



BIODIVERSITY ENHANCEMENT AND MANAGEMENT PLAN

WHITEFIELD FIRE STATION

DECEMBER 2023

Biodiversity Enhancement and Management Plan

Whitefield Fire Station

A report for

**Greater Manchester Combined Authorities
Greater Manchester Fire and Rescue Service**

Report by



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December 2023

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1. INTRODUCTION

1.1 BACKGROUND

This Biodiversity Enhancement and Management Plan (BEMP) has been produced to outline the proposed landscape and biodiversity enhancement measures and any future monitoring and long term management objectives associated with these measures.

The BEMP has been produced to ensure the long term protection and enhancement of biodiversity in accordance with Policies EN1/2 - Townscape and Built Design, EN8/2 - Woodland and Tree Planting of the Bury Unitary Development Plan, and Chapter 15 - Conserving and enhancing the natural environment, as well as National Planning Policy Framework, and British Standards 42020:2013.

1.2 AIMS AND OBJECTIVES

This document sets out the habitat proposals and outlines management measures required in order for the habitats to achieve optimal condition. Biodiversity enhancement measures in relation to protected species have also been included within this document.

Details of the landscaping and biodiversity proposals are provided in drawing WFS-APP-XX-XX-DR-L-0001 (provided in Appendix A for reference).

2. PROPOSED MANAGEMENT

2.1 PROPOSED MANAGEMENT

The management and monitoring measures for the proposed habitats and protected species provisions are provided in Table 2.1 below. Refer to Figures 1, Appendix A, for landscape proposals.

Table 2.1: Proposed Management Measures

Proposed Habitat / Species Provisions	Management Measures Required
Trees	- 9no. native trees (heavy standard) to be planted: - 4no. small leaved-lime. - 3no. silver birch. - 1no. pedunculate oak. - 1no. wild cherry. - Trees planted in accordance with BS 4428:1989 – General Landscape Operations (refer to drawing WFS-APP-XX-XX-DR-L-0001 for detail). - There is no specific management required for trees (i.e. non-intervention management). - Trees will be replaced if they are unsuccessful.
Native Scrub	- Small planted areas of native mixed scrub along south and east site boundary. Species assemblage includes: - 60% hawthorn. - 10% field maple. - 10% holly. - 10% dog rose.

Proposed Habitat / Species Provisions	Management Measures Required
	- 10% elder. - Blackthorn has been avoided within the native species mix due to its aggressive growing nature that outcompetes other scrub species. - Scrub planted in accordance with BS 4428:1989 – General Landscape Operations (refer to drawing WFS-APP-XX-XX-DR-L-0001 for detail). - Scrub habitat ideally planted in Autumn months. - Scrub will be maintained annually around site to prevent encroachment into grassland, parking and walk ways.
Introduced shrub	- Small, planted areas of introduced shrub along north and west boundaries. Species assemblage includes: - Daisy bush, winter creeper, shrubby veronica, St John's-Wort, box honeysuckle, cherry laurel, and cotton lavender. - Shrubs planted in accordance with BS 4428:1989 – General Landscape Operations (refer to drawing WFS-APP-XX-XX-DR-L-0001 for detail). - Specimens ideally planted in Autumn months. - Shrubs will be maintained annually around car parks to prevent encroachment into parking and walk ways
Beech hedge	- New hedgerows will be double row staggered planted at a density of 1m centres. - Planted hedge species will be allowed to establish with any failures replaced. - Once established (approx. 5-7 years), hedgerow to be maintained annually as per native scrub and introduced shrubs.
Meadow mix grassland areas	- Southern extent of site and two localised areas along west and east boundary of site to be seeded with wildflower meadow mix. - Seed mix will be combination of e.g. (emorsgate seed mix EG1 – General purpose meadow grass mixture, and EM1F Basic general purpose wild flowers). - Existing grassland areas to be prepared in late summer by cutting low and/or scarifying very hard, aiming to create around 50% bare soil. This is best done when the ground is dry.

Proposed Habitat / Species Provisions	Management Measures Required
	- New areas of grassland will be 100% bare soil and can be prepared for sowing easily. - Cultivate to produce a medium tilth before rolling to produce a firm surface. Aim to produce a firm, weed free, medium tilth seed bed. - Sow on the surface in the autumn (September is the best month) using a complete meadow mixture at 4g/m². - Roll hard to firm back the soil and give good seed/soil contact. Continue cutting after sowing the seed, and until the end of March in the following year. - Leave the meadow uncut and un-grazed from the end of March to mid-summer, allowing the sown species to flower in June and July. After flowering, cut and remove the vegetation. This may be taken off as hay, or cut and stacked nearby to rot. The grassland may then be kept mown or grazed through to the end of March in the following year. - Detailed information on seed preparation and sowing techniques is found on drawing WFS-APP-XX-XX-DR-L-0001.
Bat Roost Provisions	- 2no. bat boxes will be mounted to the east and south elevation of the new building. - Boxes to be erected at least 4m high and will avoid any light spill from security lighting. - It is recommended that 2no. general purpose bat boxes are erected (e.g. Schwegler 2F bat box). - For further installation guidance, refer to the NHBS website: https://www.nhbs.com/blog/nhbs-guide-where-to-hang-and-how-to-maintain-your-bat-box
Bird Box Provisions	- 2no. bat boxes will be mounted to the east and south elevation of the new building (refer to Appendix A, Figure 1). This will provide partial protection from the prevailing wind and rain. - Boxes to be erected at least 4m high. - It is recommended that 2no. general purpose bird boxes are erected (e.g. Schwegler 1B bird box). - For further installation guidance, refer to the NHBS website: https://www.nhbs.com/equipment

2.2 ANNUAL WORK PROGRAMME

An annual work programme to cover the initial 5 year period is provided in Table 2.2 below. Year 1 is triggered as soon as any work commences on site.

Table 2.2 Initial 5 Year Work Programme

Task	Year 1	Year 2	Year 3	Year 4	Year 5
On Site					
Trees	Tree planting	Replacement of failed specimens			
Native Scrub and Introduced Shrub	Scrub planting (Sep-Oct)	Site pruning annually (as required)			
Grassland creation and enhancement	Prepare grassland and sow (Sep - Oct)	Cut grassland (Aug - Mar). No cutting, leave grassland to flower (Apr-Jul)			
Beech hedge	Hedgerow planting				Hedgerow cutting (if established)
Bat and Bird box provisions	Install boxes on new building	Replacement of failed boxes. Note – A suitably qualified, licensed ecologist will need to be consulted prior to the removal of failed boxes or relocation of boxes. If bats or birds are found to be using the boxes, these are protected and it is a criminal offence to disturb the boxes if in current use.			

2.3 MANAGEMENT RESPONSIBILITIES

The roles and responsibilities associated with this management plan are outlined below.

(i) Landowner (On site and Off site)

Greater Manchester Combined Authorities

Tootal Buildings
56 Oxford Street
Manchester
M1 6EU

(ii) Funding (On site and Off site)

All funding associated with this management plan, including future monitoring and maintenance will be provided by Greater Manchester Combined Authorities.

(iii) Ecological Consultancy Responsible for Implementation of Plan

Pennine Ecological

62 Markland Hill Lane,
Bolton
Greater Manchester
BL1 5NU

Pennine Ecological will be responsible for the implementation of this management plan.

Pennine Ecological will provide a progress report for each of the first 5 years of the plan. This report will confirm that the annual work programme has been followed (on site and off site).

Pennine Ecological will provide habitat monitoring (on site and off site) in years 1, 3, 5, 10, 20 and 30.

3. FUTURE MONITORING

3.1 MONITORING PROGRAMME

A progress survey will be carried out in the first 5 years following construction.

In addition, habitat monitoring of the site will be carried out in years 1, 3, 5, 10, 20 and 30.

3.2 MONITORING REPORTING

(i) Progress Report (Years 1-5)

The progress report shall be sent to the Local Planning Authority (LPA), within 3 months of each year being completed. The report shall be sent by a qualified ecological consultant.

The document will report on progress of the annual works programme (Section 2.2) and confirmation of required actions for the next 12 month period.

(ii) Biodiversity Enhancement and Management Plan (this document)

This document will be reviewed and updated every 5 years and any subsequent changes to be implemented for perpetuity.

The ongoing habitat monitoring surveys would form the basis of any subsequent changes required. Any changes are likely to be as a result of habitats not achieving their target condition.

3.3 REMEDIAL ACTION

Any habitats failing to achieve the target conditions or habitats being altered or removed from the sites, will require remedial action. Any remedial action required would be advised by the qualified ecological consultant and reported within the relevant monitoring reports.

The responsibility of implementing (funding) any remedial action falls with the landowner.

REFERENCES

Pennine ecological (2022). *Ecology Assessment Report: Whitefield Fire Station*.

Appletons Landscape Architects (2023). *Whitefield Fire Station: Landscape Proposals Plan*.
Drawing Ref: WFS-APP-XX-XX-DR-L-0001.

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Figure 1: Proposed Landscape and Biodiversity Enhancement Plan (Drawing Ref: WFS-APP-XX-XX-DR-L-0001)

