

Technical Note

E: charlotte@croftecology.co.uk



Project: High Street, Kingsley, Stoke-on-Trent ST10 2AF **Our Reference:** 251206.BNGTechNote.v1

To: Aleksandra Pustelnik **Date:** 25/02/2026

Subject: Biodiversity Net Gain Statement (v1) **Prepared by:** Charlotte Mathews

Introduction and methodology

Croft Ecology was commissioned by Aleksandra Pustelnik to provide the necessary supporting information on Biodiversity Net Gain for a forthcoming planning application at High Street, Kingsley, Stoke-on-Trent ST10 2AF (central grid reference: SK 01214 46772) for the creation of a driveway and access track leading through a field from the road to the rear of the existing property.

The purpose of this Technical Note is to present the on-site baseline information for the Site that was used as the basis for the Statutory Metric Biodiversity Net Gain (BNG) calculations.

A baseline habitat survey at the site was undertaken on 7 January 2026 and included the following:

- An assessment of the baseline habitats within the red line boundary (including a baseline map to UK Hab) – Appendix A.
- A condition assessment of all on-site habitats.

This data was then used to complete the on-site baseline information of the Statutory Biodiversity Metric and the associated condition assessment sheets. Post-development calculations for on-site habitats were also undertaken and are summarised in the Indicative Biodiversity Gain Plan for High Street, Kingsley (Croft Ecology, February 2026) which should be read in conjunction with this Technical Note.

Personnel

The survey, assessment, BNG calculations and technical note were undertaken by Charlotte Mathews, Senior Ecologist at Croft Ecology. Charlotte has 8 years of experience working in the field of ecology and has undertaken dozens of walkover surveys/baseline habitat surveys and has been using UK Hab survey methodology for the last three years. Charlotte has been undertaking BNG calculations, baseline surveys and condition assessments for over three years and undertook the BNG calculations for this site.

The report and BNG calculations and indicative gain plan were reviewed by Jeff Grant, Principal Ecologist at Croft Ecology. Jeff has over 12 years of experience working in the field of ecology and has undertaken and reviewed dozens of Preliminary Ecological Appraisals, BNG metric calculations and Ecological Impact Assessments. Jeff also holds protected species survey licences for bats (2022-10527-CLS-CLS) and great crested newts (2025-82156-SCI-CL09).

Survey Date and Conditions

The Site was visited on 7 January 2026 and included land within the red line boundary (see Figure 1).

Weather conditions at the time of the survey were dry with light air, 60% cloud cover, and a temperature of 3°C.

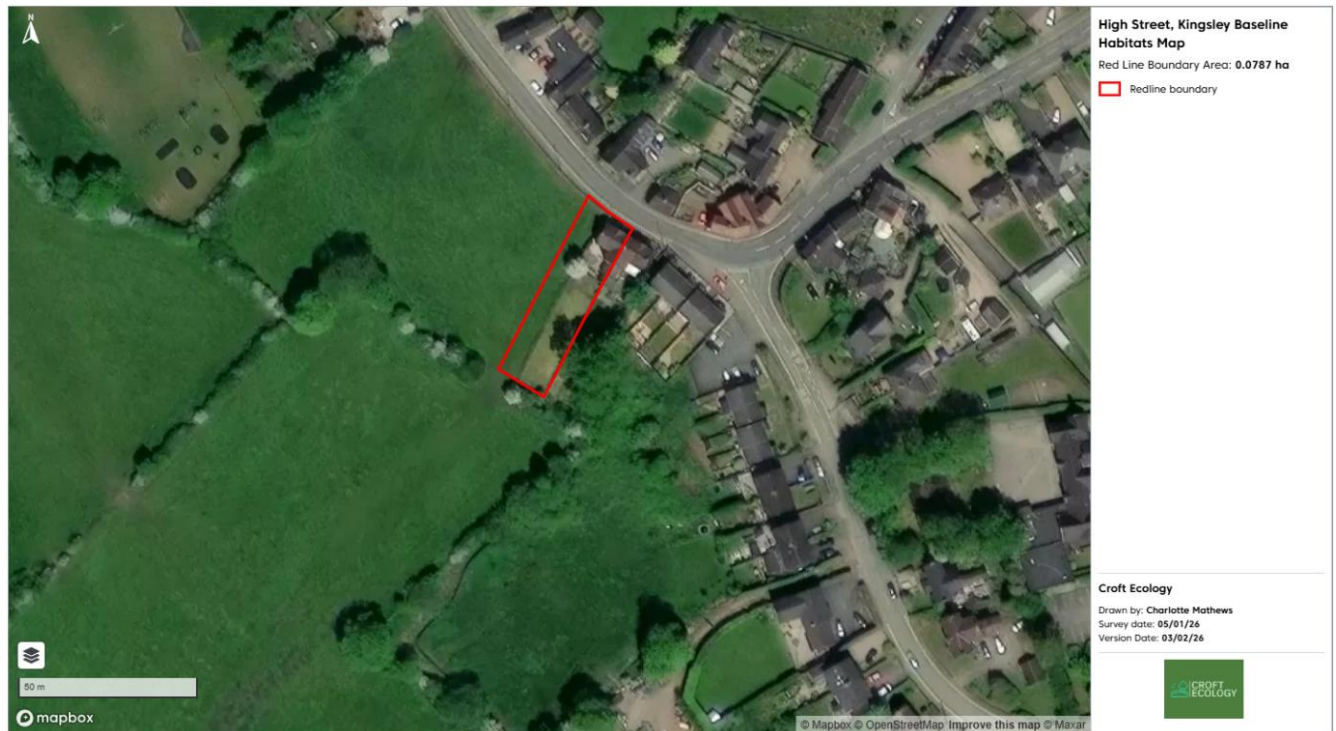


Figure 1. Site boundary (shown in red)

UK Hab Field Survey

A UK Hab¹ Field Survey was undertaken following the methodology described within v2.0 documentation (2023). It was used as the basis for subsequent completion of the Statutory Biodiversity Metric and its associated condition sheets.

A fine-scale minimum mapping unit (of 25m² or 5m) was deemed appropriate for use at the Site given its relatively small scale, consequently, only habitats with an area of 25m² or greater, or linear features 5m in length or greater, were mapped.

The UK Hab uses primary codes whereby habitats are categorised by an increasingly detailed hierarchy until a match is discovered. Secondary codes describe environmental factors that provide additional information such as management regime, hydrology or similar. In this case, each habitat was assigned a Primary Code¹ at the Level 4 hierarchy and secondary codes were applied where these could provide greater context.

During the field survey, all habitats within the Site were thoroughly observed, described, and mapped. A DAFOR abundance (D = dominant, A = abundant, F = frequent, O = occasional, R = rare)

¹ UKHab Ltd (2023) <https://www.ukhab.org/>

was assigned to each botanical species identified in each habitat and nomenclature followed Stace (Stace, 2019).

Limitations

All areas of the Site were accessible with no limitations. The Site visit was conducted during the winter and outside of the main floristic season, therefore there is a possibility some species may not have been identified. Due to the cattle grazing, general condition of the grassland, and species able to be identified during the visit, this is not deemed a constraint to the assessment of the habitats at the Site.

Results

Red line boundary

Parcel Reference: 30452805 – Modified Grassland

A large area to the northwest of the Site comprised modified grassland adjacent to the residential property boundary. The grassland was composed of dominant perennial ryegrass *Lolium perenne*, frequent creeping buttercup *Ranunculus repens*, occasional dandelion *Taraxacum spp.*, common sorrel *Rumex acetosa*, spear thistle *Cirsium vulgare*, common chickweed *Stellaria media*, cow parsley *Anthriscus sylvestris* and rare common field speedwell *Veronica persica*. The modified grassland was part of a pasture field which has been cattle-grazed for a large proportion of the year.



Photo 1. Modified grassland, located to the northwest of the Site.

Parcel Reference: 30452735 – Built Linear Feature

A built linear feature in the form of a dry-stone wall was located between the residential property and modified grassland. The stone wall was approximately 30m in length and mostly intact except for a small section where the top of the wall had partially collapsed. There was associated bramble and nettle along the field side of the wall.



Photo 2. Stone wall, located along the boundary between the field and residential property.

Parcel References: 30454519 – Vegetated Garden

There was a smaller area of vegetated garden within the red line boundary for the Site. The vegetated garden, typically managed as a lawn, comprised dominant perennial ryegrass *Lolium perenne*, occasional creeping buttercup *Ranunculus repens* and rare dandelion *Taraxacum spp.*

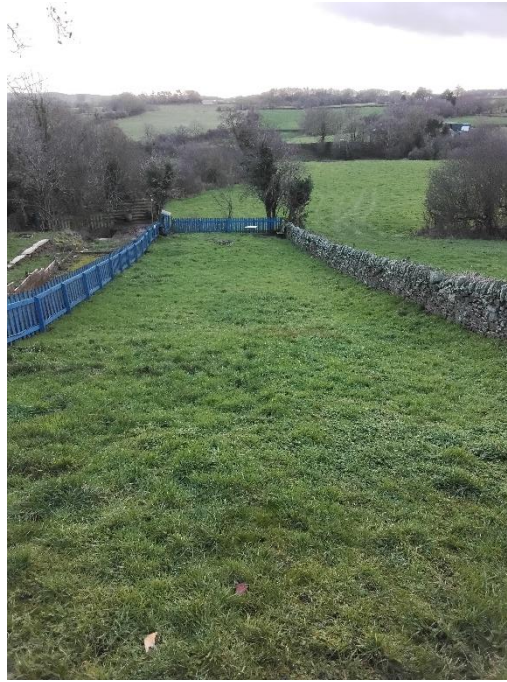


Photo 3. Vegetated garden in the east of the Site

Parcel References: 30455511 – Rural Tree

There was one tree (T1) located within the red line boundary. Tree (T1) was a medium-sized hawthorn located on the border of the residential property and the cattle-grazed field.



Photo 4. Tree T1, located along the boundary between the field and residential property.

Parcel Reference: 30586408 – Building

One building was located within the red line boundary. The building was a semi-detached two storey brick-built residential property.



Photo 5. Residential property within the red line boundary.

Parcel Reference: 30586410 – Developed land; sealed surface

Located around the residential property was an area of hardstanding used as a path around the building and a patio area.



Photo 6. Area of hardstanding and decking around the residential building at the rear of the image.

It is understood that planning permission would be subject to the biodiversity gain condition.

A UK Hab Map of the baseline habitats at the Site is provided in Appendix A and condition assessments for the on-site habitats which require them accompany this report.

The completed Statutory Biodiversity Metric for the pre-development and post-development value of the on-site habitats, along with an accompanying Indicative Biodiversity Gain Plan for High Street, Kingsley by Croft Ecology (February 2026) are provided alongside this technical note.

Recommendations

The existing baseline score for the Site is 0.26 habitat units, meaning a post-development score of 0.28 habitat units or greater would deliver the required 10% BNG.

Development is largely focused on areas of low distinctiveness habitat (modified grassland, vegetated garden) and areas scoring zero on the BNG metric (developed land), whilst the medium distinctiveness habitat – an individual tree – will be retained as part of the proposals. The loss of areas of modified grassland and vegetated garden will need to be appropriately compensated for.

Compensation and enhancement measures have been agreed with the client and are included below and illustrated on Figure 2:

- Seven small native trees targeted in moderate condition will be planted within the area of retained modified grassland at the south of the Site.
- 50m of hedgerow will be planted along the entire northeast boundary of the Site.
- The above measures will enable the proposed development to achieve an increase in biodiversity post development with a **10% habitat units BNG**.

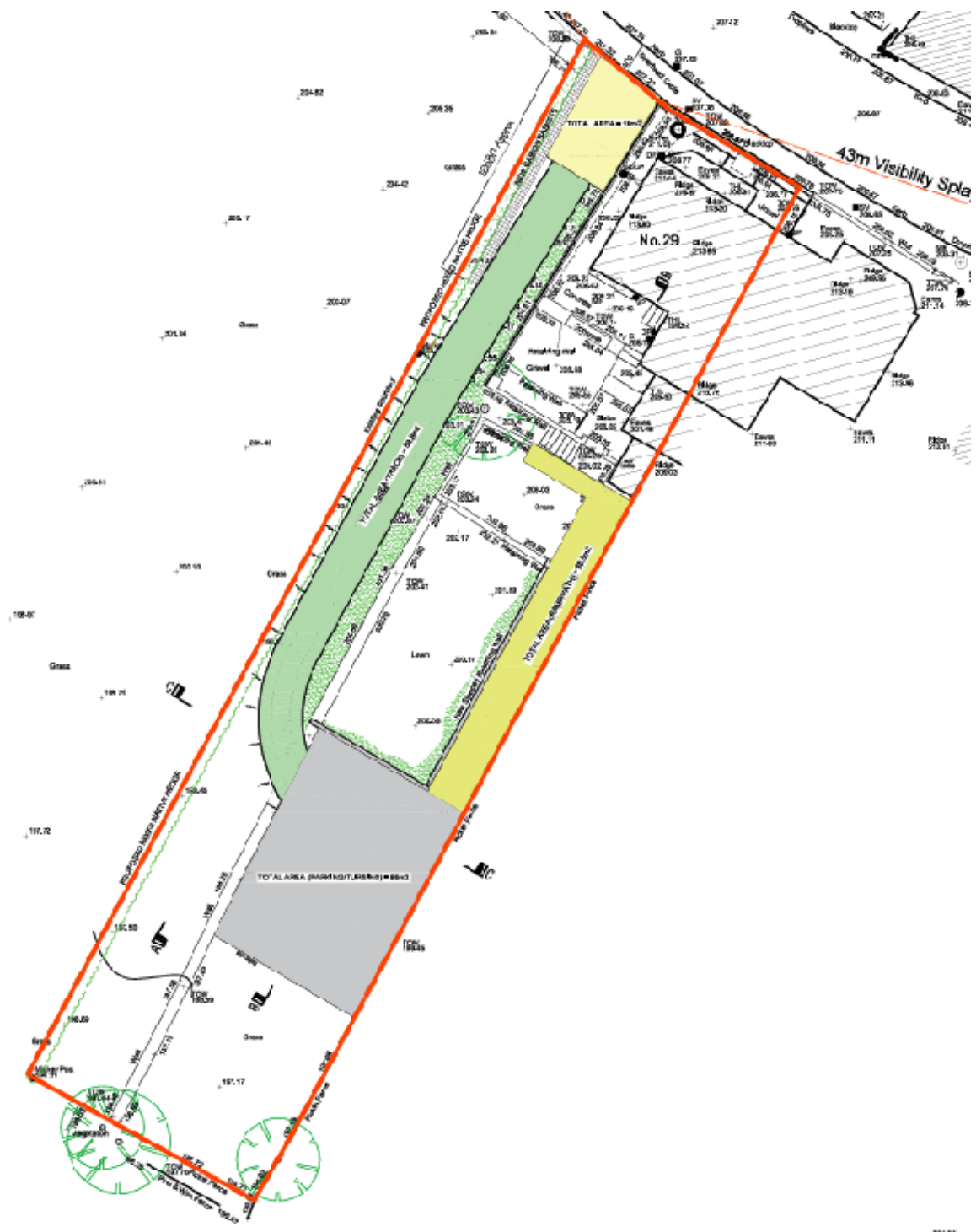


Figure 2. Proposed landscaping and layout. Extract taken from BEA-24-087-P-01 - Detailed Landscape Proposals (P02).pdf. Indicative proposed tree locations shown in Appendix B.

APPENDIX A – High Street, Kingsley Baseline Habitats Map



APPENDIX B – High Street, Kingsley Indicative Plan for Tree Planting

STANDARD PLANTING SPECIFICATIONS -

MIXED NATIVE HEDGE:

Hedging plants are to be 60-80 cm high, 1+1, bareroot, healthy and vigorous transplants to be planted in a double staggered row, 450mm apart, with 7 plants per linear metre. All transplants shall be protected with a 400mm high plastic spiral rabbit guard supported by a 750mm stake or cane. Stock proof fencing should be erected to protect hedging from grazing as required. The hedge is to be maintained for a period of 5 years following planting, ensuring adequate watering and fertilising is carried out to ensure good establishment and that all dead, diseased or damaged plants are replaced annually where required.

