

Biodiversity Enhancement Measures

Client – Wates Construction Ltd.

Address – Land to the west of Rodney Street,
Manchester, M4 6JJ

Project – This City residential development, Ancoats,
Manchester

Prepared by Simon Brain. Chartered arboriculturist. PGCE (Bio. Rec.)

Version 3

01.06.2022

1.	Introduction	3
1.1	Background to the Project	3
1.2	Site Location and Context	3
1.3	Existing ecological reporting and purpose of this report	3-4
1.3.1	Author Information	4
1.4	Executive summary	4-6
2.	Existing ecological interest	6
2.1	Existing ecological appraisal	6
2.2	Existing ecological appraisal – opportunities for enhancement	6
3.	Ecological aims and objectives	7
3.1	Aim and objectives	7
4.	Site specific enhancement measures - Proposals	7-14
4.1.	Habitat and species measures - site specific proposals	7-14

Appendix

- Appendix 1 Proposed development and outline biodiversity enhancement plan
- Appendix 2 Native tree and shrub listings

1. Introduction

1.1 Background to the project

The client is seeking to promote the project known as This City residential development, Ancoats, Manchester for residential development. This report seeks to support the development by providing a scheme for Biodiversity enhancement measures to assist in the provision of biodiversity across the site that is designed to support the planning application. The proposal is included in Appendix One and generally consists of dwellings, associated infrastructure and environmental improvements which are based on the landscape masterplan drawing number RODSTA-LYR-XX-ZZ-DWG-L-1001.

Summary of the project – This City is a new kind of housing company, owned and run by Manchester City Council. They are a new venture that will develop high quality, low carbon housing for all Mancunians. The new homes will be a mix of market housing and homes designated for Manchester Living Rent (to be rented at or below Local Housing Allowance levels). Market housing will subsidise the provision of the Manchester Living Rent properties.

Application Description of Development – Erection of two residential apartment buildings (Use Class C3), one of 8 storeys (68 apartments) and one of 5 storeys (50 apartments), to form a total of 118 residential apartments; and erection of 10, 3 storey townhouses (Use Class C3); together with car and cycle parking provision, hard and soft landscaping including public realm, access, substation and other associated works

1.2 Site Location and Context

The site is located within Ancoats, Manchester in an urban environment and enclosed by existing commercial, residential and recreational land uses. The habitat on site comprises of scattered trees, amenity grassland, ephemeral / short perennial, and hard standing habitat.

1.3 Existing ecological reporting and purpose of this report

Enhancement measures shall be using the base ecological data contained in the Ecological Assessment dated 01.06.22 which followed CIEEM guidelines (*Guidelines for Preliminary Ecological Appraisal*). Section 40 of the Natural Environment and Rural Communities Act 2006 places a statutory duty on all public authorities in England to conserve biodiversity. Therefore, the purpose of this report is to outline the biodiversity enhancement measures proposed for the redevelopment of this site.

1.3.1 Author information

Simon Brain has attained a Post Graduate Certificate in Biological Recording and has attended residential FSC Field Courses for Land mammal identification, Songbird identification, Barn Owls (CIEEM) and he holds a NE Class 2 bat license (17334-CLS) and is a Chartered arboriculturist.

2. Existing ecological interest

2.1 Existing ecological appraisal – opportunities for enhancement

Enhancement measures shall be using the base ecological data contained in the Ecological Assessment dated 01.06.22

3. Ecological aims and objectives

3.1 Aims and objectives

The aim of this plan is to provide a specification, guidelines and proposals for general and site specific biodiversity enhancements.

These measures shall be aimed at European protected species and also nationally protected or locally important species.

4. Site specific enhancement measures

Habitat and species measures – site specific proposals

4.1 Habitats. Retention of mature trees

The implementation of retained tree protection measures shall mean the retention of the arboriculture assets located on the eastern boundary. The retention of these trees shall be managed by the following means:

- A site visit shall be carried out by the arboricultural clerk of works to delineate the actual RPA in accordance with BS5837:2012.
- The position of the RPA shall become the Construction Exclusion Zone and be fenced off with heras fencing securely staked to the ground.
- The clerk shall receive digital images to demonstrate the CEZ is fit for purpose prior to any other work commencing on site.
- All works shall conform to the approved Arboricultural Impact Assessment and Method Statement

4.2 Fauna, bats. Suitable lighting provision, artificial roosting provision and planting

The provision of artificial roosting opportunities within buildings under suitable lighting provision will be central to the maintenance of a healthy bat population. Bat species utilise a variety of roosting opportunities and do use many different roost sites throughout the year depending on the time of year. Roost purposes can range from simple day roosts to roosting positions used in the night-time for short periods and therefore the provision of different artificial roosts using different thermal properties will best suit the bats annual cycle and therefore create conditions for the sustainable development of a bat population.

When new planting is planned for the site, native tree and shrub species of local provenance are recommended in preference to non-native, ornamental species. Planting of tree and shrub species that support a high insect biomass and provide a potential food source for bats throughout the bat activity period

(spring to autumn) such as rowan, buckthorn, dogwood, crab apple and wild plum are recommended.

Installation of suitable lighting provision will be achieved by the compilation of a bat sympathetic lighting plan in the vicinity of the building roost points.

4.3 Fauna, birds. Artificial nesting provision and avian friendly planting

Breeding bird habitat shall be provided using ground shrubs and trees within the development but also the buffer between development and woodland. Shrubs shall consist of the following species: Viburnum opulus, Juniperus communis, Ulex europaeus and Euonymus europaeus and those provided in Appendix 2.

In addition the following shall be supplied and fitted to trees:

- 3no. Schwegler 1B boxes for Tits

The following shall be fitted to properties:

- 5no. Ibstock Swift boxes
- 4no. House Sparrow terraces (1SP Schwegler)

4.4 Grassland wildflower introductions to buffer development from the woodland and create eco tones between the built and green infrastructures to include boundary features

The Illustrative Masterplan shows an area of land buffered between the scattered trees and the core development areas on the eastern boundary of the site and further land within the core development areas. These areas are to be developed into a lowland meadow which has a high biodiversity value and shall provide an environment where the flora and fauna communities interact with the grassland habitat species between the housing and green infrastructure. In addition isolated areas of wildflower will be introduced into the development areas. These eco tones are of intrinsic value to flora and

fauna and are set to become highly attractive for invertebrates providing foraging, nesting and shelter opportunities for biodiversity to flourish. Defined footpaths shall manage public access and enhance biodiversity.

The key to the sustainable development of lowland meadows is in the preparation of the soils, particularly making them nutrient poor. This can be achieved by ensuring the top-soils are removed and the clay based sub soils are used to sow seed into. <http://www.landis.org.uk/soilscapes/> describes the soils as Soilscape 18: Slowly permeable seasonally wet slightly acid but base-rich loamy and clayey soils.

Emorsgate provide the following EM1 mix for shaded clayey soils that shall be utilised at the rate of 16Kilo per acre.

%	Latin name	Common name
0.2	<u>Alliaria petiolata</u>	<u>Garlic Mustard</u>
0.2	<u>Allium ursinum</u>	<u>Ramsons</u>
0.2	<u>Arctium minus</u>	<u>Lesser Burdock</u>
0.1	<u>Campanula trachelium</u>	<u>Nettle-leaved Bellflower</u>
0.5	<u>Chaerophyllum temulum</u>	<u>Rough Chervil</u>
4.3	<u>Digitalis purpurea</u>	<u>Foxglove</u>
2	<u>Filipendula ulmaria</u>	<u>Meadowsweet</u>
1	<u>Galium album - (Galium mollugo)</u>	<u>Hedge Bedstraw</u>
0.2	<u>Geum urbanum</u>	<u>Wood Avens</u>
2.5	<u>Hyacinthoides non-scripta</u>	<u>Bluebell</u>
0.2	<u>Iris foetidissima</u>	<u>Gladdon</u>
0.4	<u>Prunella vulgaris</u>	<u>Selfheal</u>
0.2	<u>Silene dioica</u>	<u>Red Campion</u>
1	<u>Torilis japonica</u>	<u>Upright Hedge-parsley</u>
7	<u>Vicia cracca</u>	<u>Tufted Vetch</u>

20

Grasses

%	Latin name	Common name
10	<u>Agrostis capillaris</u>	<u>Common Bent</u>
2	<u>Anthoxanthum odoratum</u>	<u>Sweet Vernal-grass (w)</u>
2	<u>Brachypodium sylvaticum</u>	<u>False Brome (w)</u>
25	<u>Cynosurus cristatus</u>	<u>Crested Dogstail</u>
1	<u>Deschampsia cespitosa</u>	<u>Tufted Hair-grass (w)</u>
28	<u>Festuca rubra</u>	<u>Red Fescue</u>
12	<u>Poa nemoralis</u>	<u>Wood Meadow-grass</u>

80

4.5 Native tree and shrub planting through a landscaping plan

The provision of a detailed landscaping plan will be based on the provision of native trees and shrubs as contained in Appendix 1.

Appendix One – Enhancement plans

Ecological enhancements

Lowland meadow creation bounded by native hedge

LOWLAND MEADOW CREATION

The Illustrative Masterplan shows an area of land buffered between the woodland and the core development areas within the site. These areas are to be developed into a lowland meadow which has a high biodiversity value and shall provide an environment where the woodland communities interact with the grassland habitat species between the housing and green infrastructure. This eco tone is of intrinsic value to flora and fauna and is set to become highly attractive for invertebrates providing foraging, nesting and shelter opportunities for biodiversity to flourish.

- Schwegler Sparrow terrace
- Ibstock eco swift box
- Ibstock enclosed bat box

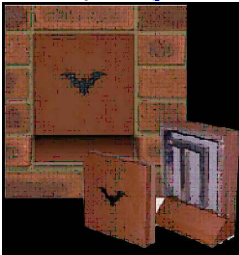
Client:		
Wates Construction		
Project:		
Land to the West of Rodney Street		
Detail:		
Ecological Enhancements		
Drawn By:	Date:	Scale:
SB	01.06.22	NTS
Drg No:	Revision:	
TR-01	V3	



Schwegler 1sp sparrow terrace



Enclosed Ibstock Bat box C or D with buildings



Ibstock eco swift box



Schwegler 1B generalist bird box



Native tree species list

Common name	Latin name
Field maple	<i>Acer campestre</i>
Common alder	<i>Alnus glutinosa</i>
Strawberry-tree	<i>Arbutus unedo</i>
Silver birch	<i>Betula pendula</i>
Downy birch	<i>Betula pubescens</i>
Box	<i>Buxus sempervirens</i>
Hornbeam	<i>Carpinus betulus</i>
Dogwood	<i>Cornus sanguinea</i>
Hazel	<i>Corylus avellana</i>
Midland hawthorn	<i>Crataegus laevigata</i>
Hawthorn	<i>Crataegus monogyna</i>
Spindle	<i>Euonymus europaeus</i>
Beech	<i>Fagus sylvatica</i>
Alder buckthorn	<i>Frangula alnus</i>
Common ash	<i>Fraxinus excelsior</i>
Sea buckthorn	<i>Elaeagnus rhamnoides</i>
Holly	<i>Ilex aquifolium</i>
Juniper	<i>Juniperus communis</i>
Crab apple	<i>Malus sylvestris</i>
Scots pine	<i>Pinus sylvestris</i>
Black poplar	<i>Populus nigra</i> subsp. <i>Betulifolia</i>
Aspen	<i>Populus tremula</i>
Wild cherry	<i>Prunus avium</i>
Bird cherry	<i>Prunus padus</i>
Blackthorn	<i>Prunus spinosa</i>
Plymouth pear	<i>Pyrus cordata</i>
Sessile oak	<i>Quercus petraea</i>
Pedunculate oak	<i>Quercus robur</i>
Purging buckthorn	<i>Rhamnus cathartica</i>
White willow	<i>Salix alba</i>
Goat willow	<i>Salix caprea</i>
Grey willow	<i>Salix cinerea</i>
Crack willow	<i>Salix fragilis</i>
Bay willow	<i>Salix petandra</i>
Purple osier	<i>Salix purpurea</i>
Almond willow	<i>Salix triandra</i>
Common osier	<i>Salix viminalis</i>
Elder	<i>Sambucus nigra</i>
English whitebeam	<i>Sorbus anglica</i>
Common whitebeam	<i>Sorbus aria</i>
Arran whitebeam	<i>Sorbus arranensis</i>
Rowan	<i>Sorbus aucuparia</i>
Bristol whitebeam	<i>Sorbus bristoliensis</i>
Devon whitebeam	<i>Sorbus devoniensis</i>
Service-tree	<i>Sorbus domestica</i>

Native tree species list

Round-leaved whitebeam	<i>Sorbus eminens</i>
Irish whitebeam	<i>Sorbus hibernica</i>
Lancastrian whitebeam	<i>Sorbus lancastriensis</i>
Grey-leaved whitebeam	<i>Sorbus porrigentifformis</i>
Arran service-tree	<i>Sorbus pseudofennica</i>
Rock whitebeam	<i>Sorbus rupicola</i>
Somerset whitebeam	<i>Sorbus subcuneata</i>
Wild service-tree	<i>Sorbus torminalis</i>
Bloody whitebeam	<i>Sorbus vexans</i>
Wilmott's whitebeam	<i>Sorbus wilmottiana</i>
Yew	<i>Taxus baccata</i>
Small-leaved lime	<i>Tilia cordata</i>
Large-leaved lime	<i>Tilia platyphyllos</i>
Wych elm	<i>Ulmus glabra</i>
Field elm	<i>Ulmus minor</i>

Common name	Latin name
Large shrubs	
Dogwood	<i>Cornus sanguinea</i>
Spindle	<i>Euonymus europaeus</i>
Sea Buckthorn	<i>Hippophae rhamnoides</i>
Wild privet	<i>Ligustrum vulgare</i>
Rhamnus cathartica	<i>Buckthorn</i>
Rosa canina	<i>Dog rose</i>
Purple willow	<i>Salix purpurea</i>
Eared willow	<i>Salix aurita</i>
Welsh whitebeam	<i>Sorbus leptophylla</i>
	<i>Sorbus minima</i>
Wayfaring tree	<i>Viburnum lantana</i>
Guelder rose	<i>Viburnum opulus</i>
Medium shrubs	
Broom	<i>Cytisus scoparia</i>
Field rose	<i>Rosa arvensis</i>
Soft downy rose	<i>Rosa mollis</i>
Sweet briar	<i>Rosa rubiginosa</i>
English whitebeam	<i>Sorbus anglica</i>
Gorse	<i>Ulex europaeus</i>
Western gorse	<i>Ulex gallii</i>
Small shrubs	
Burnet rose	<i>Rosa pimpinellifolia</i>
Butchers broom	<i>Ruscus aculeatus</i>
Dwarf willow	<i>Salix herbacea</i>
Woolly willow	<i>Salix lanata</i>
Creeping willow	<i>Salix repens</i>