

Technical Note



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Project: 229 Leicester Road, Markfield,
Leicestershire, LE67 9RH

Our Reference: 250104.BNGTechNote.v1

To: Ashby Energy Assessors

Date: 14 April 2025

Subject: Biodiversity Net Gain Statement (v1)

Prepared by: Anna Scott-Swift MCIEEM

Introduction and methodology

Croft Ecology was commissioned by Ashby Energy Assessors to provide the necessary supporting information on Biodiversity Net Gain for a forthcoming planning application at 229 Leicester Road, Markfield, Leicestershire, LE67 9RH (central grid reference: SK 49832 09856) for the construction of a new dwelling with associated access, car parking, and soft landscaping.

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 12 April 2025 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 229 Leicester Road (Croft Ecology, April 2025) which should be read in conjunction with this Technical Note.

Personnel

The survey, assessment, BNG calculations and technical note were undertaken by Anna Scott-Swift MCIEEM, Director and Principal Ecologist at Croft Ecology. Anna has over 20 years of experience working in the field of ecology and has undertaken and reviewed dozens of walkover surveys/baseline habitat surveys and has been using UK Hab survey methodology for the last three years. Anna has been undertaking BNG calculations, baseline surveys and condition assessments for over ten years (BNG has been in place as a local planning consideration in Lichfield and Warwickshire for at least this long) and undertook the BNG calculations for this site.

Survey Date and Conditions

The Site was visited on 20 March 2025 and included land within the red line boundary (see Figure 1).

Weather conditions at the time of the survey were bright and sunny with 10% cloud cover and a light breeze. The air temperature was 18°C.



Figure 1. Site boundary (source: AMLI Design; drawing no. 229/2024/-/-)

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.

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

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

Results

Red line boundary

Parcel References: 26871098 & 26871100 – Developed land ; sealed surface

There was an existing garage building and block paving driveway on Site. Both habitats had a biodiversity score of zero and did not require a condition assessment.



Photo 1. Existing garage (26871098)



Photo 2. Existing block paving driveway (26871100)

Parcel References: 26871741 & 26871107 – Vegetated and unvegetated garden

The vegetated garden comprised an existing well managed lawn, pergola, small outbuilding/brick shed, shrub planting and flower beds. There were non-native boundary hedgerows but these appeared to be within the neighbouring garden; however, as the southeastern hedgerow appears on the topographical survey and the proposed plans as being impacted, it has been included in the baseline.

The unvegetated garden comprised large patio areas and cobblestones, with plants in pots and occasional shrubs including maple species *Acer* sp. and hydrangea species *Hydrangea* sp. The vegetated garden is a low distinctiveness habitat and the unvegetated garden had a biodiversity score of zero; neither habitat requires a condition assessment.



Photo 3. Vegetated garden



Photo 4. Unvegetated garden

Parcel References: 26871101 – Introduced shrub

Introduced shrub is present along the driveway and included laurel *Prunus laurocerasus*, holly *Ilex* sp., rhododendron *Rhododendron* sp., and camellia *Camellia* sp. The introduced shrub was a low distinctiveness habitat and did not require a condition assessment.



Photo 5. Introduced shrub along the driveway

Parcel References: 26871103, 26871743, 26871750, 26871763 & 26871771 – Individual trees

Multiple individual trees were present throughout the Site, mostly within the vegetated garden. Only the medium and large trees were recorded separately (as noted in the BNG User Guide); however, there were also numerous small trees throughout. Most of the trees were a cypress *Cupressus* sp. species and there was one willow *Salix* sp. also present. The individual trees are all moderate distinctiveness habitat and condition assessments were undertaken: the cypress trees were all in moderate condition and the willow was in good condition, as it passed an additional criterion due to it being a native species.



Photo 6. Examples of individual trees – a mature cypress (left) in moderate condition and a mature willow species (right) in good condition.

Parcel References: 27438540 – Non-native and ornamental hedgerow

A non-native and ornamental hedgerow was present along the southeastern boundary. It had a varied height and the following species present: dominant Leyland cypress *Cupressus x leylandii*, and frequent bay *Laurus nobilis* and cotoneaster *Cotoneaster* sp. The non-native and ornamental hedgerow was a very low distinctiveness habitat and was given an automatic condition assessment of poor.



Photo 7. Non-native and ornamental hedgerow behind small tree

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. Condition assessments are provided for the individual trees in Appendix B.

The completed Statutory Biodiversity Metric for the pre-development and post-development value of the on-site habitats is included within the accompanying Indicative Biodiversity Gain Plan for 229 Leicester Road by Croft Ecology (April 2025).

Limitations

All areas of the Site were accessible with no limitations.

Recommendations

The existing baseline score for the site is 1.07 habitat units and 0.01 hedgerow units. There will be a loss of 0.43 habitat units as a result of the development; however, the hedgerow units will all be retained.

Development is already largely focused on areas of low distinctiveness habitat (vegetated garden) and areas scoring zero on the BNG metric (developed land; sealed surface); however, there will also be a loss of two individual trees along the eastern Site boundary. The loss of vegetated garden and individual trees will need to be appropriately compensated for.

Compensation and enhancement measures are included below:

- As the Site is within a residential curtilage and the red line boundary can only realistically include either developed land; sealed surface, vegetated or unvegetated garden, BNG is not possible to achieve on-site.
- Consequently, in order to achieve the required minimum 10% biodiversity net gain, **0.54 habitat units and 0.01 hedgerow units** will be purchased from an offsite habitat bank provider. It is recommended that, if available, habitat units are purchased from the Whitwick Habitat Bank (provided by the Environment Bank) as this is located within the same National Character Area (NCA) as the Site – Charnwood – and would be able to provide Lowland Meadow units in order to satisfy the trading rules for the loss of trees along the eastern Site boundary.
- An alternative habitat bank provider will be approached for the small number of hedgerow units required as currently The Environment Bank do not appear to offer hedgerow units within the same LPA (Hinckley & Bosworth Borough Council) or NCA (Charnwood) nor in neighbouring areas. Nevertheless, as this is such a small value, it is anticipated that there will be a suitable offsite provider that can deliver these units. Alternatively, if there is scope within the landscaping details for the site, a native hedgerow (likely in poor condition) 5-10m in length could be planted at the site (details via a landscaping condition) and would achieve 15-89% BNG.
- Once planning permission has been granted, the client will pursue the purchase of these units, or similar available units in the same or neighbouring LPA/NCA of which there are several provided by the Environment Bank.

APPENDIX A – 229 Leicester Road Baseline Habitats Map



APPENDIX B – 229 Leicester Road Condition Assessments

Condition Sheet: INDIVIDUAL TREES Habitat Type														
Habitat Types														
Individual trees – Urban trees														
Individual trees – Rural trees														
Complete a condition sheet for each tree or block of trees.														
Please see the separate Line of trees condition sheet for a line of <u>rural</u> trees. You should only use the Line of trees condition assessment and record that habitat type in <u>rural</u> locations.														
Habitat Description														
Urban trees in a vegetated garden. T1 - 1x cypress; T3 - 1x cypress, T5 - 1x cypress, T6 - 1x willow spp., T9 - 3x cypress														
Individual trees (description applied to the urban or rural environment):														
Young trees over 7.5 cm in diameter at breast height whose canopies are not touching.														
Urban Perimeter / Linear Blocks and Groups (description applied to the urban environment only):														
Groups or stands of trees (size requirement as defined above) within and around the perimeter of urban land. This includes those along urban streets, highways, railways and canals, and also former field boundary trees incorporated into developments. Canopies should predominantly overlap continuously. Groups of urban trees that don't match the descriptions for woodland may be assessed within this category.														
On-site or off-site, site name and location		On-site, 229 Leicester Road, Markfield		Survey date and Surveyor name		20.03.2025 Anna Scott-Swift								
				Survey reference (if relating to a wider survey)		UK Hab Baseline Survey - see Baseline Habitats Map for tree locations (instead of grid references)								
Limitations (if applicable)		n/a		Habitat parcel reference										
				26871 103		26871 743		26871 750	26871 763				26871 771	
				Grid reference										
Condition Assessment Criteria		T1			T3			T5		T6			T9	
		Criterion passed (Yes or No)											Notes (such as justification)	
A	The tree is a native species (or at least 70% within the block are native species).	No		No		No	Yes			No				
B	The tree canopy is predominantly continuous, with gaps in canopy cover making up <10% of total area and no individual gap being >5 m wide (individual trees automatically pass this criterion).	Yes		Yes		Yes	Yes			Yes				
C	The tree is mature (or more than 50% within the block are mature) ¹ .	Yes		Yes		Yes	Yes			Yes				
D	There is little or no evidence of an adverse impact on tree health by human activities (such as vandalism, herbicide or detrimental agricultural activity). And there is no current regular pruning regime, so the trees retain >75% of expected canopy for their age range and height.	Yes		Yes		Yes	Yes			Yes				
E	Natural ecological niches for vertebrates and invertebrates are present, such as presence of deadwood, cavities, ivy or loose bark.	No		No		No	No			No				
F	More than 20% of the tree canopy area is oversailing vegetation beneath.	No		Yes		Yes	Yes			Yes				
Number of criteria passed		3		4		4	5			4				
Condition Assessment Result (out of 6 criteria)		Condition Assessment Score		Score Achieved x/√										
Passes 5 or 6 criteria		Good (3)						Yes						

Passes 3 or 4 criteria	Moderate (2)	Yes		Yes		Yes				Yes		
Passes 2 or fewer criteria	Poor (1)											
Note that 'Fairly Good and Fairly Poor' condition categories are not available for this broad habitat type.												
Suggested enhancement interventions to improve condition score ²												