BIODIVERSITY NET GAIN ASSESSMENT

St Peter's VA CoE Primary School, Batley

March 2023

MAB Environment & Ecology Ltd
11a Kirkgate, Thirsk YO7 1PQ
Tel. 01845 574125

Email: ione@mab-ecology.co.uk

www.mab-ecology.co.uk

Registered in the U.K. no.6504129

Registered office: 11a Kirkgate, Thirsk, YO7 1PQ

Author	Alice Brown BSc (Hons)	
Status	**Date**	**Approved by:**
First draft	10-03-2023	Giles Manners CEnv MCIEEM
Second	30-03-2023	Giles Manners CEnv MCIEEM
Update	15/06/2023	Jake Walker BSc (Hons)

Site:

St. Peter's VA C of E Primary School
Fieldhead Lane
Birstall,
Batley, West Yorkshire
United Kingdom
WF17 9HN

Dates:

Surveyed: 15th February

Client:

St. Peter's VA C of E Primary School
Fieldhead Lane
Birstall,
Batley, West Yorkshire
United Kingdom
WF17 9HN

Client's agent:

Rayner Rowen Construction Limited
New Southworth Hall
Cuerdale Lane
Samlesbury
Preston
PR5 0UY

Local Planning Authority:

Kirklees

MAB ref:

2023-1513

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1 Summary

A Biodiversity Net Gain (BNG) metric has been undertaken of St. Peter's VA C of E Primary School to accompany a planning application for the construction of a new school on-site and demolition of the existing.

The site is a just under 1ha parcel of land containing predominantly modified grassland, urban habitats (sealed surface and buildings), bounded by other woodland; broadleaved.

No irreplaceable habitats will be lost to the development. The majority of the woodland and bramble scrub will be retained post-development, along with some vegetated garden and a bungalow. Some of the grassland around the bungalow will be enhanced to other neutral grassland (0.009ha).

Habitat creation will involve the extending of the existing woodland on-site by 0.0296ha through native planting and natural succession overtime. A 0.033km line of trees will be planted in the centre of the site, and 0.0056ha of mixed scrub will be planted adjacent to the new playgrounds to provide food sources for animals such as birds. Introduced shrub (0.0477ha) will be included across the site and in the understorey of scattered trees within the playground; 13 individual trees will be planted in total – native species preferred. These will be planted as extra heavy standard specimen trees; thus, is it is reasonable to assume that at least 3 will achieve the DBH required to achieve 'medium tree' classification after 30 years. 0.0328ha of other neutral grassland will be created, along with 0.0162ha of modified grassland; this will be poor condition due to low species diversity/disturbance.

This will ensure that the development has a **10.39%** net gain in habitat units, and a **100%** net gain in hedgerow units.

2 Introduction

MAB Environment and Ecology Ltd was commissioned by Rayner Rowen Construction Limited to undertake a Biodiversity Net Gain Assessment to accompany a planning application for the construction of a new school on-site and demolition of the existing at St. Peter's VA C of E Primary School.

The site is comprised of a school with a large grass playing field, bounded by mixed broadleaved woodland. The site is located at OS Grid Ref SE22202658. The site location is shown on Figure 1.

The objectives of this report are to:

- Establish baseline conditions on-site.
- Provide habitat baseline plan, and proposed design plans.
- Determine feasibility of the development achieving Biodiversity Net Gain (BNG)
- Provide a BNG Monitoring and Management Plan (MMP)

Ecologists from MAB Environment and Ecology Ltd are members of the Chartered Institute of Ecology and Environmental Management (CIEEM) and follow the Institute's Code of Professional Conduct when carrying out ecological work.

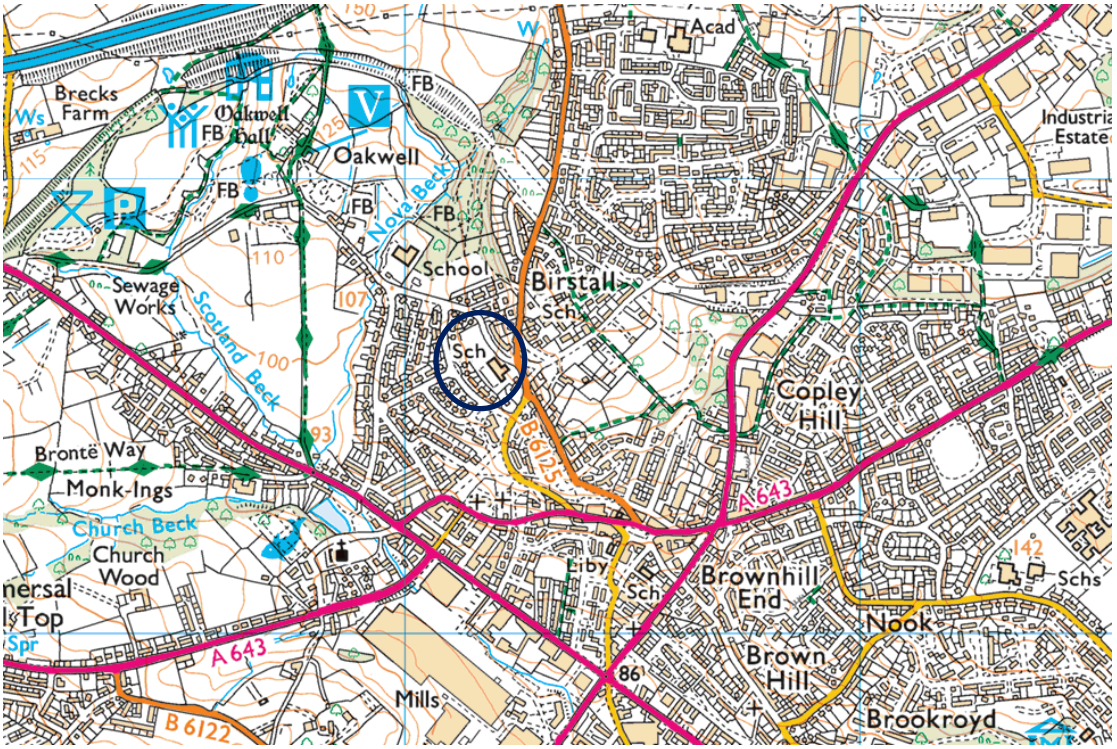

Figure 1. Site location, 1:25,000

3 Methodology

3.1 Desktop study

3.1.1 DEFRA's interactive MAGIC map was used for a baseline assessment of available environmental information of over 300 datasets including Priority Habitats & Species inventories, Designations, Environmental & Historic Landscape Agreements, SSSI impact zones, and Wildlife Licenses.

3.2 Field survey, Mapping, and Metric Calculations

3.2.1 Baseline site surveys were undertaken in February 2023 by Jake Walker and Alice Brown.

3.2.2 Jake Walker is a senior ecologist and a qualifying member of CIEEM. He has worked for MAB since 2020 and holds a Class Survey Licence WLM-A34 (Bat Survey Level 1) registration number 2021-51430-CLS-CLS; and a Level 1 Class Survey Great Crested Newt Licence 2022-10177-CL08-GCN.

3.2.3 Alice Brown is an Ecologist for MAB. She is a qualifying member of CIEEM and has a BSc (Hons) in Ecology and Conservation. She has worked for MAB since the beginning of 2022 and holds a Class Survey Licence CL17 (Bat Survey Level 1) registration number 2023-11025-CL17-BAT.

3.2.4 UK HABS habitat survey of the site was conducted following standard published guidelines (Butcher et al, 2020). This involved a walkover of the site, mapping all habitats present which fell into the appropriate Minimum Mapping Units (MMU). MMU's were decided upon pre survey. Small scale MMU's = Area 25m^2, linear feature 5m. The survey was extended to include records of protected or notable fauna and the habitats were evaluated for their potential to support such fauna. Any invasive plant species listed on Schedule 9 of the Wildlife and Countryside Act were also recorded.

3.2.5 Qfield was used in the field data collection. This enables accurate area and linear measurements and in field data collection.

3.2.6 Biodiversity Metric 3.1 was used to determine baseline metric calculations and biodiversity scores post-development.

4 Limitations

4.1.1 Habitats were surveyed in the winter, as such many herbaceous species may not have been evident and therefore not recorded.

5 Baseline ecological conditions

5.1 Current Site conditions

5.1.1 The site is a just under 1ha parcel of land containing predominantly modified grassland, urban habitats (sealed surface and buildings), bounded by other woodland; broadleaved. The grassland is generally species-poor with forb species limited to widespread species of low conservation value. Species predominantly in the woodland canopy are field maple (*Acer campestre*), ash (Fraxinus excelsior), sycamore (*Acer pseudoplatanus*), cherry (*Prunus sp*.), hazel (*Corylus avellana*), birch (*Betula sp*.).

5.1.2 See Figure 2 for baseline habitats, including areas, and conditions; see Figure 3 for the baseline habitats mapped to UK HAB.

5.2 Baseline metric calculations

	Habitats and areas			Distinctiveness	Condition	Strategic significance	Suggested action to address habitat losses	Ecological baseline		Retention category biodiversity value					
Ref	Broad Habitat	Habitat Type	Area (hectares)	Distinctiveness	Condition	Strategic significance		Total habitat units		Area retained	Area enhanced	Baseline units retained	Baseline units enhanced	Area habitat lost	Units lost
1	Grassland	Modified grassland	0.258	Low	Poor	Area/compensation not in local strategy/ no local strategy	Same distinctiveness or better habitat required ≥	0.52				0.00	0.00	0.26	0.52
2	Grassland	Modified grassland	0.0088	Low	Poor	Area/compensation not in local strategy/ no local strategy	Same distinctiveness or better habitat required ≥	0.02				0.00	0.00	0.01	0.02
3	Heathland and shrub	Bramble scrub	0.0126	Medium	Condition Assessment N/A	Area/compensation not in local strategy/ no local strategy	Same broad habitat or a higher distinctiveness habitat required (≥)	0.05		0.0111		0.04	0.00	0.00	0.01
4	Woodland and forest	Other woodland; broadleaved	0.3307	Medium	Moderate	Area/compensation not in local strategy/ no local strategy	Same broad habitat or a higher distinctiveness habitat required (≥)	2.65		0.3189		2.55	0.00	0.01	0.09
5	Urban	Developed land; sealed surface	0.2069	V.Low	N/A - Other	Area/compensation not in local strategy/ no local strategy	Compensation Not Required	0.00				0.00	0.00	0.21	0.00
6	Urban	Developed land; sealed surface	0.0926	V.Low	N/A - Other	Area/compensation not in local strategy/ no local strategy	Compensation Not Required	0.00				0.00	0.00	0.09	0.00
7	Urban	Developed land; sealed surface	0.0077	V.Low	N/A - Other	Area/compensation not in local strategy/ no local strategy	Compensation Not Required	0.00		0.0077		0.00	0.00	0.00	0.00
8	Grassland	Modified grassland	0.0192	Low	Poor	Area/compensation not in local strategy/ no local strategy	Same distinctiveness or better habitat required ≥	0.04		0.0102	0.009	0.02	0.02	0.00	0.00
9	Urban	Developed land; sealed surface	0.005	V.Low	N/A - Other	Area/compensation not in local strategy/ no local strategy	Compensation Not Required	0.00		0.005		0.00	0.00	0.00	0.00
10	Urban	Vegetated garden	0.018	Low	Condition Assessment N/A	Area/compensation not in local strategy/ no local strategy	Same distinctiveness or better habitat required ≥	0.04		0.018		0.04	0.00	0.00	0.00
11	Urban	Vegetated garden	0.0096	Low	Condition Assessment N/A	Area/compensation not in local strategy/ no local strategy	Same distinctiveness or better habitat required ≥	0.02				0.00	0.00	0.01	0.02
12	Urban	Vegetated garden	0.0146	Low	Condition Assessment N/A	Area/compensation not in local strategy/ no local strategy	Same distinctiveness or better habitat required ≥	0.03		0.0146		0.03	0.00	0.00	0.00
13															
14															
15															
16															
17															
		Total habitat area	0.98					3.35		0.39	0.01	2.68	0.02	0.59	0.65

Figure 2. Baseline biodiversity metric

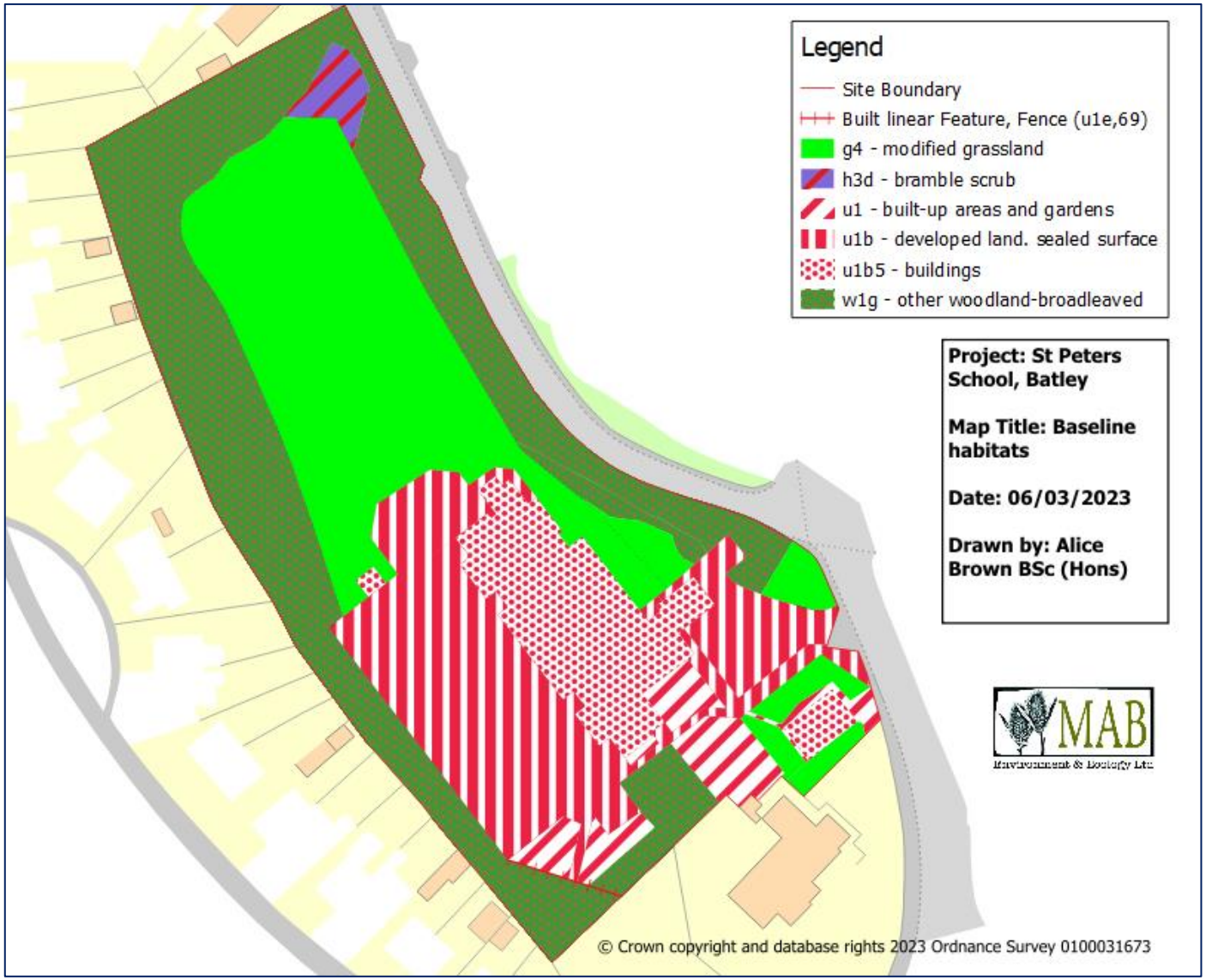

Figure 3. UKHAB map of baseline habitats.

6 Proposed design

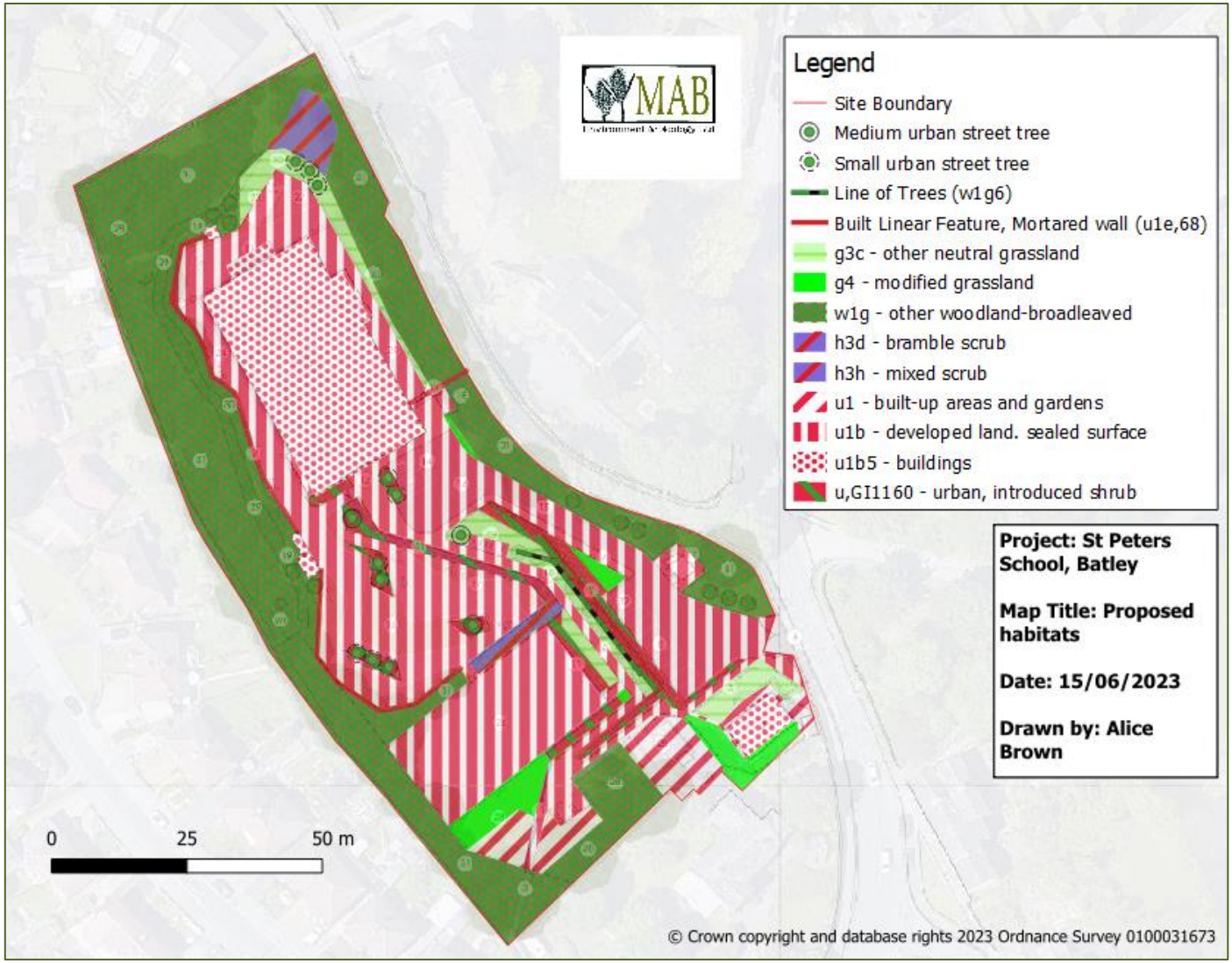

Figure 4. UKHAB map of proposed habitats overlaid on the landscape plan.

6.1.1 The majority of the woodland will be retained post-development bar a small area to facilitate the new access track to the northeast and the larger substation; this will include mostly pruning, but also the removal of some trees in this area. Some individual trees may be removed within the wider woodland due to poor life expectancy/condition, however this will not impact the woodland as an area due to succession overtime and planting (see 6.1.4). The majority of the bramble scrub to the northeast will also be retained (0.0015ha loss).

6.1.2 The areas of vegetated garden (built-up areas and gardens on Figures 3 and 4) to the southwest and to the southeast will be retained. The bungalow and surroundings will also be retained (see 6.1.6 for notes on enhancement).

6.1.3 The proposed development will see a loss of the modified grassland playing field to accommodate the proposed school building.

6.1.4 The woodland around the site will be extended (by 0.0296ha), both by planting of whips (including the area to the east of the entrance, previously modified grassland) and by succession over time. This will be facilitated in the main woodland by a boundary wall being constructed around the playground, which over time will allow the woodland and understorey to extend into the undisturbed buffer. This will be considered moderate condition (existing woodland is moderate) as it will be adding to the existing woodland (not a separate area), thus will contribute also to age mix, canopy height mix etc, increasing scores in indicators 7 and 10. This extension also includes where the existing scattered trees are within the playground, which over time in the new development will connect with the woodland where retained.

6.1.5 A line of trees will be planted in the centre of the site. This will be 0.033km long and will be poor condition as will be unlikely to pass criteria 3, 4, or 5 due to its location within a school premises. Native species are preferred in order to pass criteria 1.

6.1.6 Other neutral grassland will be created on-site: this will be untaken via creation (0.0328ha) and enhancement (0.009ha around the retained bungalow, see Table 1) through sowing of seed mixes. These will be species-rich grassland areas (≥9 species per m^2), providing resources for pollinators.

6.1.7 Areas of modified grassland will also be created across the site (0.0162ha in total). This will be poor condition as it is unlikely the species present will have high diversity due to the levels of disturbance (located near playgrounds, mown).

6.1.8 A total of 0.0056ha of mixed scrub will be planted adjacent to the playgrounds. This will be provided by native species planting, providing a range of species for food sources and nesting opportunities for species like birds. This will be poor condition as it is unlikely to achieve clearings or have a good age range.

6.1.9 13 individual trees will also be planted on-site. These will be scattered within the playground with understoreys of introduced shrub planting (0.0477ha across the site), and also to the northeast near the existing scrub (the two trees located west of the disabled parking spaces on Figure 4 will likely move to another location but will remain as individual trees, i.e., not planted within the woodland). These will be planted as extra heavy standard specimen trees; as a result, it is reasonable to suggest that at least 3 should achieve a >30cm diameter at breast height after 30 years growth to achieve 'medium tree' classification. It is recommended these are native species.

6.1.10 See Figure 4 for a map of the proposed habitats and Figure 5 and 6 for the metric.

Table 1. Enhanced habitats.

Enhanced Habitat			
Area Habitats			
Habitat	**Condition**	**Area (ha)**	**BNG Units**
Modified grassland → other neutral grassland (north of bungalow)	Moderate	0.009	0.06

7 Proposed metric calculations

Post development/ post intervention habitats									
Broad Habitat	Proposed habitat	Area (hectares)	Distinctiveness	Condition	Strategic significance	Temporal multiplier		Difficulty	Habitat units delivered
			Distinctiveness	Condition	Strategic significance	Standard or adjusted time to target condition	Final time to target condition/year	Final difficulty of creation	
Woodland and forest	Other woodland; broadleaved	0.0296	Medium	Moderate	Area/compensation not in local strategy/ no local strategy	Standard time to target condition applied	15	Low	0.14
Urban	Developed land; sealed surface	0.3533	V.Low	N/A - Other	Area/compensation not in local strategy/ no local strategy	Standard time to target condition applied	0	Medium	0.00
Urban	Developed land; sealed surface	0.1049	V.Low	N/A - Other	Area/compensation not in local strategy/ no local strategy	Standard time to target condition applied	0	Medium	0.00
Grassland	Other neutral grassland	0.0328	Medium	Moderate	Area/compensation not in local strategy/ no local strategy	Standard time to target condition applied	5	Low	0.22
Grassland	Modified grassland	0.0162	Low	Poor	Area/compensation not in local strategy/ no local strategy	Standard time to target condition applied	1	Low	0.03
Urban	Urban Tree	0.0407	Medium	Moderate	Area/compensation not in local strategy/ no local strategy	Standard time to target condition applied	27	Low	0.12
Heathland and shrub	Mixed scrub	0.0056	Medium	Poor	Area/compensation not in local strategy/ no local strategy	Standard time to target condition applied	1	Low	0.02
Urban	Introduced shrub	0.0477	Low	Condition Assessment N/A	Area/compensation not in local strategy/ no local strategy	Standard time to target condition applied	1	Low	0.09
Urban	Urban Tree	0.1099	Medium	Moderate	Area/compensation not in local strategy/ no local strategy	Standard time to target condition applied	27	Low	0.34
	Total habitat area	0.74							0.96
	Site Area (Excluding area of Urban trees and Green walls)	0.59							

Figure 5. Proposed habitat metric calculations.

		Proposed habitats		Habitat distinctiveness	Habitat condition	Strategic significance	Temporal multiplier		Difficulty risk multipliers	Hedge units delivered
Baseline ref	New hedge number	Habitat type	Length (km)	Distinctiveness	Condition	Strategic significance	Standard or adjusted time to target condition	Final time to target condition/years	Final difficulty of creation	
1	T1	Line of Trees	0.033	Low	Poor	Area/compensation not in local strategy/ no local strategy	Standard time to target condition applied	5	Low	0.06
2										
3										
4										
5										
6										
			0.03							0.06

Figure 6. Proposed hedge metric calculations.

8 Biodiversity Net Gain Metric

8.1.1 The proposed development will result in a 10.39% net gain in habitat units, and a 100% net gain in hedgerow units. This satisfies local policy and the trading rules of the metric.

On-site baseline	*Habitat units*	3.35
	Hedgerow units	0.00
	River units	0.00
On-site post-intervention (Including habitat retention, creation & enhancement)	*Habitat units*	3.70
	Hedgerow units	0.06
	River units	0.00
On-site net % change (Including habitat retention, creation & enhancement)	*Habitat units*	10.39%
	Hedgerow units	0.00%
	River units	0.00%
Off-site baseline	*Habitat units*	0.00
	Hedgerow units	0.00
	River units	0.00
Off-site post-intervention (Including habitat retention, creation & enhancement)	*Habitat units*	0.00
	Hedgerow units	0.00
	River units	0.00
Total net unit change (including all on-site & off-site habitat retention, creation & enhancement)	*Habitat units*	0.35
	Hedgerow units	0.06
	River units	0.00
Total on-site net % change plus off-site surplus	*Habitat units*	10.39%
	Hedgerow units	100.00%
	River units	0.00%
Trading rules Satisfied?	Yes ✓	

Figure 7. Headline results.

9 Habitat creation

9.1 Native scrub planting

- Plant between November-March
- Leave unplanted gaps to create open ground as part of the mosaic
- Mix species randomly. Scrub species should be native; examples of suitable species include *Cornus sanguinea* (Dogwood), *Corylus avellana* (Hazel), *Euonymus europaeus* (Spindle).
- Scallop the edges of the scrub or scrub mosaic. To achieve this, plant patches of shrub in semi-circles and create areas of open ground in between.

9.2 Tree planting

- Planting of new trees should be undertaken between November-March. Planting should be avoided during very cold or windy weather – not in frozen or waterlogged soils.
- Tree species should be native. Suitable trees species include, but are not limited to, *Acer campestre* (Field Maple), *Acer pseudoplatanus* (Sycamore), *Betula sp.* (Birch), *Quercus robur* (Oak).
- Bare-root and rootballed trees and shrubs should be planted immediately, but if this is not possible then they can be heeled in (temporary planting in the soil to prevent the roots drying out) until planting is possible.
- To ensure that the trees are protected from damage, tree guards should be installed around the newly planted trees. Constructed timber basket guards will provide long-term protection until the tree reaches maturity.

10 Habitat creation/enhancement

10.1 Other neutral grassland

10.1.1 Creation/enhancement of the grassland should follow practiced guidelines in meadow creation/restoration. Enhancement will likely involve the following methods:

Preparation

- Current sward should be kept short during autumn and spring

- Create at least 50% bare ground in June-mid-July by mechanical management (scarify ground)

Sowing

- Seed mixtures spread between August- late September OR in March – April
- Seeds should be spread using the recommended rate (i.e., 4g/m^2)
- Seed should be scattered on surface - replicating natural processes.
- Scattered seeds will need to be in contact with bare soil – rolling of recipient field straight after seed has been spread will achieve this.
- Vegetation growth should be restricted in the autumn of first year to reduce competition – this can be managed by an additional cut in the late autumn.

10.1.2 Recommended species can be found in Appendix 1.

11 Habitat management

11.1 Mixed scrub

Establishment

- The whips/scrub should be allowed to establish and mature for a period of 6-8 years. No management should be undertaken during this time.

Management

- Once established the scrub should endure an annual cut back. 10% of the scrub should be cut each year.
- Areas of scrub should be cut in rotation – this will allow an age range of species to form alongside rides and glades within the scrub.
- Cuttings should be stacked on-site as habitat piles.
- Two years post-planting newly planted whips should be assessed to determine if they have established successfully. If any have failed then they should be replaced, a further check on any re-planted whips should be undertaken two years post planting.

11.2 Trees

- Two years post-planting newly planted trees should be assessed to determine if they have established successfully. If any trees have failed then they should be replaced, a further check on any re-planted trees should be undertaken two years post planting.

11.3 Other neutral grassland

- Management should be undertaken using a heavy-duty mower (e.g., sickle-bar mowers and motor scythes or a two-wheel strimmer) – these will create a sward of differing heights, creating microclimates for invertebrates.
- Spring cut undertaken no later than end of April.
- 'Shut up' grass (no management) between April-July, allowing wildflowers to bloom.
- From mid-July/August take a hay cut. Leaving wide margins around edge: cut should be across the area or from the centre, allowing insects and animals to escape.
- Cuttings should be left in-situ for a few days (2-3) to allow seeds to drop. Cuttings should be later removed to reduce excess soil nutrients. Cuttings can be piled on-site, creating additional habitat for a range of faunal species.
- If needed (heavy grass growth after initial hay cut) then an additional cut can be undertaken in late autumn.

12 References

BS42020. Biodiversity - Code of Practice for planning and development. British Standards Institution 2013.

Circular 06/05: Biodiversity and Geological Conservation - Statutory Obligations and Their Impact Within the Planning System.
http://www.communities.gov.uk/publications/planningandbuilding/circularbiodiversity

The Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019

National Planning Policy Framework 2018:
https://www.gov.uk/government/collections/revised-national-planning-policy-framework#revised-national-planning-policy-framework

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STEPHEN PANKS [A], NICK WHITE [A], AMANDA NEWSOME [A], MUNGO NASH [A], JACK POTTER [A], MATT HEYDON [A], EDWARD MAYHEW [A], MARIA ALVAREZ [A], TRUDY RUSSELL [A], CLARE CASHON [A], FINN GODDARD [A], SARAH J. SCOTT [B], MAX HEAVER [C], SARAH H. SCOTT [C], JO TREWEEK [D], BILL BUTCHER [E] AND DAVE STONE [A] 2022. *Biodiversity metric 3.1: Auditing and accounting for biodiversity – User Guide*. Natural England.

Appendix 1: Recommended species

Wildflowers (20%):

Centaurea nigra - Common Knapweed
Cerastium fontanum - Common Mouse ear
Conopodium majus - Pignut
Geranium sylvaticum - Wood Cranesbill
Hypochaeris radicata - Cat's ear
Lathyrus pratensis - Meadow Vetchling
Lotus corniculatus - Bird's foot Trefoil
Plantago lanceolata - Ribwort Plantain
Primula veris - Cowslip
Prunella vulgaris - Selfheal
Ranunculus acris - Meadow Buttercup
Rhinanthus minor - Yellow Rattle
Rumex acetosa - Common Sorrel
Sanguisorba officinalis - Great Burnet
Succisa pratensis - Devil's bit scabious
Trifolium repens - White Clover
Viola riviniana - Common Dog Violet

Grasses (80%):

Agrostis capillaris - Common Bent
Anthoxanthum odoratum - Sweet Vernal Grass
Festuca rubra - Red Fescue
Dactylis glomerata - Cocksfoot
Poa trivialis - Rough Meadow

Appendix 2: Local Planning Policy

12.1 Kirklees Local Plan Adopted 27 February 2019

Policy LP30 Biodiversity & Geodiversity The council will seek to protect and enhance the biodiversity and geodiversity of Kirklees, including the range of international, national and locally designated wildlife and geological sites, Habitats and Species of Principal Importance and the Kirklees Wildlife Habitat Network.

Biodiversity and Development:

Development proposals will be required to:-

(i) result in no significant loss or harm to biodiversity in Kirklees through avoidance, adequate mitigation or, as a last resort, compensatory measures secured through the establishment of a legally binding agreement;

(ii) minimise impact on biodiversity and provide net biodiversity gains through good design by incorporating biodiversity enhancements and habitat creation where opportunities exist;

(iii) safeguard and enhance the function and connectivity of the Kirklees Wildlife Habitat Network at a local and wider landscape-scale unless the loss of the site and its functional role within the network can be fully maintained or compensated for in the long term;

(iv) establish additional ecological links to the Kirklees Wildlife Habitat Network where opportunities exist; and

(v) incorporate biodiversity enhancement measures to reflect the priority habitats and species identified for the relevant Kirklees Biodiversity Opportunity Zone.

12.2 Kirklees BAP

Kirklees Council

Kirklees Biodiversity Action Plan

Kirklees Habitats of Principal Importance

UK Habitats of Principal Importance relevant to Kirklees	
UK BAP Habitat	**Key geographical areas in Kirklees (biodiversity opportunity map category)**
Arable Field Margins	Pennine Foothills
Blanket Bog	Uplands
Hedgerows	Pennine Foothills
Inland Rock Outcrop and Scree Habitats	Valley Slopes and quarries in any area.
Lowland Dry Acid Grassland	Valley Slopes
Lowland Heathland	Valley Slopes
*Hay Meadows	Pennine Foothills and Mid-altitudinal Grasslands
Lowland Mixed Deciduous Woodland	Valley Slopes and Pennine Foothills
Open Mosaic Habitats on Previously Developed Land	Urban Areas – included in Scrub Habitat Action Plan
Ponds	Relevant to occurrence of protected species (white-clawed crayfish, great-crested newt, water vole, *L. natans*).
Reedbeds	Floodplain – included in Riverine Corridors Habitat Action Plan
Rivers	Floodplain – included in Riverine Corridors Habitat Action Plan
Traditional Orchards	Pennine Foothills
Upland Flushes, Fens and Swamps	Uplands
Upland Heathland	Uplands
**Upland Mixed Ashwoods	Valley Slopes (upland): component of Upland Oak Woodland
Upland Oakwoodland	Uplands
Wet Woodland	Floodplain: also component of Lowland Mixed Deciduous Woodland and Upland Oak Woodland
Wood-Pasture & Parkland	Pennine Foothills and Valley Slopes

Invertebrates

Preferred Name	Common Name	Grouping	Kirklees Status
Formica lugubris	Northern Wood Ant	ant	Kirklees Species Action Plan. Occurs at one site.
Coenonympha pamphilus	Small Heath	butterfly	Not included in current plan. Found in some acid grasslands across the district.
Lasiommata megera	Wall Brown	butterfly	Not included in current plan. Species of rough grassy habitats - thought to be fairly widespread in district.
Satyrium w-album	White-letter Hairstreak	Butterfly	Associated with woodland edge and hedgerow habitats. Localised and scarce

Reptiles and Amphibians

Preferred Name	Common Name	Grouping	Kirklees Status
Vipera berus	Adder	reptile	Not included in current plan. Not recorded – status uncertain.
Lacerta vivipara	Common Lizard	reptile	Included in Kirklees Habitat Action Plan. Upland distribution.
Bufo bufo	Common Toad	amphibian	Included in Kirklees Habitat Action Plan. Fairly widespread but partial information about distribution.
Natrix natrix	Grass Snake	reptile	Not included in current plan. Unconfirmed record (KWLAF meeting 15/10/2007) – status uncertain.
Triturus cristatus	Great Crested Newt	amphibian	Kirklees Species Action Plan. 9 recorded sites.
Anguis fragilis	Slow-worm	reptile	Not included in current plan. Not recorded – status uncertain but probably not present.

Terrestrial Mammals

Note: The Common Pipistrelle bat has been delisted as a UK priority species

Preferred Name	Common Name	Grouping	Kirklees Status
Lepus europaeus	Brown Hare	terrestrial mammal	Included in Kirklees Habitat Action Plan. Widespread.
Plecotus auritus	Brown long-eared bat	terrestrial mammal	Included in Kirklees Habitat Action Plan. Recorded but status unknown.
Lepus timidus	Mountain Hare	terrestrial mammal	Included in Kirklees Habitat Action Plan. Widespread in uplands.
Nyctalus noctula	Noctule	terrestrial mammal	Included in Kirklees Habitat Action Plan. Recorded but status unknown.
Lutra lutra	Otter	terrestrial mammal	Included in Kirklees Habitat Action Plan. Status uncertain but recorded in district and neighbouring areas.
Mustela putorius	Polecat	terrestrial	Not included in current plan.
		mammal	Appear to spreading across country and may colonise naturally.
Pipistrellus pygmaeus	Soprano Pipistrelle	terrestrial mammal	Included in Kirklees Habitat Action Plan. Recorded but status unknown.
Arvicola terrestris	Water Vole	terrestrial mammal	Kirklees Species Action Plan. 3 recorded populations.
Erinaceus europaeus	West European Hedgehog	terrestrial mammal	Included in Kirklees Habitat Action Plan. Widespread.