

BIODIVERSITY ENHANCEMENT MANAGEMENT PLAN

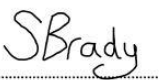
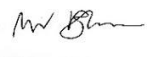
December 2022

**Plant Hill Road,
Blackley,
Manchester,
M9 8LX**

**U R B A N
G R E E N**



QUALITY MANAGEMENT

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APPENDIX 1 – Biodiversity Enhancements Location Plan

1 Introduction

1.1 Background to the Scheme

Irwell Valley Homes are proposing to develop Land on Plant Hill Road (hereafter referred to as 'the site'). The proposals include the demolition of two onsite buildings and the development of 12 residential units with associated hard and soft landscaping.

Urban Green have been appointed to provide a Biodiversity Enhancement Management Plan (BEMP) for the site which has been written to accompany the Biodiversity Net Gain Assessment of this site.

The author of the report is Biodiversity Net Gain Consultant, Sarah Child. Sarah has experience providing consulting services in Biodiversity Net Gain for a range of development schemes, both residential and commercial, across the UK.

1.2 Site Context

The site is located at National Grid Reference SD 85183 03446 and comprises a total area of approximately 0.2ha (see Figure 1).

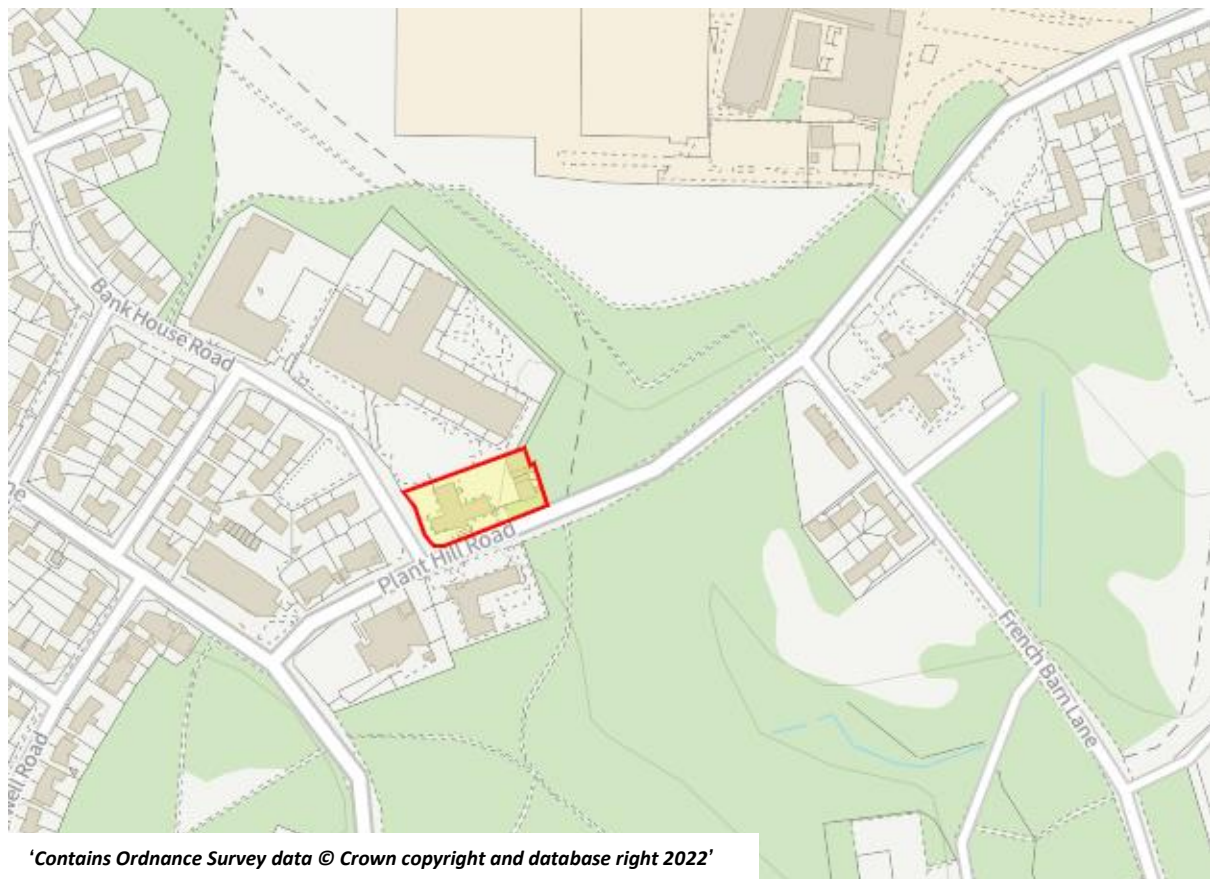


Figure 1 – Site Extent

The site is located in a densely urban area of Salford, approximately 5.5km north of the centre of Manchester. The site is bound by Plant Hill Road to the south and Bank House Road to the west, with residential developments present immediately opposite. Prospect House Specialist Support Primary School is present immediately to the north, with an area of woodland present immediately to the east. Immediately present to the southeast and south is a large expanse of woodland. Within the wider

landscape, managed public open greenspaces are present to the north and east, with a residential estate present to the west.

1.3 Purpose of this Management Plan

The purpose of this management plan is to provide a schedule for the long-term management of habitats on site, ensure that existing and proposed habitats are suitably maintained and ensure good establishment and continued improvement of habitat condition. This allows those responsible for the management and maintenance of the site to understand the existing habitats, the development and ongoing management requirements of the site. Habitats should be maintained under a formal management regime for a minimum of 30 years, with regular assessments during this period to assess the development and condition of habitats.

1.4 Aims of this Management Plan

This management plan covers the habitat creation and enhancement on site, as detailed within the Biodiversity Net Gain (BNG) Assessment (Urban Green, 2022a & 2022b). This report assessed the development as scoring a loss of 93.53% in area habitat units and a gain of 100.00% in linear hedgerow habitat units utilising the Biodiversity Metric 3.1.

Appropriate management practices are essential to ensuring that the proposed habitats reach the condition outlined within the Biodiversity Net Gain assessment and that the development achieves the predicted gain in value to the environment. The aim of this management plan is to provide a habitat management plan that:

- Maintains and enhances site biodiversity, through the sustainable management of on-site habitats;
- Promotes the successful establishment and growth of newly created habitats;
- Ensures the health and safety of all site user's post development is protected;
- Outlines a process for the regular monitoring and review of management practices and site habitats; and
- Provide measurable and achievable targets appropriate to each habitat to ensure condition targets are met as set out in Section 6 in accordance with Biodiversity Metric 3.1 habitat condition sheets.

2 Development Proposals

The site comprises approximately 0.2ha in total. The applicant is seeking approval for the demolition of two of the existing buildings and the development of 12 residential units with associated hard and soft landscaping (Urban Green, 2022c).

The current landscape proposals for the development of the site produce a 93.53% net loss in area habitat units and a 100% net gain in linear hedgerow units. Area and linear habitats are assessed separately within the metric meaning that the large gain in linear hedgerow habitats cannot compensate for the loss of area habitats. Consequently, for this development to conform to the relevant National Planning Policy Framework and Local Planning Policies, offsetting would be required to compensate for the loss of habitat units.

The proposed habitats also fail to satisfy the trading rules laid out by the metric. The urban trees, which must be lost to accommodate for the development, have not been replaced in full by the same broad habitat or a better distinctiveness habitat. Despite five new urban trees being planted, this does not sufficiently compensate for those lost, resulting in a loss of 3.32 units of medium distinctiveness habitat which will need to be compensated for offsite.

3 Management Considerations

3.1 Management Responsibilities

The implementation of this management plan will be the responsibility of the landowner for a minimum of 30 years, based on requirements within the Environment Act (2021). Any transference of responsibility of this plan should be undertaken with the appropriate appointment of a competent organisation capable of delivering the management detailed within the document.

The organisation implementing this plan will be a management company with the necessary certificates of competence to implement landscape management operation on site. The managing organisation will ensure that all site management complies with good practice standards and all relevant health and safety procedures. The managing organisation will also ensure that measures outlined to avoid pollution incidents, comply with protected species and habitats legislation, and ensure overall environmental protection are enforced.

A maintenance specification is provided in Section 6. This sets out the detailed maintenance requirements for the habitats onsite, which must be followed at all times. Any deviations from the management plan must be highlighted to the site owners or management company.

3.2 Controlling Authority

The controlling authority, Manchester City Council, should be consulted on any matters relating to the approved landscape proposals for the scheme.

3.3 Health and Safety

The site will be managed to comply with all relevant health and safety legislation, approved codes of practice (ACOP) and Health and Safety Executive (HSE) guidance.

As the managing organisation will be the main company involved in on site works, the managing organisation will fulfil the landowner's role and the work manager's role. This places an obligation on the managing company to ensure that any contractor understands and fulfils their health and safety role and any work undertaken on the site will follow the guidelines of the HSE.

3.4 Monitoring and Review

Regular monitoring of the development against measurable targets (as detailed within Section 6) will be undertaken across all habitats detailed within this management plan during the 30-year period. The outcome of this monitoring will form part of a Monitoring and Audit Report to be submitted to the site owner annually to inform the forthcoming year's work. The report will include management operations undertaken, any unexpected changes or declines in habitat condition and any actions required that fall outside those detailed within this report.

A more in-depth habitat assessment of the created habitats on site should also be undertaken between April and September annually by an experienced ecologist. Results should be reported back and feed into a five-year management plan review, to enable assessment of the management prescriptions against the defined objectives for each habitat. Where objectives are not being adequately met, appropriate action will be put in place, with any refinements incorporated into the updated management plan and annual work programme. This review will enable maintenance operations to evolve in accordance with habitat requirements as they establish, and mature and targeted conditions are met.

3.5 General Measures

Habitat creation on site will follow details set out in the Detailed Planting Plan (Urban Green, 2022c). The following general measures shall be met to ensure successful habitat creation and succession on site.

- All planting is to follow guidance set out in the relevant British Standard or Horticultural Trades Association documents and carried out by a competent person.
- Planting is to remain undamaged, with healthy and vigorous growth, and is to be planted upright and well balanced. Trees and shrubs are to be of good shape and without elongated shoots, grown in a suitable environment and hardened off before being delivered to the site.
- All planting is to be true to name and free from pests, diseases, discoloration, weeds, fungus, and physiological disorders upon planting.
- If plants/trees are unobtainable alternatives are to be agreed with the Ecologist/Landscape Architect in writing prior to ordering.
- After planting ensure that the full depth of topsoil is wetted. Apply water evenly and without damaging or displacing plants or soil. Continue to water as necessary to ensure the successful establishment and continued thriving of planting.
- All tree/shrub/hedgerow works shall be completed outside of nesting bird season (i.e. between October and February inclusive). If works are required within the nesting bird season, a check must be undertaken of all affected trees by a suitably qualified ecologist.
- All tree works shall be carried out by a skilled, qualified and approved Arboricultural Contractor in accordance with BS3998: 2010 'Tree Work – Recommendations'.

4 Ecological Baseline

The ecological baseline for the site was assessed within the Preliminary Ecological Assessment (PEA) (Urban Green, 2022d) informed by an extended UKHab habitat survey. A summary of designated sites, notable and/or protected species and habitats identified is provided below, with full descriptions of each feature available within the PEA. The baseline habitat map for the site can be found in the Biodiversity Net Gain Report (Urban Green, 2022a).

Table 1 – Identified designated sites relevant to the site.

Designated Site	Distance from Site	Description
Statutory Designated Sites		
Rochdale Canal Special Area of Conservation (SAC) and SSSI	3.9km east	This site is designated for the significant populations of floating water-plantain (<i>Luronium natans</i>) and diversity of pondweed species (<i>Potamogeton</i> sp.) supported within the predominantly mesotrophic waters. The site falls within the Impact Risk Zone for this SSSI.
Blackley Forest Local Nature Reserve (LNR)	600m west	The forest makes up most of the reserve along with grassland. The River Irk flows through the park and is a main feature. There are a variety of plants and animals to see. Habitats include broadleaved and plantation woodland, grassland, lake, marsh and a river.
Boggart Hole Clough LNR	975m south-east	The site is the largest woodland clough in Manchester and part is ancient woodland.
Non-statutory Designated Sites		
Bailey's Wood Site of Biological Interest (SBI)	750m south-east	No information provided.
Blackley Forest & Heaton Vale Reservoirs SBI	850m west	No information provided.
Boggart Hole Clough SBI	975m south-east	No information provided.

Table 2 – Identified Ecological features relevant to the site.

Species / Species Group	Evidence	Considered within Assessment	Rationale for Consideration
Birds	Suitable habitat present	Yes	There is suitable nesting potential for passerine birds on the site, and 14 records of protected/notable bird species were returned from the data search.
Bats (all species)	Suitable habitat present	Yes	32 records of bats were returned. The site was assessed to have low value for foraging and commuting bats and low roosting potential.

Species / Species Group	Evidence	Considered within Assessment	Rationale for Consideration
Hedgehog (<i>Erinaceus europaeus</i>)	Suitable habitat adjacent to site	Yes	Two records of hedgehogs were returned. While habitats present on site have limited potential for hedgehogs, the areas of woodland adjacent to the site have higher potential.
Badger (<i>Meles meles</i>)	Suitable habitat adjacent to site	Yes	No records of badger returned through the data search, however, woodland adjacent to the site provides potential suitable habitat for commuting or foraging.
Invasive Species	Ability to spread quickly	Yes	No records of invasive species were returned, and none were found on site. However, some invasive non-native plants are very fast spreading and therefore the potential for these species to be introduced to the site cannot be ruled out.

Table 3 – Pre-development Habitats Identified

UK Hab Classification	Dominant Species / Description	Development Actions and Mitigation
Area Habitats		
Grassland – Modified Grassland	Three parcels of modified grassland were present along the southern boundary of the site. All parcels were actively managed and had similar species compositions, including perennial ryegrass (<i>Lolium perenne</i>), dandelion (<i>Taraxacum</i>), creeping buttercup (<i>Ranunculus repens</i>), and clover (<i>Trifolium sp.</i>).	Although this habitat is in poor condition, it still offers limited habitat provision, however it will all be lost to accommodate the development. Seeded amenity grassland habitat will be sown in the back gardens of houses.
Urban – Urban Trees	There were eight urban trees present on the site. Seven mature downy birch (<i>Betula pubescens</i>) were present in grassland parcel 1 and one mature whitebeam (<i>Sorbus aria</i>) in parcel 3.	All the urban trees currently present on site will be lost. Five additional trees will be planted to partially compensate for the loss.
Urban – Buildings/Developed land; sealed surface	Two buildings were present on site, and the remainder of the site consisted of hardstanding maintained as car parks.	This habitat provides no ecological value, therefore no mitigation is necessary.

5 Biodiversity Enhancements

This section discusses some potential biodiversity enhancements for wildlife which are recommended in the PEA (Urban Green, 2022d), and provides details on their installation and maintenance.

5.1 Bat Boxes

A total of 4 bat boxes could be installed across the site. The bat boxes selected would provide a range of suitable conditions and target pipistrelle species that are likely to be present within the area (Urban Green, 2022d).

Externally mounted bat boxes should be positioned on installed mature trees or newly constructed houses. Please refer to Table 4 for the bat box specifications examples. A bat box design of similar specification can be selected for the site.

Table 4 - Bat box specification

Bat Box Type	Image		Total Number of Boxes
Greenwoods Ecohabitats Two Crevice Bat Box Dimensions: External: 43 high x 21.5 wide x 6.8 deep Internal: 41 x 16.5 x 1.8 Weight: 6.75 kg			2
Greenwoods Ecohabitats Medium Hollow Bat Box Dimensions: External: 43 x 21.5 x 13.5 Internal: 41 x 16.5 x 8.5 Weight: 6.75			2

5.1.1 Positioning of Bat Boxes

Bat boxes must be positioned between 4–6m high and are most effective when located on a south-east to south-western facing aspect, as this will provide additional heat throughout the day. Bats prefer to change roosts to benefit from varying ambient temperatures, so bat boxes are to be clustered in small

groups (i.e., three boxes per tree stem, on the eastern, western, and southern aspects). Please refer to Appendix 1 for the Biodiversity Enhancements Location Plan.

5.1.2 Timing of Installation

Bat boxes should ideally be positioned on houses and should be installed post-construction.

5.1.3 Maintenance of Bat Boxes

Bat boxes are considered self-cleaning and require minimal maintenance once installed. The boxes are made of hard-wearing material that is generally long-lasting. Bat boxes should be checked periodically (e.g., every two years) to assess their use and the condition of the boxes. Section 5.4 includes the maintenance schedule.

If any boxes are identified as damaged or missing, they are to be replaced with a box of similar specification.

Note only those holding the appropriate Natural England Class 2 bat licence may open and inspect these boxes. It is an offence for anyone without this licence to open a bat box. If a bat box becomes occupied by a bird the nest must be left *in situ* until after the bird nesting season (March to September inclusive).

5.2 Bird Boxes

The development has the potential to enhance bird nesting opportunities through the provision of bird nest boxes. A total of 6 bird boxes could be installed across the site upon houses.

Bird boxes come in several types and sizes, which vary in their suitability from species to species. Table 5 provides details of bird nest box types and the likely species they attract. Bird species that are known to inhabit the local area and readily utilise artificial nest boxes have been selected. Boxes of similar specifications as those detailed in Table 6 can be selected, in the case the example boxes are not available.

Table 5 – Bird nest box hole sizes and associated species

Box entrance hole size	Associated species
28mm	Great tit (<i>Parus major</i>), tree sparrow (<i>Passer montanus</i>), pied flycatchers (<i>Ficedula hypoleuca</i>)
32mm	House sparrow (<i>Passer domesticus</i>)
45mm	Starling (<i>Sturnus vulgaris</i>)
13cm high x 12cm wide	Barn owl (<i>Tyto alba</i>)

Table 6 – Bird nest boxes that can be bought from websites such as nhbs.com, habitat.co.uk or other online retailers

Bird box type	Image	Target Species	Number of boxes
BilBao Woodstone Nest Box <u>Specification</u> Height: 210mm Width: 305mm Depth: 120mm Entrance Hole Diameter: 28mm Weight: 6kg Material: Woodstone		Coal tit, blue tit, great tit	2
BilBao Woodstone Nest Box <u>Specification</u> Height: 210mm Width: 305mm Depth: 120mm Entrance Hole diameter: Oval Weight: 6kg Material: Woodstone		House sparrow, tree sparrow, great tit, blue tit, nuthatch	2
Vivara Pro Woodstone Starling Nest Box <u>Specification</u> Height: 385mm Width: 220mm Depth: 215mm Entrance hole diameter: 45mm Weight 7.4kg Material: Woodstone		Starling	2

5.2.1 Positioning of Bird Boxes

Bird boxes are most effective when positioned on a north-east to north-west facing aspect to prevent overheating during the summer nesting season. Care should be taken to make sure boxes are not angled in such a manner to allow rain to enter them. Nest boxes are to be affixed to vertical surfaces (such as trees or houses) at a minimum height of 3m. Please refer to Appendix 1 for the Biodiversity Enhancements Location Plan.

5.2.2 Timing of Installation

The bird boxes must be installed at the earliest opportunity in order to compensate for the disturbance of the on-site nesting habitat. Bird boxes can be installed at any time of the year. However, they must remain undisturbed throughout the bird nesting season (March to September inclusive) to avoid disturbing nesting birds and committing an offence under the Wildlife and Countryside Act 1981 (as amended). Section 5.4 includes the Schedule of Works.

5.2.3 Maintenance of Bird Boxes

The boxes are made of Woodstone, which have been selected due to their durability compared traditional softwood boxes.

The following maintenance measures are to be completed, following the installation of the boxes:

- Bird boxes will require periodic checking and cleaning, (e.g., once every two years).
- Unhatched eggs may be removed legally between September and January and must then be disposed of.
- Disused nests must be removed and cleaned using boiling water to remove parasites. Boxes should be left to dry before replacing the lid. Insecticides and flea powders must not be used.
- If any boxes are identified as damaged or missing, they are to be replaced with a box of similar specification.

Note bird boxes must only be opened and cleaned outside the bird nesting season (which is between March to September inclusive).

5.3 Hedgehog

The site is considered to have potential to support hedgehogs, therefore, hedgehog highways are to be installed across the site to improve connectivity. Additionally, hedgehog homes could be installed within suitable areas for hedgehogs within the site to provide additional hibernation features.

Appendix 1 details the location of the proposed hedgehog homes to be installed within the site. If hedgehog homes are not available, brash/wood piles can be used instead in similar locations.

Specifications for hedgehog enhancements are detailed in Table 7.

Table 7 – Hedgehog enhancements that can be bought from websites such as britishhedgehogs.org.uk, arkwildlife.co.uk or other online retailers

Specification	Image
Hedgehog Home Approximately 23 x 52 x 40cm (9" x 20½" x 16").	

5.3.1 Hedgehog Homes Locations

A hedgehog house contains a narrow or tunnel-like entrance, which is essential to prevent predators such as foxes and badgers gaining access to the hedgehog house. In addition, camouflaging the top and sides of house with soil and leaves can also help to reduce the chance of predation, ensuring that the entrance remains clear at all times for hedgehog access.

Hedgehog homes should be placed out of direct sunlight and must not face the north or north-east aspects (to avoid cold winter winds) and where they will not be disturbed, such as against a wall, bank or fence (British Hedgehog Preservation Society, 2018).

To prolong the longevity, hedgehog homes must be emptied (if absent from hedgehog presence) annually in April or October, to reduce the infestation of fleas and ticks that can be transferred through nest use. If hedgehog presence is confirmed within hedgehog homes from initial inspection (upon gently removing the lid), then this hedgehog home must be exempt from the annual clean until the following year (subject to presence of a hedgehog).

If possible, the addition of hay or straw must be added to each hedgehog home for insulation and replaced after an annual clean has been completed. Further information is available on the Hedgehog Street website (<https://www.hedgehogstreet.org/cleaning-out-boxes/>), and within the Work Schedule located in Section 5.4.

5.3.2 Hedgehog Highway Locations

Hedgehog highways comprise small gaps within fences, approximately 13cm x 13cm. They should be installed across the site creating a corridor for hedgehogs to commute across the site and into residential gardens. It is recommended that every fence within the development has a hedgehog highway gap included to facilitate full movement of hedgehog across the site.

5.4 Work Schedule

Key

	Recommended times when works can be conducted
	Times to avoid work

5.4.1 During Construction

Works	J	F	M	A	M	J	J	A	S	O	N	D
Erect boxes / Deploy hedgehog houses	Any time of year. All bird/bat/hedgehog boxes to be erected prior to the completion of the scheme.											

5.4.2 Post-Construction

Works	J	F	M	A	M	J	J	A	S	O	N	D
Bird box check and cleaning			Avoid bird nesting season									
Bat box checks												
Annual hedgehog house clean and replacement of bedding (if absent from hedgehog presence)												

Bird and bat box checks should be conducted in October of every other year to ensure that there is sufficient time for any repairs or replacements to be conducted.

6 Ecological Strategy

This section summarises the management strategy for each habitat proposed to be introduced within the final design of the scheme. Each objective includes a target time for positive assessment provided to enable identification of failing management and trigger early intervention. Management plans have been included detailing management objectives for an initial 5-year period. Regular monitoring of the site against the management objectives will be conducted during the first five years of the project, and a review of the management strategies will be undertaken, with any updates or changes to the program incorporated for the next five years of the management plan.

The proposed landscape layout (Urban Green, 2022c), found in the Biodiversity Net Gain Report (Urban Green, 2022a), displays the final proposed habitats and their location on site. Areas which are classified as ‘developed land, sealed surface’ offer no ecological benefit and the ecological value of ‘vegetated gardens’ is highly dependent on how they are used by homeowners. Therefore, both habitats are automatically allocated condition scores of N/A and require no ecologically driven management.

6.1 Area Habitat Creation

6.1.1 Urban - Urban trees – Proposed Trees

A total of five urban trees will be planted across the site, in the gardens of houses. Trees are predominantly non-native snowy mespilus (*Amelanchier lamarckii*) with one native silver birch (*Betula pendula*) specimen.

The targeted condition for the urban tree habitat is **moderate**, with an expected target condition time of 27 years. Detailed management techniques are detailed within Table 9 along with the corresponding condition criteria. In order to reach the expected targeted condition of moderate, at least 3 of the following criteria are expected to be achieved. As individual trees automatically pass criterion 2, this is not assessed. An annual schedule of works for the first 5 years post-development is detailed in Table 11 in Section 6.3.

Table 9 – Management Objectives for Urban Trees

Condition Assessment Criteria / objective	Management Activities	Benefit to environment	Target time for Positive Assessment
1. The tree is a native species	Replace failed trees like for like to ensure >70% native species mix is retained	Native trees provide more biodiverse habitats and support native species that non-native trees cannot	From year 1
2. The tree canopy is predominantly continuous	N/A	N/A	N/A
3. The tree is mature or veteran	- Limit the use of damaging management practices e.g., herbicide use - After 10-20 years, trees will reach semi-maturity and appropriate corrective surgery may be necessary.	Mature and veteran trees are more effective than young trees at providing air filtration services and sequester carbon. Veteran trees provide additional niches for wildlife.	10 years

	Undertake annual arboricultural assessments for the first 3 years (Urban Green, 2022e)		
4. There is little or no evidence of an adverse impact on tree health by anthropogenic activities and no current regular pruning regime so the trees retain >75% of expected canopy	- Only undertake management activities where necessary - Limit use of herbicides around trees - Tree works/pruning should be undertaken by a qualified professional - Avoid cutting all specimens across the plot in a single period, particularly where this is likely to remove all flower/fruit interest for wildlife. - Ensure tree canopy is balanced and consistent with the natural structure for the species	Promotes healthy growth and supports growth to maturity.	From year 1
5. Micro-habitats for birds, mammals and insects are present	- Leave any micro-habitat features, such as ivy and loose bark, in place - Where it is safe and appropriate, retain areas of dead wood - No management activities to take place during nesting season (February to August) - Avoid undertaking management activities on all trees in a single month period to retain important resources for wildlife. - Installation of bird and bat boxes in suitable locations on trees (Appendix 1)	Ensures diversity is maintained throughout by allowing the creation of additional habitat niches which can be exploited by wildlife.	By year 5
6. More than 20% of the tree canopy area is oversailing vegetation beneath	Leave a 2m unmown buffer zone around each tree to allow natural succession of surrounding vegetation	Creates a buffer habitat around trees to allow movement of wildlife and increases diversity of flora	From year 1

	- No use of herbicides within this zone - Periodic removal of non-native invasive species		
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6.1.2 Urban - Introduced Shrub

Areas of non-native, introduced shrub will be planted within the front gardens of houses, to improve visual value and provide nectar food for pollinators. Species present will include Japanese quince (*Chaenomeles japonica*), dwarf sweet box (*Sarcococca humilis*), and shrubby veronica ‘Margorie’ (*Hebe* ‘Marjorie’). Planting will provide a positive visual impact but has limited value as a habitat. Introduced shrub is automatically assigned a condition score of **N/A** within the metric and, due to the ornamental nature and limited ecological value that this habitat type provides, only basic aesthetic management is required.

6.2 Linear Habitat Creation

6.2.1 Hedgerow - Native Hedgerow

Lengths of beech (*Fagus sylvatica*) hedgerow will be created across the site, which will border driveways, paths and gardens.

The expected condition for the new hedgerows is **moderate**, with a predicted time to target condition of 5 years. Detailed management techniques are discussed within Table 10 along with the corresponding condition criteria. An annual schedule of works for the first 5 years post-development is detailed in Table 12 in Section 6.3.

Table 10 – Management objectives for Native Hedgerows

Condition Assessment Criteria / objective	Management Activities	Benefit to environment	Target time for Positive Assessment
A1. Height >1.5m average along length.	- Formative pruning should be undertaken to encourage growth - Prune mature plants only when necessary and in a way that promotes natural form - No management to take place during bird nesting season	Hedgerows serve several important roles for birds, mammals and invertebrates. Firstly, they act as valuable wildlife corridors, facilitating the movement of species between different habitats, which is especially important in urban environments where there is likely to be a high level of anthropogenic disturbance. Hedgerows, particularly those containing native species, provide plentiful foraging opportunities and can support complex food webs. Finally, hedgerows offer nesting habitat for some bird species, as well as refuge from predators, spaces to rest and shelter.	5 years
A2. Width >1.5m average along length.	- Damaging practices and activities should be avoided around the hedge e.g., use of machinery to allow plants to grow to maturity and in good health - Formative pruning should be undertaken to encourage growth - No management to take place during bird nesting season		5 years
B1. Gap between ground and base of canopy <0.5 m for >90% of length	Formative pruning should be undertaken to encourage dense growth		5 years

(unless 'line of trees').	Pruning should promote the natural form of shrubs within the hedgerow		
B2. Gaps make up <10% of total length and no canopy gaps >5 m	Replace any failed plants with others of the same species, size and quality		From year 1
C1. >1 m width of undisturbed ground with perennial herbaceous vegetation for >90% of length: - measured from outer edge of hedgerow, and - is present on one side of the hedge (at least).	- Leave a 1m buffer zone around the base of the hedge which is free from management activity e.g. weeding, mowing - No use of fertilisers in this area to ensure habitat isn't dominated by a handful of species		From year 1
C2. Plant species indicative of nutrient enrichment of soils dominate <20% cover of the area of undisturbed ground.	No use of fertilisers to allow for a higher diversity of flora and prevent a few species dominating		From year 1
D1. >90% of the hedgerow and undisturbed ground is free of invasive non-native and neophyte species.	- Identification and removal of invasive non-native species as soon as possible. - Where possible, do this by hand. If necessary, application of herbicide should be carried out by an experienced contractor.		From year 1
D2. >90% of the hedgerow or undisturbed ground is free of damage caused by human activities.	- Leave a 1m buffer zone around the base of the hedge which is free from management activity e.g. weeding, mowing - Damaging practices and activities should be avoided around the hedge e.g., use of machinery to allow plants to grow to maturity and in good health		2 years

Appropriate for management
 Not appropriate for management

6.3 Five Year Work Programme

Table 11 – Five Year Work Programme for Urban Trees

Habitat	Action	Frequency Notes	Indicative timing of operation											
			J	F	M	A	M	J	J	A	S	O	N	D
Urban trees	Initial and replacement planting – Bare root and root ball	Year 1 then as required to year 5												
	Initial and replacement planting – Containerised	Year 1 then as required to year 5												
	Control and removal of non-native species surrounding trees	As required year 1 to 5												
	Monitoring throughout growing and dormant period to ensure successful establishment and control browsing and other damage	Every three months years 1 to 5												
	Any required pruning to damaged or diseased trees	As required year 1 to 5												

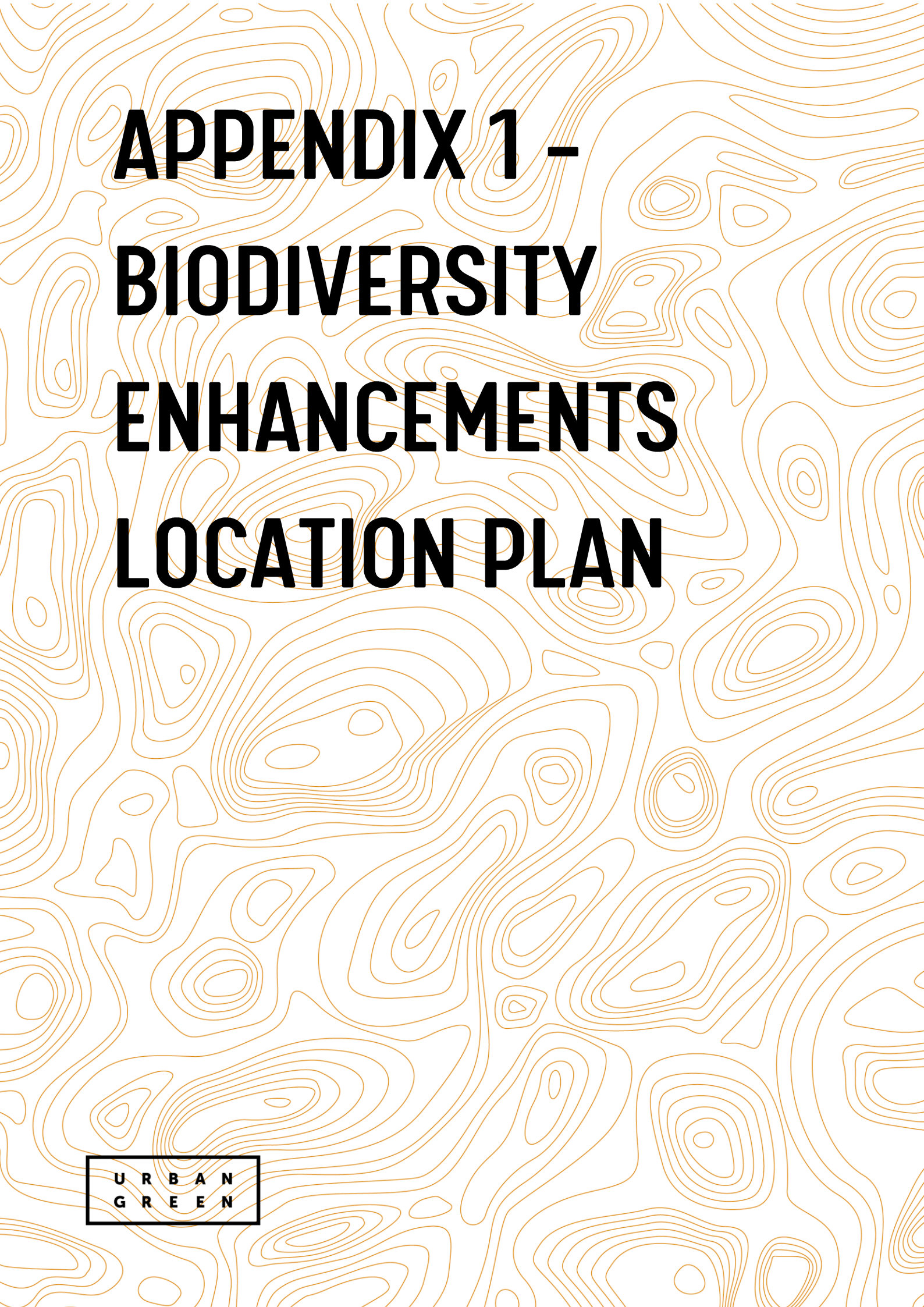
Habitat	Action	Frequency Notes	Indicative timing of operation											
			J	F	M	A	M	J	J	A	S	O	N	D
	Water twice a month during warmer months	Annually during warmer months or as needed in periods of hot weather												
	Visual inspection of tree health	Based on recommendations made in the tree survey report for existing boundary trees (Urban Green, 2022e) Annually for 3 years for newly planted trees												

Table 12 – Five Year Work Programme for Native Hedgerows

Habitat	Action	Frequency Notes	Indicative timing of operation											
			J	F	M	A	M	J	J	A	S	O	N	D
Native Hedgerow	Initial and replacement planting	Year 1 then as required to year 5												
	Control and removal of non-native species	As required year 1 to 5												
	Formative pruning	During winter months for first 2 years then once annually after this												
	Mulching	Twice a year in first year then once annually after this												
	Watering	During warmer months or as needed in periods of hot weather												

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The background of the entire page is a topographic map with orange contour lines on a white background. The lines are of varying thickness and form irregular, concentric shapes that suggest hills and valleys.

APPENDIX 1 – BIODIVERSITY ENHANCEMENTS LOCATION PLAN

U R B A N
G R E E N

The Bungalow

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Graphical representations of equipment on this drawing have been co-ordinated, but are approximations only. Please refer to the specifications and / or details for actual sizes and / or specific contractor construction information.

- ★ Two Crevice Bat Box
- ★ Medium Hollow Bat Box
- ★ BilBao Woodstone Nest Box (28mm)
- ★ BilBao Woodstone Nest Box (32mm)
- ★ Vivara Pro Woodstone starling Nest Box
- ▲ Hedgehog House

U R B A N
G R E E N

A: Ground Floor, The Tower,
Deva City Office Park, Trinity Way,
Manchester M3 7BF
T: +44 (0) 161 312 3131

Client

Irwell Valley Homes

Project:

Plant Hill Road

Title:

Biodiversity Enhancements Location
Plan

Issue:

01

Drawn:

SC

Checked:

SB

Approved:

MB

Project:

UG1827

Scale @ A3:

1:5,000

Date:

16/12/2022

Dwg No:

UG_1827_ECO_BEMP_01

01

Hard Works

-  **Vehicular Asphalt Surfacing**
Black colour. To engineer specification & recommendation
-  **Pedestrian Asphalt Surfacing**
Black colour. To engineer specification & recommendation
-  **Concrete Block Paving**
To private driveways
Bracken and heather colour. Herringbone laid.
-  **Precast Concrete Flag Paving**
To private paths and patios
Buff colour.
-  **Existing Brick Wall**
-  **Brick Wall**
1100mm high. Brick to match architecture.
-  **Metal Railings**
1100mm high. With matching gates.
-  **Timber Closeboard Fence with Timber Posts**
2100mm high. With matching gates.
-  **Timber Closeboard Fence with Timber Posts**
1800mm high.

 Site Red Line Boundary

Soft Works

-  **Existing Tree**
To be retained.
-  **Proposed Tree Planting**
-  **Proposed Native Hedge Planting**
-  **Proposed Ornamental Shrub Planting**
Ornamental shrub mix.
-  **Proposed Turf Grass**
To front gardens.
-  **Proposed Seeded Amenity Grass**