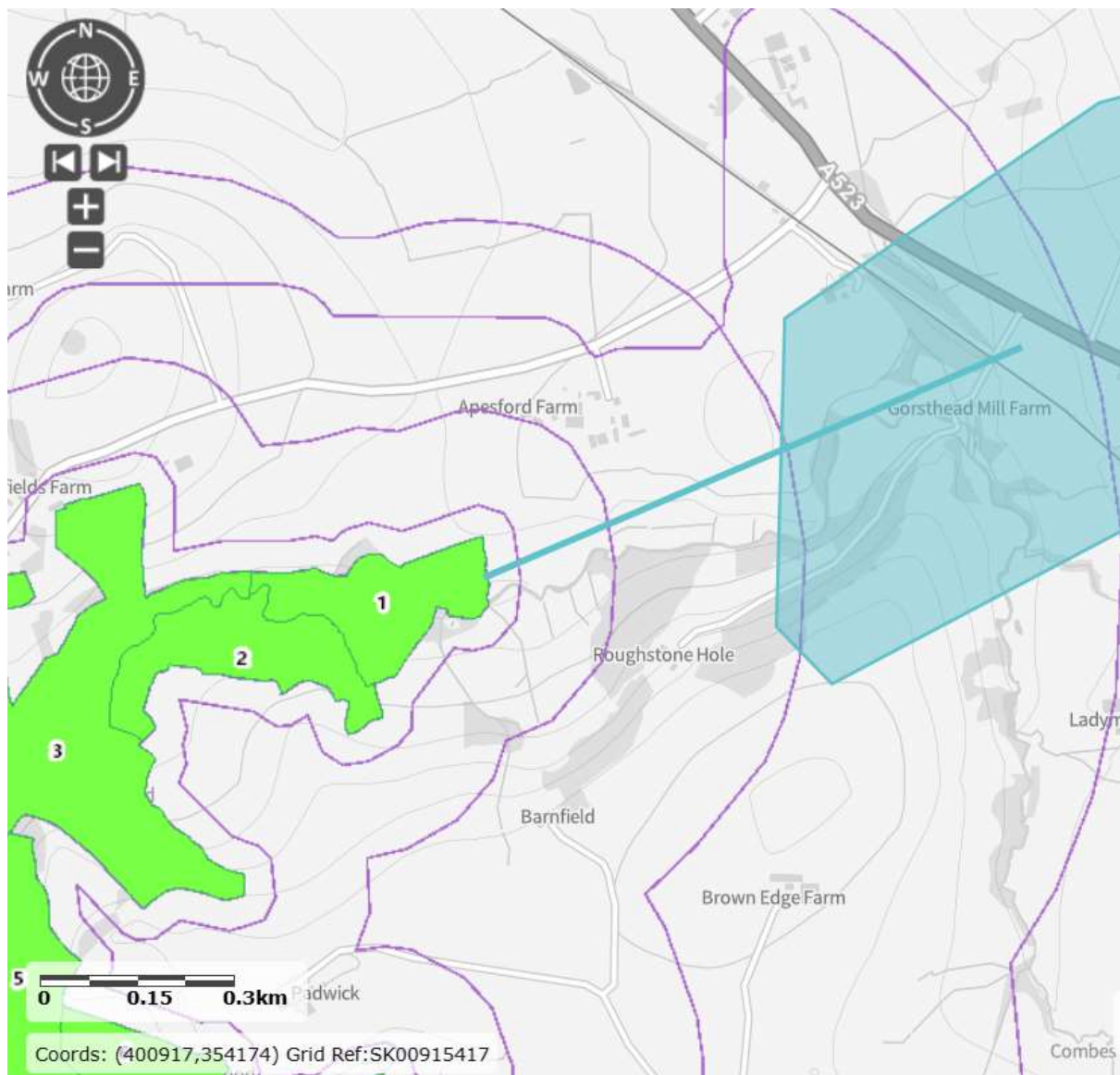


Figure 3 – SSSI locations (green) in relation to the proposed development site (blue)

3.0 Baseline habitat map

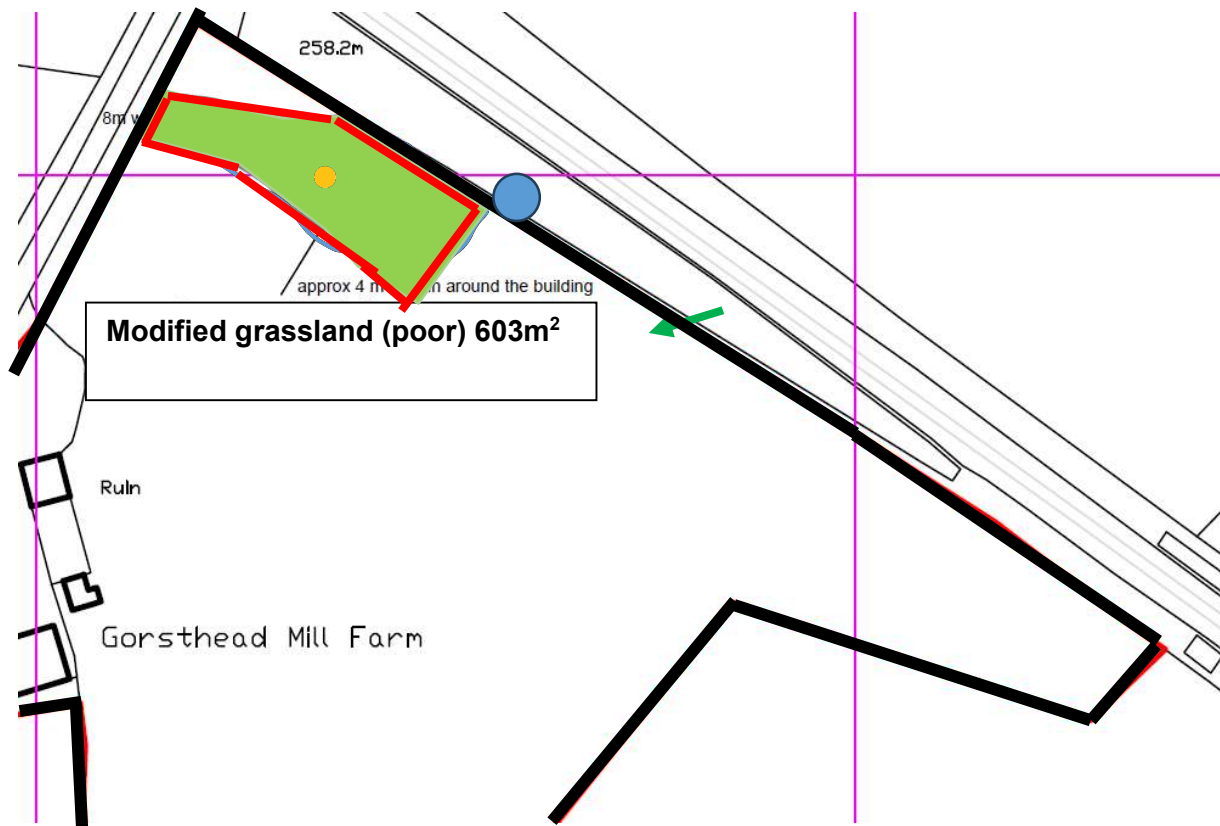


Figure 4 – baseline (pre-development) habitat map of development site. *Thick black line denotes parcel and ownership boundary, red line denotes development site boundary of 603m². Blue circle denotes mature tree outside of site boundary and unaffected by proposals/not included in BNG baseline. Yellow dot denotes an individual small tree (DBH < 30cm) present within the development area.*

4.0 Post-development habitat map, with potential BNG measures

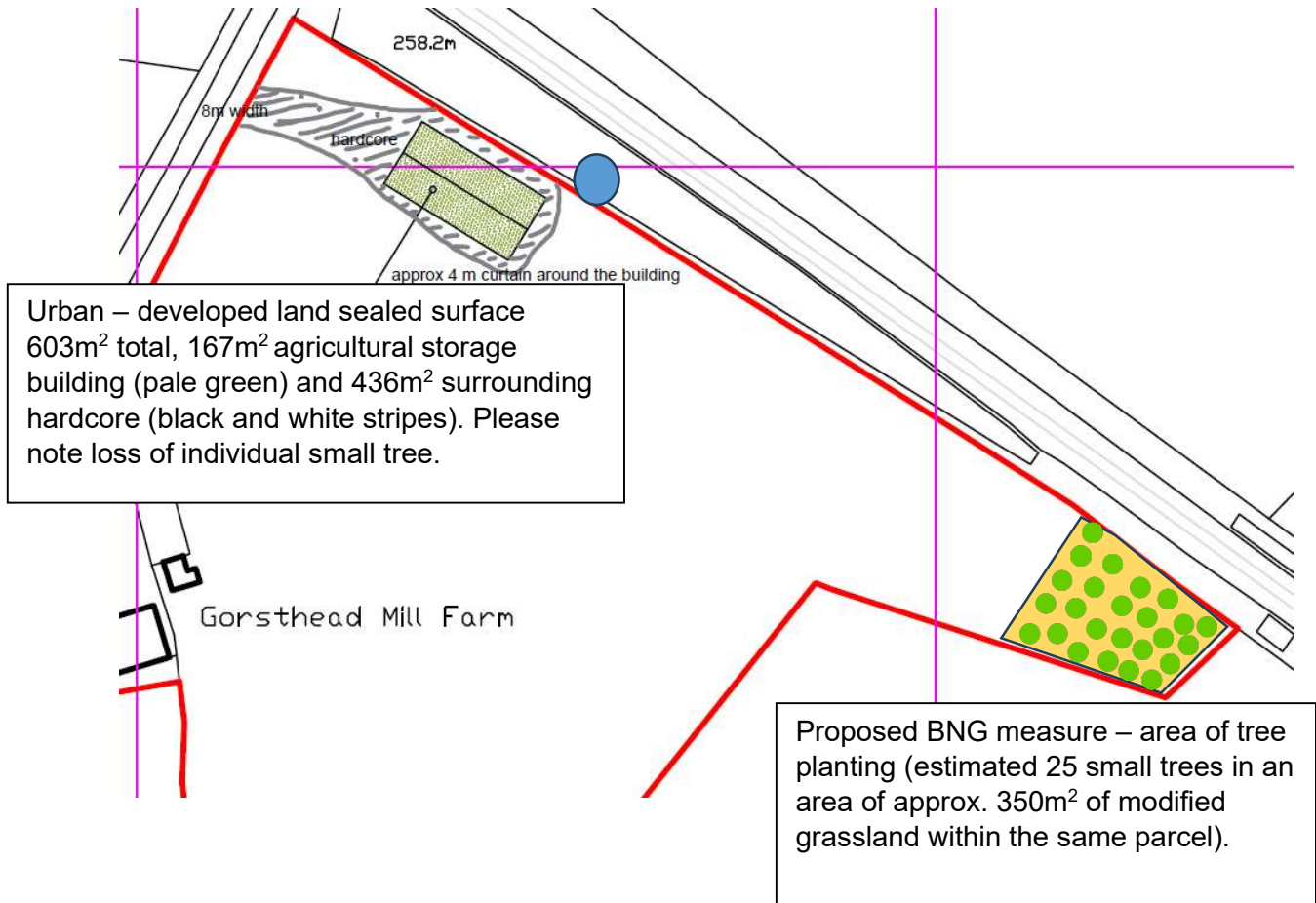


Figure 5 – Post-development habitat map

5.0 Summary and BNG proposals

In conjunction with a desktop assessment and site visit - the small-sites metric (Statutory biodiversity metric) was completed to assess the baseline biodiversity value of the habitats present on the proposed development site at Gorsthead Mill Farm.

The proposed development of the agricultural building and surrounding hardcore will see the loss of 603m² of poor modified grassland (low distinctiveness) and 1 individual small tree (medium distinctiveness).

The total pre-development baseline biodiversity of the development site was calculated as **0.2786 area habitat biodiversity units** (0 hedgerow / watercourse biodiversity units).

In order to meet the BNG requirements of this development - it is proposed that an area of around 350m² to the east of the site, within the same parcel (see figure 5) is used to plant 25 individual small native trees, with appropriate protection to prevent damage by grazing livestock. Species should include native fruit and nut species such as Rowan, Hazel, Crab Apple and Holly to attract birds and wildlife. Planting should take place during winter months (November/March)

Using the biodiversity metric tool the total post-development area habitat biodiversity units is calculated at **0.3110, a total net change of 0.0324 units and a positive uplift of 11.62% habitat biodiversity units** – thus exceeding the expected 10% BNG.