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# Biodiversity Net Gain Assessment

January 2025

**Project Reference: PR-0416-24**

**Knowsley Village Hall**

School Lane

Knowsley

L34 9EN

**National Grid Reference: SJ43419592**



**Knowsley Village Hall, School Lane, Knowsley, L34 9EN**  
**Biodiversity Net Gain Assessment**

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Document Title	Biodiversity Net Gain Assessment
Project Reference	PR-0416-24
Issue Number	1.1
Prepared for	Mr. B. Maguire
Prepared by	Tyrer Ecological Consultants Ltd

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Reviewed by	Mr. H. Mulligan Qualifying CIEEM
Review Date	14/01/2025
Approved by	Mrs. K. Wilding CEnv MIEMA ACIEEM
Date of Issue	14/01/2025

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## Executive Summary

As part of a proposed planning application with Knowsley Council concerning Knowsley Village Hall, Tyrer Ecological Consultants Ltd were commissioned to carry out a Biodiversity Net Gain (BNG) Assessment, inclusive of a site visit in December 2024 to identify, map and condition assess the habitats present within the red line boundary.

Proposals are understood to involve the conversion of the existing vacant property into a number of self-contained residences.

Based on the current landscaping proposals, the scheme will result in a **10.27% net-gain in Habitat units**, and a **19.85% net-gain in Hedgerow units**. In terms of specific unit changes, the metric output indicates a gain of **0.45 Habitat units**, and a gain of **0.01 Hedgerow units**.

The **trading rules are satisfied** for the site.

<p><b>Total net unit change</b>                      (Including all on-site &amp; off-site habitat retention, creation &amp; enhancement)</p>	<i>Habitat units</i>	0.45
	<i>Hedgerow units</i>	0.01
	<i>Watercourse units</i>	0.00
<p><b>Total net % change</b>                      (Including all on-site &amp; off-site habitat retention, creation &amp; enhancement)</p>	<i>Habitat units</i>	10.27%
	<i>Hedgerow units</i>	19.85%
	<i>Watercourse units</i>	0.00%
<p><b>Trading rules satisfied?</b></p>	<p>Yes ✓</p>	

The above results are based on extensive cooperation between the Ecologist (Tyrer Ecological Consultants) and the applicant (Mr. B. Maguire), which has resulted in changes to the landscaping scheme, including the planting of a number of individual trees within areas designated as communal space to ensure that continued management can be ensured.

The above indicates that the scheme has been produced in line with the mitigation hierarchy and BNG guidance, inclusive of the Rules & Principles of use.

If proposals are altered, then it may be necessary to re-assess the scheme using the Statutory Biodiversity Metric Tool in order to ascertain whether a gain is still achieved.

The 'Medium' distinctiveness created habitats (i.e. the Individual Trees and the Wildflower Planting) are considered significant, and as such they will require a Habitat Monitoring and Management Plan (HMMP), detailing management prescriptions for the 30-year period.

## Incidental Observations

One invasive non-native species (INNS) was located on site, in the form of rhododendron (*Rhododendron ponticum*). The INNS present appears to be located in close proximity to an

area which will be directly impacted by the works, and there is considered to be a high chance of continued spread both within the site as well as off-site.

*It is therefore recommended that this INNS is eradicated from the site by a qualified Invasive Species contractor in accordance with a Method Statement. This could be secured by a suitably worded planning condition.*

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## 1.0 Introduction & Scope

- 1.1 As part of a proposed planning application with Knowsley Council concerning Knowsley Village Hall, Tyrer Ecological Consultants Ltd were commissioned to carry out a Biodiversity Net Gain (BNG) Assessment, inclusive of a site visit in December 2024 to identify, map and condition assess the habitats present within the red line boundary.
- 1.2 A previous ecological survey (titled Preliminary Ecology Appraisal – PEA) was undertaken at the site by Sensible Ecological Survey Solutions (SESS), however the report did not include any information in relation to Biodiversity Net Gain. This report therefore aims only to provide information to allow for the completion of a Biodiversity Net Gain report and does not deal with any other implications, such as the necessity for protected species surveys.
- 1.3 Proposals are understood to involve the conversion of the existing vacant property into a number of self-contained residences. See **Figure 1.1** below for a proposed site plan.

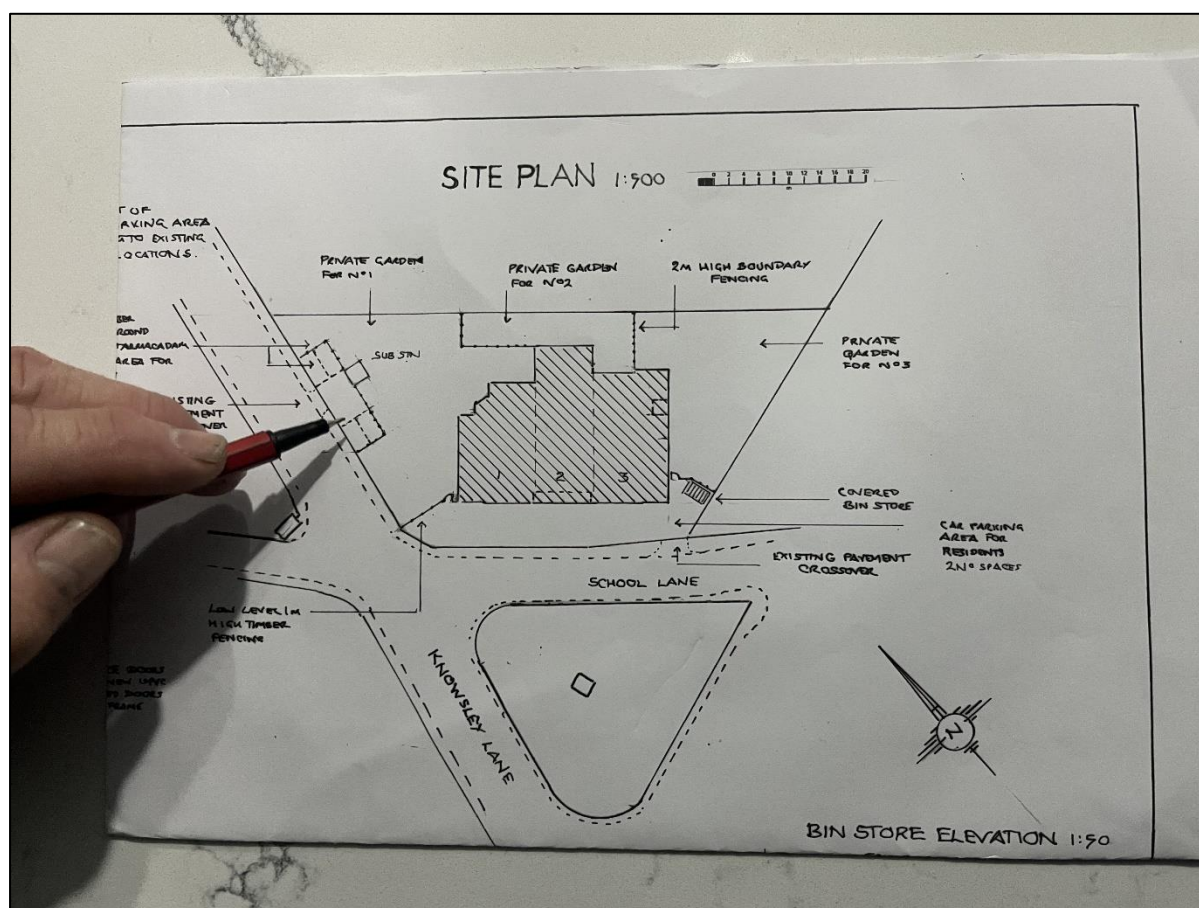


Figure 1.1 – Proposed site plan © Mr. B. Maguire

- 1.4 This BNG Assessment relies on information gathered during the baseline assessment (see **External Appendices**) as well as from third-party plans associated with the scheme (see **Point 2.11** of this report for key third-party data sources).
- 1.5 As part of the Local Planning Authorities (LPA) planning policies and obligations to the Planning Framework, a Biodiversity Net Gain Assessment is typically required prior to planning permission being granted, in order to safeguard ecological gains at the site.
- 1.6 This assessment uses 'The Statutory Biodiversity Metric Tool' as this is the most recent and most appropriate metric for the proposed scheme versus alternatives available. This metric can be used or specified by any development project, consenting body or landowner that

needs to calculate biodiversity losses and gains for terrestrial and / or intertidal habitats and has been extensively tested.

### **National Policy**

- 1.7 The National Planning Policy Framework (NPPF), revised in December 2024, legislates net gain in biodiversity through paragraphs 8(c), 187(d), 192(b) and 193(d). An effort should be made, therefore, through the development design to provide ecological enhancement in order to deliver an overall increase in biodiversity, and opportunities to incorporate biodiversity in and around developments should be encouraged.
- 1.8 The Environment Act 2021 ('The Act') came into force in November 2021. Aspects of the Act relating to BNG came into force on 12<sup>th</sup> February 2024, whereby BNG is mandatory under Schedule 7A of the Town and Country Planning Act 1990 (as inserted by Schedule 14 of the Environment Act 2021).
- 1.9 The Act is supported by secondary legislation, consisting of six statutory instruments laid within law, of which the relevant legislation includes:
- The Environment Act 2021 (Commencement No. 8 and Transitional Provisions) Regulations 2024<sup>1</sup>
  - The Biodiversity Gain Site Register Regulations 2024<sup>2</sup>
  - The Biodiversity Gain Site Register (Financial Penalties and Fees) Regulations 2024<sup>3</sup>
  - The Biodiversity Gain Requirements (Exemptions) Regulations 2024<sup>4</sup>
  - The Biodiversity Gain Requirements (Irreplaceable Habitat) Regulations 2024<sup>5</sup>
  - The Biodiversity Gain (Town and Country Planning) (Modifications and Amendments) (England) Regulations 2024<sup>6</sup>
- 1.10 Other legislature considered for the purposes of this report includes the following:
- Biodiversity Net Gain: Good practice principles for development (2019),
  - Natural Environment and Rural Communities (NERC) Act (2006) Section 41.

### **Local Policy**

- 1.11 The following policies from the Knowsley Local Plan are considered relevant to this assessment (see **Table 1.1** overleaf):

**Table 1.1 – Relevant policies as extracted from the Knowsley Local Plan**

<b>Policy Title</b>	<b>Summary</b>
<b>CS8: Green Infrastructure</b>	Knowsley's existing green infrastructure will be protected, managed, or enhanced, through the identification, protection and enhancement of strategically important areas of greenspace. In relation to the LCR, the Council will work with partners to help deliver local and sub-regional programmes, initiatives and strategies to enhance Green Infrastructure.

<sup>1</sup> See: <https://www.legislation.gov.uk/ukxi/2024/44/contents/made>

<sup>2</sup> See: <https://www.legislation.gov.uk/ukxi/2024/45/contents/made>

<sup>3</sup> See: <https://www.legislation.gov.uk/ukxi/2024/45/contents/made>

<sup>4</sup> See: <https://www.legislation.gov.uk/ukxi/2024/47/contents/made>

<sup>5</sup> See: <https://www.legislation.gov.uk/ukxi/2024/48/contents/made>

<sup>6</sup> See: <https://www.legislation.gov.uk/ukxi/2024/50/contents/made>

Policy Title	Summary
<b>CS21:</b> Greenspaces and Trees	The Council will provide and maintain quantitative, qualitative and accessibility standards for different types of public open space.

## 2.0 The Statutory Biodiversity Metric Tool

- 2.1 Biodiversity Net Gain is specified as “an approach to development which aims to leave the natural environment in a measurably better state than before”. The Statutory Biodiversity Metric Calculation Tool is a quantitative tool used to calculate how development projects impact upon the biodiversity value of a site and allows for the scale of mitigative / compensatory measures to be calculated by a suitably qualified individual.
- 2.2 Application of use follows the Biodiversity Net Gain Principles and Rules (DEFRA, July 2024) covered in the most recent User Guide<sup>7</sup> (see **Tables 2.1 – 2.2**), whilst also taking into account the Biodiversity Net Gain: Good practice principles<sup>8</sup>, developed by **CIRIA** (Construction Industry Research and Information Association), **CIEEM** (Chartered Institute of Ecology and Environmental Management) and **IEMA** (Institute of Environmental Management and Assessment).
- 2.3 It is a legal requirement that the four BNG Rules are met, whilst the Principles provide guidance for application of use.

**Table 2.1 – Biodiversity Metric Rules**

Rule Number	Rule Detail
<b>1</b>	The trading rules of this biodiversity metric must be followed.
<b>2</b>	Biodiversity unit outputs, for each type of unit, must not be summed, traded, or converted between types. The requirement to deliver at least a 10% net gain applies to each type of unit.
<b>3</b>	To accurately apply the biodiversity metric formula, you must use the biodiversity metric calculation tool or small sites biodiversity metric tool (SSM) for small sites. The tools remove the need for a user to manually calculate the change in biodiversity value. The tool will summarise the results of the calculation and inform a user whether the biodiversity net gain objective has been met.
<b>4</b>	In exceptional ecological circumstances, deviation from this biodiversity metric methodology may be permitted by the relevant planning authority.

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<sup>7</sup> See:

[https://assets.publishing.service.gov.uk/media/669e45fba3c2a28abb50d426/The\\_Statutory\\_Biodiversity\\_Metric\\_-\\_User\\_Guide\\_23.07.24\\_.pdf](https://assets.publishing.service.gov.uk/media/669e45fba3c2a28abb50d426/The_Statutory_Biodiversity_Metric_-_User_Guide_23.07.24_.pdf)

<sup>8</sup> See: <https://cieem.net/wp-content/uploads/2019/02/Biodiversity-Net-Gain-Principles.pdf>

**Table 2.2 – Biodiversity Metric Principles**

Principle Number	Principle Detail
1	The metric assessment should be completed by a competent person.
2	The use of this biodiversity metric does not override existing biodiversity protections, statutory obligations, policy requirements, ecological mitigation hierarchy or any other requirements. This includes consenting or licensing processes, for example woodlands.
3	This biodiversity metric should be used in accordance with established good practice guidance and professional codes.
4	This biodiversity metric is not a complex or comprehensive ecological model and is not a substitute for expert ecological advice.
5	Biodiversity units are a proxy for biodiversity and should be treated as relative values.
6	This biodiversity metric is designed to inform decisions in conjunction with locally relevant evidence, expert input, or guidance.
7	Created and enhanced habitats should seek, where practical and reasonable, to be local to any impact and deliver strategically important outcomes for nature conservation.
8	Created and enhanced habitats should be, where practical and reasonable, local to any impact and deliver strategically important outcomes for nature conservation.
9	The metric does not enforce a minimum habitat size ratio for compensation of losses. However, proposals should aim to: <ul style="list-style-type: none"> <li>• maintain habitat extent - supporting more, bigger, better and more joined up ecological networks</li> <li>• ensure that proposed or retained habitat parcels are of sufficient size for ecological function</li> </ul>

2.4 Using the available baseline ecological information gathered, supported by the design information as has been communicated, the Statutory Biodiversity Metric Calculation Tool was completed by the following assessor (see **Table 2.3**):

**Table 2.3 – BNG Assessor credentials**

Name	Description of most relevant credentials
<b>Mr. B. Richards</b> ACIEEM	<ul style="list-style-type: none"> <li>• Consultant Ecologist with 3 years of professional training and experience,</li> <li>• MBiolSci in Biological Sciences (Zoology),</li> <li>• Received in-house training from Senior Ecologists as well as attended external webinars and training courses in application of the Metric</li> <li>• Undertaken a number of BNG assessments, utilising both the SSM Beta's and full BNG tool, v3.0, v3.1, v4.0 &amp; Statutory.</li> </ul>

2.5 Assessment of baseline / post-development Area Habitat / Hedgerow / Watercourse units have been carried out and assessed separately in accordance with the guidance, principles, and rules – where present on site. Any revisions required following the issue of this report will use The Statutory Biodiversity Metric in accordance with the rules of use for that version.

2.6 Measurement of habitats was carried out using a combination of desktop software – QGIS, Google Earth and MAGiC Maps 2023/24, whilst physical habitat measurements were also taken in the field during ground truthing, where necessary.

- 2.7 The Guidance Note on BNG issued by Merseyside Environmental Advisory Service<sup>9</sup> provides information pertaining to the application of strategic significance to areas and habitats within the Liverpool City Region (LCR) combined authority which includes the Borough of Knowsley. This document, along with the LCR Ecological Network Explorer<sup>10</sup> online mapping software, was accessed and used to assess the strategic significance of habitats present within the site. The site includes the following layers indicative of strategic significance:
- **Nature Improvement Area (NIA).**
- 2.8 In addition, the Knowsley Council Local Plan Policies Map Online Tool<sup>11</sup> was utilised. The site is located within the following layers:
- **Allocated for Housing Development** (LP – CS3 & UDP – H5),
  - **Conservation Area** (LP – CS20 & UDP – DQ5).
- 2.9 The North Merseyside Biodiversity Action Plan (NMBAP) was also accessed to assist with determining the strategic significance of on-site habitats.
- 2.10 Based on the above, all of the on-site habitats have been formally categorised as being 'Formally identified within local strategy', with the exception of urban types.
- 2.11 Key third-party data sources and / or information used to inform this BNG assessment include:
- **Arboricultural Implications Plan** © Rainfords Arboriculture,
  - **Tree Constraints Plan** © Rainfords Arboriculture,
  - **Tree Survey, Arboricultural Impact Assessment, and Arboricultural Method Statement** © Rainfords Arboriculture,
  - **Proposed Site Plan** © Mr. B. Maguire.
- 2.12 No irreplaceable habitats exist on site at the baseline stage; the individual trees present meet the threshold as the NMBAP habitat 'Individual Trees'.
- 2.13 The results, conclusions and recommendations of this report have been assessed by Mrs. K. Wilding, Director of Tyrer Ecological Consultants Ltd, and her assessment concurs with the findings and recommendations of Mr. Richards, as well as with other Senior consultants within the company.

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<sup>9</sup> Available here: [https://eas.merseysidebiobank.org.uk/wp-content/uploads/2024/03/LCR\\_Mandatory\\_BNG\\_Guidance\\_Note\\_FINAL.pdf](https://eas.merseysidebiobank.org.uk/wp-content/uploads/2024/03/LCR_Mandatory_BNG_Guidance_Note_FINAL.pdf)

<sup>10</sup> Available here: <https://lcreconet.uk/map/>

<sup>11</sup> Available here: <https://localplanmaps.knowsley.gov.uk/>

### 3.0 Limitations

- 3.1 Third-party information was utilised in the completion of the Biodiversity Net Gain assessment (see **Point 2.11**); therefore, Tyrer Ecological Consultants Ltd cannot be held accountable for any possible discrepancies within supporting information.
- 3.2 The site plans provided to the author are hand drawn. Whilst these are accepted by planning authorities, these types of plans are typically inaccurate in comparison to electronically drawn and georeferenced documents; thus the above limitation may be exacerbated within this report.
- 3.3 The habitat codes of UK Habitats are not, at present, fully aligned with the Biodiversity Metric Calculator. Where applicable, translations have, therefore, been made between the two categorisations by the assessor, who aims to most accurately represent the biodiversity value of the site and the habitats present.
- 3.4 Measurements have been calculated utilising software such as 'QGIS' (a Geographic Information System or GIS), aerial imagery and third-party plans provided by the applicant, all of which may have varying levels of inaccuracy, and as such Tyrer Ecological Consultants Ltd cannot be held accountable for any discrepancies between habitat areas (ha) or linear features (km) stated in this report and other documentation pertaining to the site.
- 3.5 The Statutory Biodiversity Metric allows for an area / length accuracy to any number of decimal places, however 'Total area' / 'Total length' is displayed to two decimal places, this may result in small rounding discrepancies on large sites with many small parcels of habitat. However, the metric uses the true value entered into each row to calculate the overall unit change of the site, thus while rounding discrepancies may be displayed under 'Total area' / 'Total length' these discrepancies do not impact the results of the calculation tool; these discrepancies should be taken into account by both the practitioner and reviewer in line with the above.
- 3.6 In considering possible limitations, no significant constraints were experienced which might adversely influence the results, conclusions, and recommendations of this BNG assessment, the results of which have been presented in accordance with the rules and principles of use to the satisfaction of the assessor.

#### 4.0 Habitat Survey with Metric

##### Baseline Habitats

- 4.1 The reader is referred to the 'Hard copy' of the Metric<sup>12</sup>, which will accompany this report when issued and should be read in conjunction with this section. See **Tables 4.1 – 4.2** below for **baseline habitat information** as extracted from the Hard copy of the Metric.
- 4.2 Please refer to **Appendix I** for specific scoring of the condition analyses carried out at the site on a per-habitat basis.

**Table 4.1 – Baseline Habitat information for Area habitats**

Habitat Type	Area (hectares)	Condition	Assessor comments	Habitat Units
<b>g4 – Modified grassland</b> <b>Habitat Ref.: 1</b>	0.1129	Poor	The majority of the site is formed of a species-poor grassland, with an estimated 4 species per m <sup>2</sup> , with a composition indicative of a highly enriched substrate, featuring cock's-foot and red fescue as the dominant graminoids, and forbs such as creeping buttercup, herb-Robert, dandelion and broad-leaved dock, amongst others. Identified as 'amenity grassland' in the associated PEA report © SESS.	<b>0.26</b>
<b>u1b5 – Buildings</b> <b>Habitat Ref.: 2</b>	0.0599	N/A	Three built structures are present in the site; the main structure set to be converted, a substation to the south-east and a shipping container to the west. Identified as 'Buildings' in the associated PEA report © SESS.	<b>0.00</b>
<b>u1b6 – Other developed land</b> <b>Habitat Ref.: 3</b>	0.0316	N/A	Paved hardstanding is present around the main structure on site and to the east of the substation, whilst an area of tarmac is present in the west of the site. Identified as 'Hard standing' and 'Bare ground' in the associated PEA report © SESS.	<b>0.00</b>
<b>Individual Trees 'Rural Trees'</b> <b>Habitat Ref.: 4</b>	0.2769	Good	11 of the individual trees on site meet 'Good' condition in the context of the metric, labelled as T2, T8, T10, T11, T14, T15, T16, T20, T21, G22 & T23 as per Tree Survey, AIA, and Arboricultural Method Statement © Rainfor's Arboriculture. Identified as 'Scattered trees' in the associated	<b>3.82</b>

<sup>12</sup>This section of the report should be read in conjunction with the hard copy of the Statutory Biodiversity Metric Calculation tool – external Appendix.

Habitat Type	Area (hectares)	Condition	Assessor comments	Habitat Units
			PEA report © SESS. These are variously sized – see tree helper within metric for exact calculations.	
<b>Individual Trees</b> 'Rural Trees'  <b>Habitat Ref.: 5</b>	0.0285	Moderate	A total of seven trees meet 'Moderate' condition in the context of the metric, labelled as T3, G9, T12, T13, T17, T18 & T19 as per Tree Survey, AIA, and Arboricultural Method Statement © Rainfords Arboriculture. Identified as 'Scattered trees' in the associated PEA report © SESS. These are variously sized – see tree helper within metric for exact calculations.	<b>0.26</b>
<b>Total Habitat area (excl. urban trees)</b>	<b>0.20</b>		<b>Total Habitat Units (incl. urban trees)</b>	<b>4.34</b>

**Table 4.2 – Baseline Hedgerow information for Linear habitats**

Hedgerow Type	Length (kilometres)	Condition	Assessor comments	Hedgerow Units
<b>h2b –</b> Non-native and ornamental hedgerow  <b>Hedgerow Ref.: 1</b>	0.0616	Poor	Several single species hedgerows are present around the site, though have all been input as a single feature as no condition assessment is applicable. Labelled as T4, T5, T6 & T7 as per Tree Survey, AIA, and Arboricultural Method Statement © Rainfords Arboriculture, and identified as 'Scattered trees' in the associated PEA report © SESS. The hedgerow to the north-east is formed of firethorn, whilst a cherry laurel feature is present along the south-western border.	<b>0.06</b>
<b>Total Hedgerow Length</b>	<b>0.06</b>		<b>Total Hedgerow Units</b>	<b>0.06</b>

## Proposals

- 4.3 Proposals are understood to involve the conversion of the existing vacant property into a number of self-contained residences.
- 4.4 The proposals will result in the retention of the majority of the on site habitats, with the exception of small areas of grassland, a section of building and some of the trees which have

been recommended for removal in the AIA report, as well as a small section of grassland to the east of the site which will be removed to facilitate an off-road parking area. **Figures 4.1 – 4.2** provide UK Habitats maps of the site at the baseline and post-development stages.

### Post-Development Habitats

4.5 The reader is again referred to the ‘Hard copy’ of the Metric, which will accompany this report when issued and should be read in conjunction with this section. See **Tables 4.3 – 4.4** overleaf for **post-development habitat information**, as extracted and adapted from the Hard copy of the Metric.

**Table 4.3 – Post-development Habitat information for Area habitats**

Habitat Type	Area (hectares)	Condition	Assessor comments	Habitat Units
<b>g4 – Modified grassland</b> <b>Habitat Ref.: 1</b>	0.1006	Poor	The majority of this habitat will be retained, with the exception of a small area around the substation and to the north-east of the main structure to facilitate parking spaces, as per Proposed Site Plan © Mr. B. Maguire. <b>Some of this habitat will be kept outside of private curtilage, and as such will be available for enhancement measures.</b>	<b>0.23</b>
<b>g4 – Modified grassland</b> <b>Habitat Ref.: 6</b>	0.0008	N/A	A small area of modified grassland will be created where the shipping container is currently sited <b>and will be able to be secured as it is outside of private curtilage</b> , as per Proposed Site Plan © Mr. B. Maguire.	<b>0.00</b>
<b>u1b5 – Buildings</b> <b>Habitat Ref.: 2</b>	0.0573	N/A	The majority of the structure set for conversion will be maintained, with the exception of an area to the north. The substation is set to be retained in full, and the shipping container removed, as per Proposed Site Plan © Mr. B. Maguire.	<b>0.00</b>
<b>u1b6 – Other developed land</b> <b>Habitat Ref.: 3</b>	0.0316	N/A	This habitat is set to be retained in full, as per Proposed Site Plan © Mr. B. Maguire.	<b>0.00</b>
<b>u1b6 – Other developed land</b> <b>Habitat Ref.: 7</b>	0.0141	N/A	New areas of hardstanding will be set around the substation and to the north of the converted structure, as per Proposed Site Plan © Mr. B. Maguire.	<b>0.00</b>

Habitat Type	Area (hectares)	Condition	Assessor comments	Habitat Units
<b>Individual Trees</b> 'Rural Trees' <b>Habitat Ref.: 4</b>	0.2565	Good	All of these trees will be retained, <b>including T2 &amp; T8 following further correspondence with the client, in contrast to the AIA.</b>	<b>3.54</b>
<b>Individual Trees</b> 'Rural Trees' <b>Habitat Ref.: 5</b>	0.0285	Moderate	All of these trees will be retained, as per Proposed Site Plan © Mr. B. Maguire.	<b>0.26</b>
<b>Individual Trees</b> 'Rural Trees' <b>Habitat Ref.: 8</b>	0.1344	Moderate	A total of 33 individual trees will be planted in an area to the north and north-west. These will be formed of native species. See planting schedule ( <b>Table 4.5</b> ) for species.	<b>0.47</b>
<b>Total Habitat area (excl. urban trees)</b>	<b>0.20</b>		<b>Total Habitat Units (incl. urban trees)</b>	<b>4.79</b>

**Table 4.4 – Post-development Hedgerow information for Linear habitats**

Hedgerow Type	Length (kilometres)	Condition	Assessor comments	Hedgerow Units
<b>h2b –</b> Non-native and ornamental hedgerow <b>Hedgerow Ref.: 1</b>	0.0553	Poor	Some of this habitat will be retained at the post-development stage, as per Proposed Site Plan © Mr. B. Maguire.	<b>0.06</b>
<b>h2b –</b> Non-native and ornamental hedgerow <b>Hedgerow Ref.: 2</b>	0.0192	Poor	New areas of hedging set to be planted to screen the structure from the road, as per Proposed Site Plan © Mr. B. Maguire.	<b>0.02</b>
<b>Total Hedgerow Length</b>	<b>0.08</b>		<b>Total Hedgerow Units</b>	<b>0.07</b>

**Table 4.5 – Suitable native species for planting individual trees**

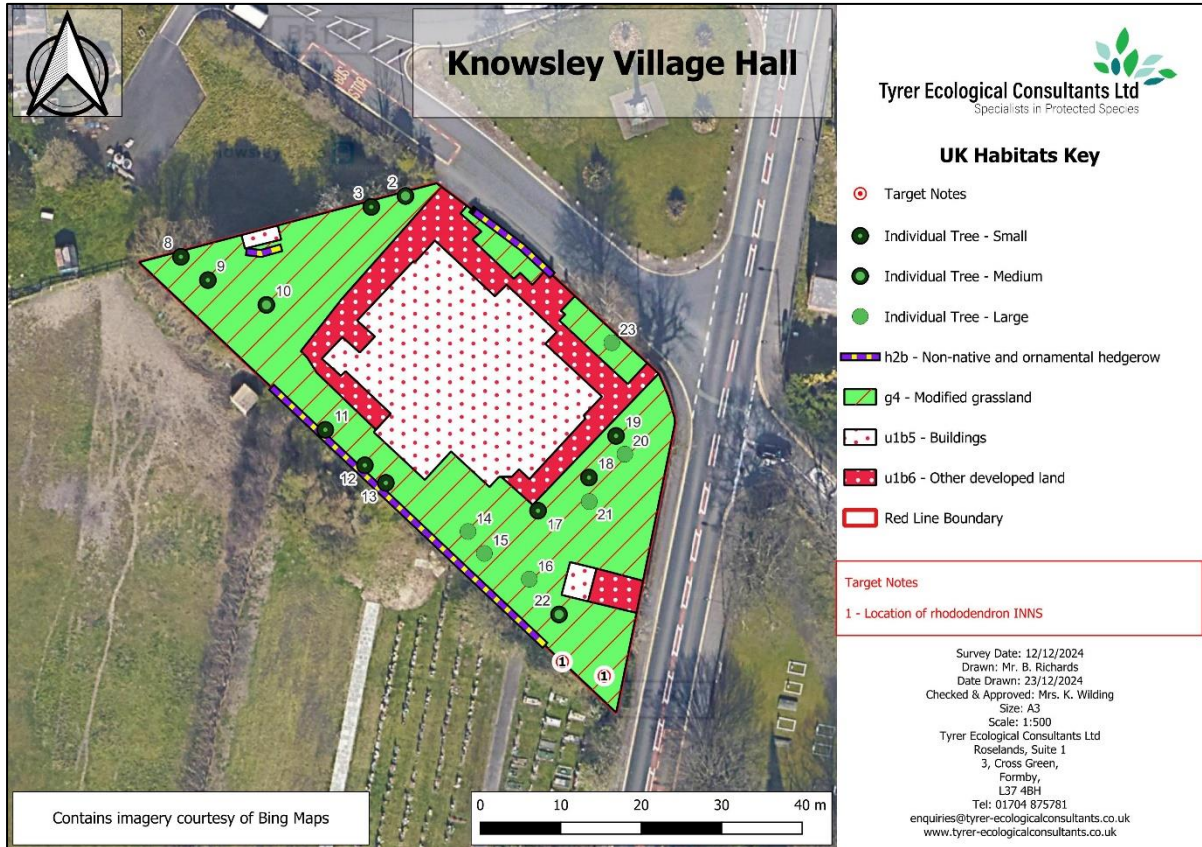
Common Name	Scientific Name	Preferred Habitats
Alder	<i>Alnus glutinosa</i>	Damp soils, wetlands, spoil/landfill
Alder Buckthorn	<i>Frangula alnus</i>	Wet heathland, swamps, acidic/neutral woodlands
Aspen	<i>Populus tremula</i>	Scrub/coppices edges, moist soil. Shade intolerant

**Knowsley Village Hall, School Lane, Knowsley, L34 9EN**  
**Biodiversity Net Gain Assessment**

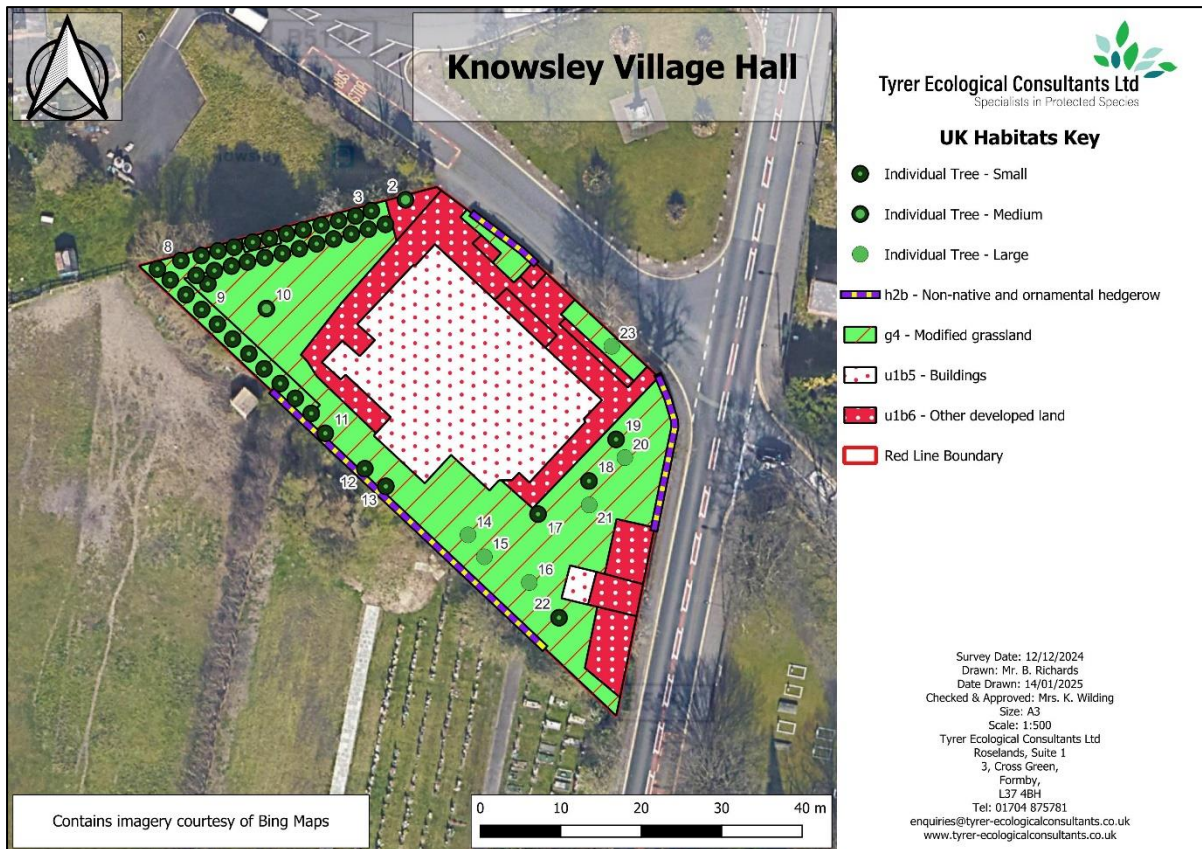
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<b>Common Name</b>	<b>Scientific Name</b>	<b>Preferred Habitats</b>
Downy Birch	<i>Betula pubescens</i>	Poor, damp, non-chalky soils
Elder	<i>Sambucus nigra</i>	Ubiquitous except on sandy soils
Field Maple	<i>Acer campestre</i>	Rich/heavy soils
Hawthorn	<i>Crataegus monogyna</i>	Hedgerows, most soils, full sun
Hazel	<i>Corylus avellana</i>	Woods and hedgerow understories, drier soils
Holly	<i>Ilex aquifolium</i>	Non-chalky, free-draining soils
Pedunculate Oak	<i>Quercus robur</i>	Ubiquitous, avoiding marshy/chalky/light soils
Rowan	<i>Sorbus aucuparia</i>	Upland; light, acid soils
Sessile Oak	<i>Quercus petraea</i>	Upland, avoiding heavy/alkaline soils
Small-leaved Lime	<i>Tilia cordata</i>	Woods and hedgerows, moist, nutrient-rich soils
Wild Cherry	<i>Prunus avium</i>	Rich/heavy soils, woodlands, full sunlight
Wild Crab Apple	<i>Malus sylvestris</i>	Woods and hedgerows, moist heavier soils

**Knowsley Village Hall, School Lane, Knowsley, L34 9EN  
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**Figure 4.1 – Baseline UK Habitats Map**



**Figure 4.2 – Post-development UK Habitats Map**

## 5.0 Conclusions & Recommendations

- 5.1 Based on the current landscaping proposals, the scheme will result in a **10.27% net-gain in Habitat units**, and a **19.85% net-gain in Hedgerow units**.
- 5.2 In terms of specific unit changes, the metric output indicates a gain of **0.45 Habitat units**, and a gain of **0.01 Hedgerow units**.
- 5.3 The **trading rules are satisfied** for the site.
- 5.4 See **Figure 5.1** below for Headline results summary of projections as outputted by the Statutory Biodiversity Metric Calculation Tool.

<b>Total net unit change</b> (Including all on-site & off-site habitat retention, creation & enhancement)	<i>Habitat units</i>	0.45
	<i>Hedgerow units</i>	0.01
	<i>Watercourse units</i>	0.00
<b>Total net % change</b> (Including all on-site & off-site habitat retention, creation & enhancement)	<i>Habitat units</i>	10.27%
	<i>Hedgerow units</i>	19.85%
	<i>Watercourse units</i>	0.00%
<b>Trading rules satisfied?</b>	<b>Yes ✓</b>	

**Figure 5.1** – Headline results summary outputted by the Statutory Biodiversity Metric Tool

- 5.5 The above results are based on extensive cooperation between the Ecologist (Tyrer Ecological Consultants) and the applicant (Mr. B. Maguire), which has resulted in changes to the landscaping scheme, including the planting of a number of individual trees within areas designated as communal space to ensure that continued management can be ensured.
- 5.6 The above indicates that the scheme has been produced in line with the mitigation hierarchy and BNG guidance, inclusive of the Rules & Principles of use.
- 5.7 If proposals are altered, then it may be necessary to re-assess the scheme using the Statutory Biodiversity Metric Tool in order to ascertain whether a gain is still achieved.
- 5.8 The 'Medium' distinctiveness created habitats (i.e. the Individual Trees and the Wildflower Planting) are considered significant, and as such they will require a Habitat Monitoring and Management Plan (HMMP), detailing management prescriptions for the 30-year period.

### Incidental Observations

- 5.9 One invasive non-native species (INNS) was located on site, in the form of several bushes of rhododendron (*Rhododendron ponticum*). This was not identified within the initial PEA, despite

it being locally remarkable given it exists within modified grassland and is clearly visible from street view.

- 5.10 The INNS present appears to be located in close proximity to an area which will be directly impacted by the works, and there is considered to be a high chance of continued spread both within the site as well as off-site.
- 5.11 It is therefore recommended that this INNS is eradicated from the site by a qualified Invasive Species contractor in accordance with a Method Statement. This could be secured by a suitably worded planning condition.

## 6.0 Bibliography

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### Appendix I: Condition Assessment Tables

#### Baseline

#### Condition Assessment Score – Grassland (Low) Habitat Ref.: 1

Condition Assessment Criteria		Ref 1
A	There are 6-8 vascular plant species per m <sup>2</sup> present, including at least 2 forbs (these may include those listed in Footnote 1). <b>Note - this criterion is essential for achieving Moderate or Good condition.</b>	N
	Where the vascular plant species present are characteristic of medium, high or very high distinctiveness grassland, or there are 9 or more of these characteristic species per m <sup>2</sup> (excluding those listed in Footnote 1), please review the full UKHab description to assess whether the grassland should instead be classified as a higher distinctiveness grassland. Where a grassland is classed as medium, high, or very high distinctiveness, please use the relevant condition sheet.	
B	Sward height is varied (at least 20% of the sward is less than 7 cm and at least 20% is more than 7 cm) creating microclimates which provide opportunities for vertebrates and invertebrates to live and breed.	N
C	Any scrub present accounts for less than 20% of the total grassland area. (Some scattered scrub such as bramble <i>Rubus fruticosus</i> agg. may be present).  Note - patches of scrub with continuous (more than 90%) cover should be classified as the relevant scrub habitat type.	Y
D	Physical damage is evident in less than 5% of total grassland area. Examples of physical damage include excessive poaching, damage from machinery use or storage, erosion caused by high levels of access, or any other damaging management activities.	N
E	Cover of bare ground is between 1% and 10%, including localised areas (for example, a concentration of rabbit warrens).	Y
F	Cover of bracken <i>Pteridium aquilinum</i> is less than 20%.	Y
G	There is an absence of invasive non-native plant species (as listed on Schedule 9 of WCA).	N
<b>Total Score</b>		<b>3</b>
Condition Assessment Result		Condition Assessment Score
Passes 6 or 7 criteria including passing essential criterion A		Good
Passes 4 or 5 criteria including passing essential criterion A		Moderate
Passes 3 or fewer criteria; OR Passes 4 - 6 criteria (excluding criterion A)		Poor  Y

*Condition Assessment Score – Individual Trees (Habitat Ref.: 4)*

Condition Assessment Criteria		T2	T8	T10	T11	T14	T15	T16	T20	T21	G22	T23
<b>A</b>	The tree is a native species (or at least 70% within the block are native species).	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
<b>B</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).	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
<b>C</b>	The tree is mature (or more than 50% within the block are mature).	Y	N	Y	N	Y	Y	Y	Y	Y	Y	Y
<b>D</b>	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.	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
<b>E</b>	Natural ecological niches for vertebrates and invertebrates are present, such as presence of deadwood, cavities, ivy or loose bark.	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	Y
<b>F</b>	More than 20% of the tree canopy area is oversailing vegetation beneath.	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
<b>Total Score</b>		<b>6</b>	<b>5</b>	<b>6</b>	<b>5</b>	<b>6</b>	<b>6</b>	<b>6</b>	<b>6</b>	<b>6</b>	<b>5</b>	<b>6</b>
Condition Assessment Result		Condition Assessment Score										
Passes 5 or 6 criteria	Good	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Passes 3 or 4 criteria	Moderate											
Passes 2 or fewer criteria	Poor											

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*Condition Assessment Score – Individual Trees (Habitat Ref.: 5)*

Condition Assessment Criteria		T3	G9	T12	T13	T17	T18	T19
<b>A</b>	The tree is a native species (or at least 70% within the block are native species).	Y	Y	Y	Y	Y	Y	Y
<b>B</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).	Y	Y	Y	Y	Y	Y	Y
<b>C</b>	The tree is mature (or more than 50% within the block are mature).	N	N	N	N	N	N	N
<b>D</b>	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.	Y	Y	Y	Y	Y	Y	Y
<b>E</b>	Natural ecological niches for vertebrates and invertebrates are present, such as presence of deadwood, cavities, ivy or loose bark.	N	N	N	N	N	N	N
<b>F</b>	More than 20% of the tree canopy area is oversailing vegetation beneath.	Y	Y	Y	Y	Y	Y	Y
<b>Total Score</b>		<b>4</b>	<b>4</b>	<b>4</b>	<b>4</b>	<b>4</b>	<b>4</b>	<b>4</b>
Condition Assessment Result	Condition Assessment Score							
Passes 5 or 6 criteria	Good							
Passes 3 or 4 criteria	Moderate	Y	Y	Y	Y	Y	Y	Y
Passes 2 or fewer criteria	Poor							

Post-development

Condition Assessment Score – Grassland (Low) Habitat Ref.: 1

Condition Assessment Criteria		Ref 1
<b>A</b>	There are 6-8 vascular plant species per m <sup>2</sup> present, including at least 2 forbs (these may include those listed in Footnote 1). <b>Note - this criterion is essential for achieving Moderate or Good condition.</b>  Where the vascular plant species present are characteristic of medium, high or very high distinctiveness grassland, or there are 9 or more of these characteristic species per m <sup>2</sup> (excluding those listed in Footnote 1), please review the full UKHab description to assess whether the grassland should instead be classified as a higher distinctiveness grassland. Where a grassland is classed as medium, high, or very high distinctiveness, please use the relevant condition sheet.	<b>N</b>
<b>B</b>	Sward height is varied (at least 20% of the sward is less than 7 cm and at least 20% is more than 7 cm) creating microclimates which provide opportunities for vertebrates and invertebrates to live and breed.	<b>N</b>
<b>C</b>	Any scrub present accounts for less than 20% of the total grassland area. (Some scattered scrub such as bramble <i>Rubus fruticosus</i> agg. may be present).  Note - patches of scrub with continuous (more than 90%) cover should be classified as the relevant scrub habitat type.	<b>Y</b>
<b>D</b>	Physical damage is evident in less than 5% of total grassland area. Examples of physical damage include excessive poaching, damage from machinery use or storage, erosion caused by high levels of access, or any other damaging management activities.	<b>N</b>
<b>E</b>	Cover of bare ground is between 1% and 10%, including localised areas (for example, a concentration of rabbit warrens).	<b>Y</b>
<b>F</b>	Cover of bracken <i>Pteridium aquilinum</i> is less than 20%.	<b>Y</b>
<b>G</b>	There is an absence of invasive non-native plant species (as listed on Schedule 9 of WCA).	<b>N</b>
<b>Total Score</b>		<b>3</b>
Condition Assessment Result		Condition Assessment Score
Passes 6 or 7 criteria including passing essential criterion A		Good
Passes 4 or 5 criteria including passing essential criterion A		Moderate
Passes 3 or fewer criteria; OR Passes 4 - 6 criteria (excluding criterion A)		Poor  <b>Y</b>

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*Condition Assessment Score – Individual Trees (Habitat Ref.: 4)*

Condition Assessment Criteria		T2	T8	T10	T11	T14	T15	T16	T20	T21	G22	T23
<b>A</b>	The tree is a native species (or at least 70% within the block are native species).	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
<b>B</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).	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
<b>C</b>	The tree is mature (or more than 50% within the block are mature).	Y	N	Y	N	Y	Y	Y	Y	Y	Y	Y
<b>D</b>	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.	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
<b>E</b>	Natural ecological niches for vertebrates and invertebrates are present, such as presence of deadwood, cavities, ivy or loose bark.	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	Y
<b>F</b>	More than 20% of the tree canopy area is oversailing vegetation beneath.	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
<b>Total Score</b>		<b>6</b>	<b>5</b>	<b>6</b>	<b>5</b>	<b>6</b>	<b>6</b>	<b>6</b>	<b>6</b>	<b>6</b>	<b>5</b>	<b>6</b>
Condition Assessment Result		Condition Assessment Score										
Passes 5 or 6 criteria	Good	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Passes 3 or 4 criteria	Moderate											
Passes 2 or fewer criteria	Poor											

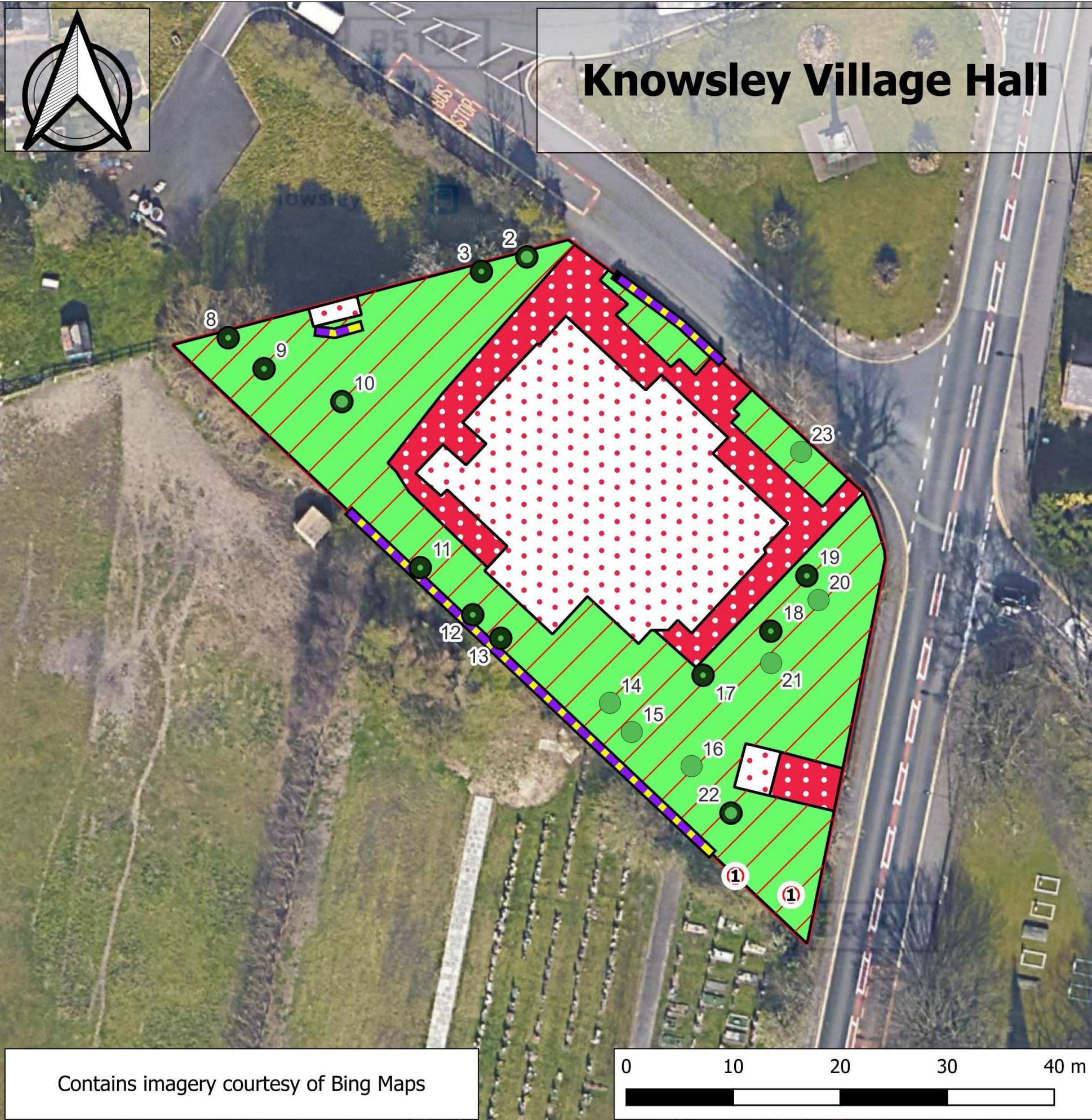
**Knowsley Village Hall, School Lane, Knowsley, L34 9EN**  
**Biodiversity Net Gain Assessment**

*Condition Assessment Score – Individual Trees (Habitat Ref.: 5)*

Condition Assessment Criteria		T3	G9	T12	T13	T17	T18	T19
<b>A</b>	The tree is a native species (or at least 70% within the block are native species).	Y	Y	Y	Y	Y	Y	Y
<b>B</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).	Y	Y	Y	Y	Y	Y	Y
<b>C</b>	The tree is mature (or more than 50% within the block are mature).	N	N	N	N	N	N	N
<b>D</b>	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.	Y	Y	Y	Y	Y	Y	Y
<b>E</b>	Natural ecological niches for vertebrates and invertebrates are present, such as presence of deadwood, cavities, ivy or loose bark.	N	N	N	N	N	N	N
<b>F</b>	More than 20% of the tree canopy area is oversailing vegetation beneath.	Y	Y	Y	Y	Y	Y	Y
<b>Total Score</b>		<b>4</b>	<b>4</b>	<b>4</b>	<b>4</b>	<b>4</b>	<b>4</b>	<b>4</b>
Condition Assessment Result	Condition Assessment Score							
Passes 5 or 6 criteria	Good							
Passes 3 or 4 criteria	Moderate							
Passes 2 or fewer criteria	Poor							

*Condition Assessment Score – Individual Trees (Habitat Ref.: 8)*

Condition Assessment Criteria		Ref. 8
<b>A</b>	The tree is a native species (or at least 70% within the block are native species).	<b>Y</b>
<b>B</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).	<b>Y</b>
<b>C</b>	The tree is mature (or more than 50% within the block are mature).	<b>N</b>
<b>D</b>	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.	<b>Y</b>
<b>E</b>	Natural ecological niches for vertebrates and invertebrates are present, such as presence of deadwood, cavities, ivy or loose bark.	<b>N</b>
<b>F</b>	More than 20% of the tree canopy area is oversailing vegetation beneath.	<b>Y</b>
<b>Total Score</b>		<b>4</b>
Condition Assessment Result		Condition Assessment Score
Passes 5 or 6 criteria		Good
Passes 3 or 4 criteria		Moderate <b>Y</b>
Passes 2 or fewer criteria		Poor



Contains imagery courtesy of Bing Maps

# Knowsley Village Hall



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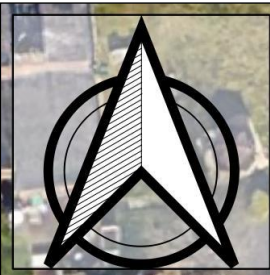
## UK Habitats Key

- Target Notes
- Individual Tree - Small
- Individual Tree - Medium
- Individual Tree - Large
- h2b - Non-native and ornamental hedgerow
- g4 - Modified grassland
- u1b5 - Buildings
- u1b6 - Other developed land
- Red Line Boundary

### Target Notes

1 - Location of rhododendron INNS

Survey Date: 12/12/2024  
 Drawn: Mr. B. Richards  
 Date Drawn: 23/12/2024  
 Checked & Approved: Mrs. K. Wilding  
 Size: A3  
 Scale: 1:500  
 Tyrer Ecological Consultants Ltd  
 Roselands, Suite 1  
 3, Cross Green,  
 Formby,  
 L37 4BH  
 Tel: 01704 875781  
[enquiries@tyrer-ecologicalconsultants.co.uk](mailto:enquiries@tyrer-ecologicalconsultants.co.uk)  
[www.tyrer-ecologicalconsultants.co.uk](http://www.tyrer-ecologicalconsultants.co.uk)



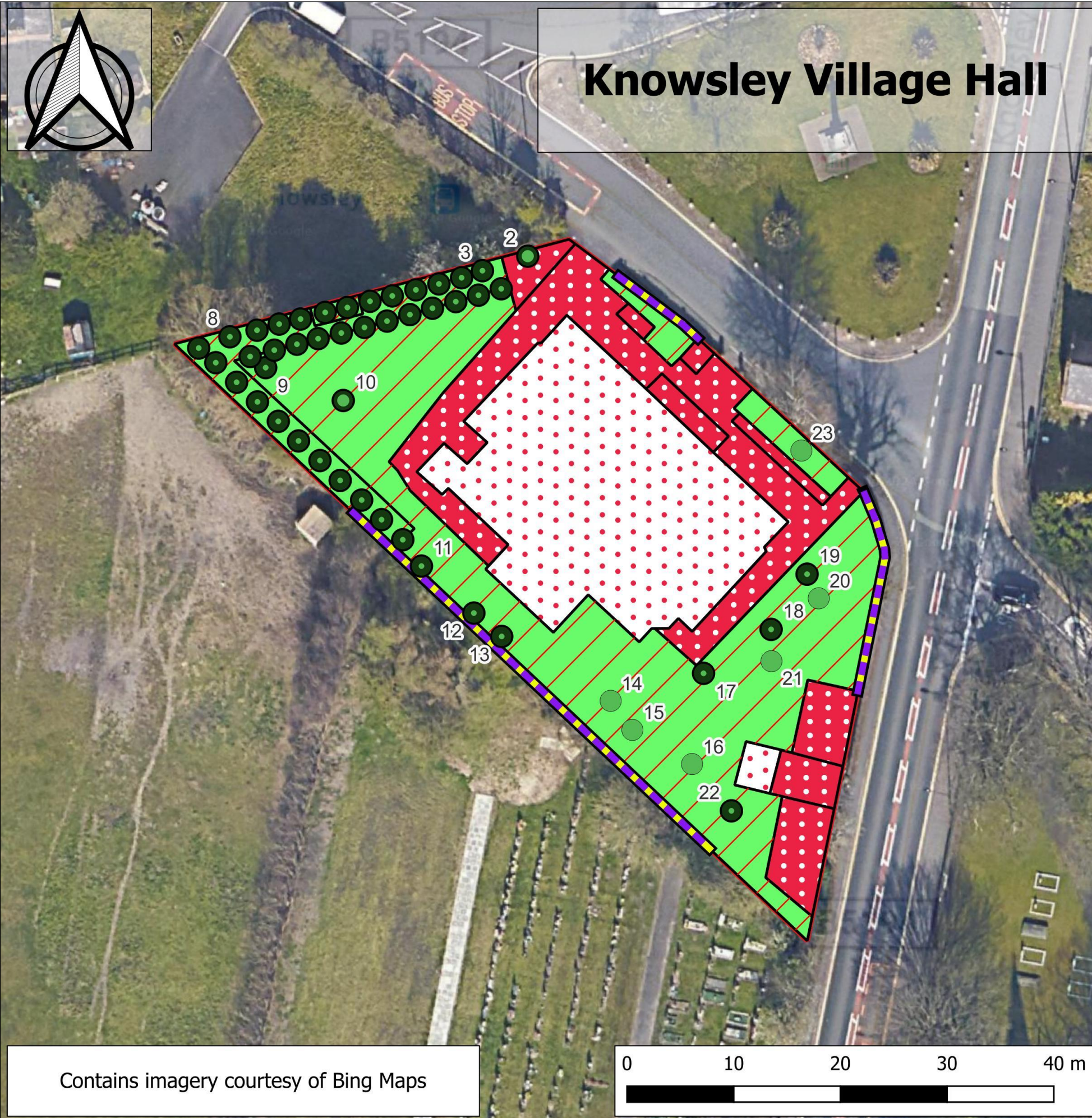
# Knowsley Village Hall



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## UK Habitats Key

- Individual Tree - Small
- Individual Tree - Medium
- Individual Tree - Large
- h2b - Non-native and ornamental hedgerow
- g4 - Modified grassland
- u1b5 - Buildings
- u1b6 - Other developed land
- Red Line Boundary



Contains imagery courtesy of Bing Maps

Survey Date: 12/12/2024  
 Drawn: Mr. B. Richards  
 Date Drawn: 14/01/2025  
 Checked & Approved: Mrs. K. Wilding  
 Size: A3  
 Scale: 1:500  
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