



Brighter strategies
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Client: Powerleague Fives Limited

Project: Powerleague Manchester Nicholls

Report: Landscape and Ecological Management Plan

QUALITY ASSURANCE

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CONTENTS

1.0	EXECUTIVE SUMMARY	1
2.0	INTRODUCTION	3
2.1	AIMS AND OBJECTIVES	3
2.2	PREVIOUS REPORTS	4
2.3	PROPOSED SCHEME	4
2.4	SITE LOCATION AND DESCRIPTION	4
3.0	ECOLOGICAL BACKGROUND	6
3.1	BASELINE CONDITIONS	6
3.2	BIODIVERSITY ACTION PLANS (BAP)	7
3.3	COMPETENCIES	10
4.0	ECOLOGICAL LANDSCAPING FEATURES	11
4.1	OVERVIEW	11
4.2	LANDSCAPING	11
5.0	MANAGEMENT AND MONITORING	19
5.1	OVERVIEW	19
5.2	ECOLOGICAL CONSTRAINTS TO MANAGEMENT	21
6.0	SUMMARY AND CONCLUSIONS	22
APPENDIX A LANDSCAPING PLANS		
APPENDIX B LEGISLATION AND POLICY		
REFERENCES		

Tables

Table 3.1	Greater Manchester BAP Key Habitats and Species of Relevance to this Site	8
Table 4.1	List of potentially suitable species	13
Table 5.1	Summary of management actions for first 5 Years (to be extended to 30 year period as appropriate)	20

Figures

Figure 4.1	Example substrate type and planting variation	12
Figure 4.2	Examples of Log piles	16
Figure 4.3	Sandy piles	17
Figure 4.4	Rope coil	17

1.0 EXECUTIVE SUMMARY

Greengage Environmental Ltd was commissioned by Powerleague Fives Limited to produce a Landscape and Ecological Management Plan (LEMP) for the development at the Powerleague Manchester Nicholls site.

The development comprises six new padel courts, with associated canopies and landscaping.

This document has been produced to address condition 15 of the planning consent (ref: 139661/FO/2024) for the proposed development at the site. The condition states a LEMP shall be submitted to, and be approved in writing by, the local planning authority prior to the commencement of the development.

The baseline ecological assessment (report reference: 5527012JB19MAR24FV01_EcIA) determined the existing habitats on site comprise principally grassland, scrub and trees, which have value for foraging bats, nesting birds, invertebrates, hedgehog and fox.

Ecological mitigation, compensation and enhancement measures have therefore been specified in light of baseline conditions, contemporary best practice, local conservation targets (such as Biodiversity Action Plan priorities), relevant planning policy, and proposed development details. These measures have been incorporated into the landscaping proposals and will seek to create habitat suitable for supporting rare, protected and notable ecological receptors, ensuring net gains in biodiversity value.

As shown on the Landscape General Arrangement (doc ref: L050-PL-01 Landscape General Arrangement Plan) produced by Urban Landscape Partnership (ULP), features of ecological value on site include:

- Retention of existing trees where possible;
- Enhanced tree planting incorporating the following species of ecological value:
 - Field maple;
 - Wayfaring tree;
 - Crab apple;
 - Bird cherry; and
 - Rowan.
- Mixed scrub creation incorporating the following species of ecological value
 - Blackthorn;
 - Hawthorn;
 - Hazel;
 - Elder; and
 - Dogwood.
- Enhancement of existing grassland with wildflower grassland mix (Emorsgate EL1 and EM2);

- Creation of biodiverse brownfield habitat on former cricket pitch which will include:
 - Mounded biodiverse roof substrate (between 150mm and 200mm in depth)
 - Seeded with biodiverse roof plant species mix
 - Two log piles;
 - Two sand piles;
 - Two cobble piles; and
 - Two rope coils.

In addition to the newly created habitats, the grassland and bramble scrub in the east of the site will be retained and left to regenerate naturally following removal of the temporary construction access route that will be constructed in this area.

This report should be read in conjunction with the following planning stage reports:

- Ecological Impact Assessment (ref: 5527012JB19MAR24FV01_EcIA)
- Biodiversity Net Gain Assessment (ref: 552701sr22Mar24FV01_BNGA)
- Construction Environmental Management Plan (ref: 552701JB11MAR24FV01_CEMP)

Construction phase ecological protection measures are set out in the Ecological Impact Assessment and Construction Environmental Management Plan, and not repeated within this report.

As is evidenced by the planning stage Biodiversity Net Gain Assessment (BNGA), net gains in ecological value will be delivered in the medium to longer terms as a result of the proposed ecological enhancements and site management.

2.0 INTRODUCTION

Greengage was commissioned by Powerleague Fives Limited to produce an LEMP, detailing specifications for ecological mitigation, compensation and enhancement features for the Powerleague Manchester Nicholls site in Manchester, in order to discharge the ecology related condition on the schedule (planning permission ref: 139661/FO/2024).

2.1 AIMS AND OBJECTIVES

This document aims to collate the site-wide ecological design concepts and future monitoring and management regime at the site.

Landscaping features are targeted at specific ecological receptors of note, either with potential to be on site or known to be in the area, reflecting contemporary best practice and objectives of local conservation groups, Biodiversity Action Plans (BAPs) and planning policy.

This document has been produced to address the following condition of the planning consent which specifically states:

'A landscape and ecological management plan (LEMP) shall be submitted to, and be approved in writing by, the local planning authority prior to the commencement of the development.'

The content of the LEMP shall include the following:

- a. Description and evaluation of features to be managed.*
- b. Ecological trends and constraints on site that might influence management.*
- c. Aims and objectives of management.*
- d. Appropriate management options for achieving aims and objectives.*
- e. Prescriptions for management actions.*
- f. Preparation of a work schedule (including an annual work plan capable of being rolled forward over a five-year period).*
- g. Details of the body or organization responsible for implementation of the plan.*
- h. Ongoing monitoring and remedial measures.*

The LEMP shall also include details of the legal and funding mechanisms by which the long-term implementation of the plan will be secured by the developer with the management body(ies) responsible for its delivery.

The plan shall also set out (where the results from monitoring show that conservation aims and objectives of the LEMP are not being met) how contingencies and/or remedial action will be identified, agreed and implemented so that the development still delivers the fully functioning biodiversity objectives of the originally approved scheme. The approved plan will be implemented in accordance with the approved details.'

The landscaping features specified will positively contribute to enhancing the ecological and wildlife value of the site, meet objectives of planning permission conditions and complement local and regional BAPs.

Works described in this report will be carried out at specific times throughout the installation process supervised by a suitably qualified ecologist. Otherwise, installation works will be undertaken by a specialist contractor with reference to this strategy.

In addition, this specification includes a management plan for the successful establishment and long term management and monitoring of the ecological landscaping features.

2.2 PREVIOUS REPORTS

This report should be read in conjunction with the following planning stage reports:

- Ecological Impact Assessment (ref: 5527012JB19MAR24FV01_EcIA)
- Biodiversity Net Gain Assessment (ref: 552701sr22Mar24FV01_BNGA)
- Construction Environmental Management Plan (ref: 552701JB11MAR24FV01_CEMP)

Construction phase ecological protection measures are set out in the Ecological Impact Assessment and Construction Environmental Management Plan, and not repeated within this report.

2.3 PROPOSED SCHEME

The development comprises six new padel courts, with associated canopies and landscaping.

Within the Landscape General Arrangement (doc ref: L050-PL-01 Landscape General Arrangement Plan) provided by ULP, newly provided green landscaping on site includes:

- Tree planting;
- Species-rich amenity grassland;
- Wildflower grassland;
- Mixed native scrub; and
- A biodiverse brownfield habitat.
- In addition to the newly created habitats, the grassland and bramble scrub in the east of the site will be retained and left to regenerate naturally following removal of the temporary construction access route that will be constructed in this area.

2.4 SITE LOCATION AND DESCRIPTION

The assessment site area for the planning application extended to approximately 0.71 hectares (ha) and is centred on Ordnance Survey National Grid Reference (OS NGR): SJ 85646 97165.

The site is located in Ardwick, an area within Manchester immediately southeast of the A365, M12 6BA. The site is located to the east of Dalberg Street and to the north of Nicholls Community Football Centre.

Within the immediate area, the site was largely surrounded by industrial buildings, the A665 to the east of the site, and the A57 to the south of the site. Within the wider area Ardwick train station was located of the east of the site, Powerleague Manchester Central located to the north of the site, areas of residential green space including Ardwick Green Park located to the west of the site, and residential properties within the wider site area. Manchester city centre is located approximately 1 km northwest of the site.

3.0 ECOLOGICAL BACKGROUND

3.1 BASELINE CONDITIONS

The baseline for the site is set out in the Ecological Impact Assessment (report reference: 5527012JB19MAR24FV01_EcIA) and summarised in the following section.

The habitats presented across the assessment site consist of the following UK Hab categories:

- Modified grassland (g4) [112 - earth bank, 200 - trees, 502 - seasonally wet];
- Bramble scrub (h3d scattered trees);
- Scattered trees (g 33, h 33 and u 33);
- Introduced shrub (u1 847 33); and
- Artificial unvegetated, unsealed surface (u1c).

The protected and notable species identified as having potential for being present on site is discussed below:

- Bats;
 - The records search identified the presence of common pipistrelle bats, soprano pipistrelle bats, noctule bats and *Myotis* sp., bats within 2 km of the site.
 - Some foraging potential for bats at the site, including the scattered trees and dense bramble scrub.
 - Suitable foraging habitat in the form of a line of trees adjacent to the site along the eastern boundary of the playing field (adjacent to the site) however, this is likely to be impacted by light pollution, reducing the potential for the site to be used by less common bat species.
 - On site trees were not considered to be of sufficient age to be suitable for roosting bats with no features identified.
 - No roosting features were identified in any of the structures surrounding the proposed padel courts.
- Birds;
 - Several records for bird species were returned from the local records centre. Those of relevance to the site include dunnock, starling and song thrush.
 - Scrub and tree habitats provide suitable nesting and foraging opportunities for a wide range of common bird species.
 - Unlikely to support an important assemblage of bird species due to site size.
- Invertebrates
 - The records search identified 29 records for invertebrates within 2 km of the site.

- The closest record to the site pertains to a 2020 record of a cinnabar moth located approximately 750 east of the site.
- Site considered to have very limited opportunities to support protected or notable invertebrate species given the small scale of common and widespread habitats present.
- Common and widespread species are likely to utilise habitats such as the grassland, scrub and trees however an important assemblage on invertebrates is not considered likely.
- Other Mammals;
 - Hedgehog - no records of hedgehogs were returned within the data search, although habitat of potential value is present.
 - Fox - the survey identified mammal runs on the site which have the potential to be used by foxes.

Construction phase ecological protection measures, for the receptors discussed above, are set out in the Ecological Impact Assessment and Construction Environmental Management Plan, and not repeated within this report.

3.2 BIODIVERSITY ACTION PLANS (BAP)

In accordance with the aims and objectives of this document a review of the relevant biodiversity action plans and local conservation targets was undertaken. This review, along with the results of the Ecological Impact Assessment, is then able to form the context for ecological enhancement at the site.

UK Biodiversity Action Plans (BAPs) have been developed which set priorities for nationally important habitats and species. To support the BAPs, Species/Habitat Statements (otherwise known as Species/Habitat Action Plans) were produced that provide an overview of the status of the species and set out the broad policies that can be developed to conserve them. A list of priority species of conservation importance was also developed.

The UK BAP was succeeded in 2012 by the UK-Post 2012 Biodiversity Framework which informed the creation of the Biodiversity 2020 strategy; England's contribution towards the UK's commitments under the United Nations Convention of Biological Diversity.

Despite this, the UK BAP priority species lists and conservation objectives still remain valid through integration with local BAPs (which remain valid), and in the form of the Habitats and Species of Principle Importance list (as required under section 41 of the Natural Environment and Rural Communities (NERC) Act).

Local Biodiversity Action Plans (LBAPs) ensure that national action plans (the UK BAP/Biodiversity 2020) are translated into effective action at the local level and establish targets and actions for locally characteristic species and habitats.

The site is subject to the Greater Manchester BAP which define key habitats and taxa/species of regional and local conservation interest. Receptors of relevance to this strategy which should have accordingly been considered within the scheme design are summarised in Table 3.1 below.

Table 3.1 Greater Manchester BAP Key Habitats and Species of Relevance to this Site

Priority habitats/species	Local objectives of relevant BAPS and policy	Relevant features of this strategy
Bats	- Maintain the distribution and range of bat populations and habitats in Greater Manchester and prevent further losses and fragmentation - Increase the number of and enhance the quality of roosting sites, feeding habitat and commuting routes with the aim of increasing bat population levels within Greater Manchester - Encourage the provision of artificial roost sites including the use of bat boxes and bat bricks in areas of good foraging habitat.	- Green linkages are maintained across the site through the provision of mixed scrub and tree planting. - The value for invertebrates will be improved providing a foraging resource for bats.
Black Redstart	- Create a minimum of 50 green roofs/green walls across the GM conurbation over the next five years, particularly in areas where Black Redstarts are known to breed. - Require applications for development in areas known to be used by Black Redstarts to be accompanied by a survey for Black Redstarts	Biodiverse brownfield habitat is to be created at ground level on the former cricket strip.
Grasslands	- For species rich neutral, acid, marshy and grasslands of high ecological value on previously developed land the following targets are applied: - Maintain current extent of priority habitat - Maintain current extent of priority habitat in favourable condition - Restore grassland to meet priority habitat type definition	Species rich neutral grassland is to be created in sections of the site.

Priority habitats/species	Local objectives of relevant BAPS and policy	Relevant features of this strategy
	○ Create new grassland	
Urban managed green space	● Maintain current amount of managed greenspace and prevent further losses and fragmentation. ● Promote appropriate management practices to enhance or increase managed greenspace's contribution to biodiversity. ○ For areas under 5 ha produce site type specific strategy documents to identify appropriate management practices for the integration of biodiversity into other uses and functions ○ Integrate appropriate survey and monitoring programmes into all management plans and strategy documents ● Increase the amount of managed greenspace being managed to enhance or increase biodiversity, without reducing the area of other valuable habitats and species.	● This LEMP to provides site specific strategy and site management suggestions to integrate biodiversity into the proposals. ● Green linkages are maintained across the site to ensure habitats are not fragmented.

3.3 COMPETENCIES

James Bumphrey, who reviewed this report, has an undergraduate degree in Environmental Sciences (BSc Hons), a master's degree in environmental Consultancy and a Natural England Great Crested Newt Licence. James has over 11 years' experience in ecology survey and consultancy.

India Rayner, who wrote this report, read Physical Geography (BSc Hons) at Sheffield university and has two charterships for CIWEM as an Environmentalist and Water Environmental Manager. India is a senior consultant with over 6 years of experience in environmental consultancy.

This report was written by India Rayner and reviewed and verified by James Bumphrey who confirms in writing (see the QA sheet at the front of this report) that the report is in line with the following:

- Represents sound industry practice;
- Reports and recommends correctly, truthfully and objectively;
- Is appropriate given the local site conditions and scope of works proposed; and
- Avoids invalid, biased and exaggerated statements.

4.0 ECOLOGICAL LANDSCAPING FEATURES

4.1 OVERVIEW

The proposed development provides the potential to deliver an overall enhancement in the biodiversity value of the site. This will primarily be achieved by the introduction of features within the landscaping proposals and actions within the long-term management regime for the site, targeting specific ecological receptors.

The creation of specific habitats and attraction of notable and protected ecological receptors will complement the targets of national and local policy and BAPs.

Specifically, the proposals will seek to enhance the on-site habitat for the following species:

- Foraging and roosting bats (UK and local BAP priority species);
- Birds (including black redstart, local BAP priority species); and
- Invertebrates (including solitary bees).

The following landscaping elements are to be included at the site:

- Tree planting;
- Species-rich amenity grassland;
- Wildflower grassland;
- Mixed native scrub; and
- A biodiverse substrate-based habitat inspired by biodiverse green roof.

Detail on these features and specifications are provided in the chapter below.

Landscaping proposals are provided in Appendix A.

4.2 LANDSCAPING

Tree Planting

Enhanced tree planting will be incorporated including a mix of native trees providing foraging and nesting habitat for birds. Species of wildlife value include:

- Retention of existing trees where possible;
- Enhanced tree planting incorporating the following species of ecological value:
 - Field maple;
 - Wayfaring tree;
 - Crab apple;
 - Bird cherry; and

- Rowan.

Mixed Scrub

Compensatory, and enhanced, scrub planting will provide a foraging resource for birds and invertebrates as while as maintaining connectivity across the site. Species of wildlife value include:

- Blackthorn;
- Hawthorn;
- Hazel;
- Elder; and
- Dogwood.

Grassland

Existing retained grassland will be enhanced through sowing of a wildflower grassland mixes. These are proposed to be wildflower grassland mix (Emorsgate EL1 and EM2).

Grassland labelled WF1 at Appendix A is proposed to be cut once a year. Grassland labelled WF2 at Appendix A is proposed to be cut regularly with a short sward maintained.

Biodiverse Brownfield Habitat

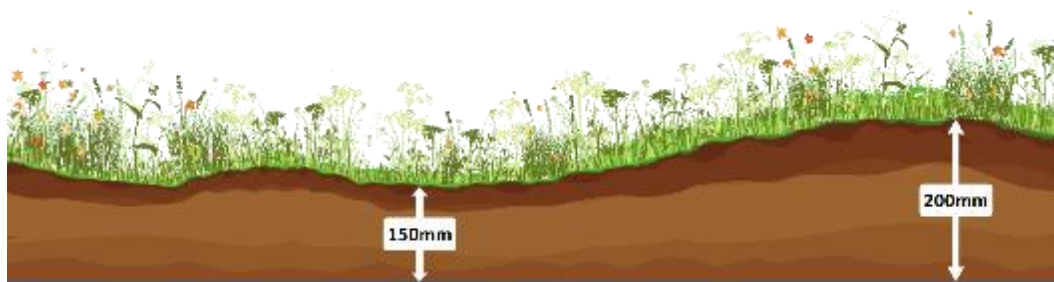
Habitat typically associated with a brownfield site, and generally found on a 'biodiverse green roof' will be created at ground level on a disused cricket pitch. Details are provided below. An ecologist will be present to oversee key phases of installation and provide confirmation of suitability of selected products.

Substrate Specification

A 'typical' biodiverse substrate designed for extensive living roofs, composed of recycled crushed brick, expanded clay shale and recycled organic content. Bauder's Biodiverse substrate¹ is a suitable product. Contractor will confirm substrate selected with confirmation of suitability of product provided by an ecologist.

Substrate depths will vary between 150mm and 200mm to ensure suitable retention of water and embed resilience for future climate risks, including longer and more frequent periods of drought, see Figure 4.1.

Figure 4.1 Example substrate type and planting variation





Species/Seed Mixes

Due to the unpredictable nature of colonisation and its dependence on plant propagules in the area, the low-nutrient substrate will be seeded with a suite of native species of known value for the targeted ecological receptors. The diverse mix of species increases the flowering period, increasing the availability of nectar for pollinators throughout the year.

Seeds will be sown at a rate of 5g/m² with plugs planted at a density of 15-20/m² with a minimum root ball of 25cm³.

Suitable seed mixes can be procured from a variety of retailers that are tailored for exposed, low-nutrient conditions on roof tops. Bauder's Flora 3 Seed Mix² contains 49 species including 35 wildflowers on the RHS Perfect for Pollinators list. The diverse mix of species increases the flowering period, increasing the availability of nectar for pollinators throughout the year. This seed mix, or similar products from other suppliers, should be used on the biodiverse substrate areas.

Table 4.1 below gives suitable species. These species are selected for their suitability to a variety of substrates as well as their biodiversity value. The contractor will confirm species mix selected with confirmation of suitability of mix provided by an ecologist.

Table 4.1 List of potentially suitable species

Common name	Scientific name
Fine to medium aggregate areas	
Yarrow	<i>Achillea millefolium</i>
Agrimony	<i>Agrimonia eupatoria</i>
Kidney Vetch	<i>Anthyllis vulneraria</i>
Thrift	<i>Armeria maritima</i>
Common daisy	<i>Bellis perennis</i>
Common Knapweed	<i>Centaurea nigra</i>

Common name	Scientific name
Viper's Bugloss	<i>Echium vulgare</i>
Blue fleabane	<i>Erigeron acer</i>
Dropwort	<i>Filipendula vulgaris</i>
Lady's Bedstraw	<i>Galium verum</i>
Common Rock-rose	<i>Helianthemum nummularium</i>
Perforate St John's Wort	<i>Hypericum perforatum</i>
Common cat's-ear	<i>Hypochaeris radicata</i>
Wild Candytuft	<i>Iberis amara</i>
Field Scabious	<i>Knautia arvensis</i>
Rough Hawkbit	<i>Leontodon hispidus</i>
Oxeye Daisy	<i>Leucanthemum vulgare</i>
Birdsfoot Trefoil	<i>Lotus corniculatus</i>
Mellilots	<i>Melilotus spp</i>
Wild Marjoram	<i>Origanum vulgare</i>
Hoary Plantain	<i>Plantago media</i>
Salad Burnet	<i>Sanguisorba minor</i>
Cowslip	<i>Primula veris</i>
Selfheal	<i>Prunella vulgaris</i>
White stonecrop	<i>Sedum album</i>
Bladder Campion	<i>Silene vulgaris</i>
Red clover	<i>Trifolium pretense</i>
Dark Mullein	<i>Verbascum nigrum</i>
Wild pansy	<i>Viola tricolor</i>
Free draining cobble dominated substrates	
Sea thrift	<i>Armeria maritima</i>
South American vervain	<i>Verbena bonariensis</i>
Great mullein	<i>Verbascum thapsus</i>
Yarrow	<i>Achillea spp.</i>
Lesser calamint	<i>Calamintha nepeta</i>
Common primrose	<i>Primula vulgaris</i>
Mother-of-Thyme	<i>Thymus polytrichus</i>
Small scabious	<i>Scabiosa columbaria</i>
Bugle	<i>Ajuga reptans</i>
Biting stonecrop	<i>Sedum acre</i>
Mexican fleabane	<i>Erigeron karvinskianus</i>
Maiden pink	<i>Dianthus deltoides</i>
Rock rose	<i>Cistus x purpureus</i>
Sticky catchfly	<i>Silene viscaria</i>
Common wallflower	<i>Erysimum cheiri</i>

Common name	Scientific name
Ephemeral wetland substrates	
Marsh bedstraw	<i>Galium palustre</i>
Water mint	<i>Mentha aquatica</i>
Soft rush	<i>Juncus effuses</i>
Water forget-me-not	<i>Myosotis scorpiodes</i>
Beaked sedge	<i>Carex rostrate</i>
Marsh cinquefoil	<i>Comarum palustre</i>
Meadowsweet	<i>Filipendula ulmaria</i>
Hemp agrimony	<i>Eupatorium cannabinum</i>
Cowslip	<i>Primula veris</i>
Devil's bit scabious	<i>Succisa pretensis</i>
Ragged robin	<i>Lychnis flos-cuculi</i>

Invertebrate Habitat Features

A range of invertebrate habitat structures have been recommended for incorporation onto brownfield habitat at the Manchester Nicholls site to provide habitats suitable for invertebrates and further increase the range of micro niches and biodiversity. Log piles, sandy piles, stone swirls and rope coils will be integrated to enhance the value for invertebrates and provide aesthetic interest.

It is recommended that a minimum of two of each enhancement feature described below are provided. Installation to be undertaken under supervision of an ecologist.

Log pile

Log piles made up of wood from broadleaved trees such as oak and beech, and from fruiting trees such as apple and pear will be installed, at least 100mm in diameter with the bark still on. Logs in contact with the substrate will remain damp underneath, which is vital for many invertebrates such as woodlice. Logs will be placed both vertically and horizontally in clusters; vertical standing wood will be incorporated by submerging the logs into the full depth of the substrate, ideally in the deeper sections, again using a range of diameters and lengths. Logs could be procured from tree removals on the site should these be suitable.

Figure 4.2 Examples of Log piles



Sandy piles

Many species of burrowing solitary bees and wasps require sandy areas to burrow and nest. Provision of sandy piles provides nesting opportunities for such invertebrates within close proximity of a foraging resource. Two sandy piles will be incorporated which will be compacted to form a sandcastle effect, and be 50cm high covering one square metre, with 30° angled sides. Rocks and stones may be placed on the surface to increase stability.

Figure 4.3 Sandy piles



Rope coil

Rope made from natural fibres will be used such as Manila rope which is suitable for general outdoor use. Manila rope is made from the leaves of the plant *Musa textilis* and will last up to 10 years, reducing maintenance requirements. The rope will be coiled in a spiral shape to cover an area of 1m²; the rope will be coiled loosely to ensure suitable gaps are created for invertebrates. Pegs will need to be used to harness the rope and ensure that it cannot blow away.

Figure 4.4 Rope coil



Horticultural Best Practice

The landscaped areas will require maintenance once established. The use of pesticides (herbicides, insecticides, fungicides and slug pellets) should be discouraged to prevent changes to the food chain, particularly on invertebrates, birds and/or mammals.

5.0 MANAGEMENT AND MONITORING

5.1 OVERVIEW

This section provides an overview of the relevant management and monitoring features of the ecological landscaping features at the site. These will be initially implemented for the 5 year period following completion of the development with applicable actions rolled out over an additional 30 year period as required.

The management plan will therefore be iterative in the medium to long-term. Suggestions can be made to alter the landscaping features or supplement the planting regime as necessary. Primarily, the management plan will include actions to maintain the ecological objectives for the habitat strategy, which are:

- Optimise biodiversity on site, measured by the range of wildlife supporting planting and wildlife using the site;
- Support invertebrates through a diverse range of floral species and suitable invertebrate niche habitats;
- Encourage use of the site by species highlighted in the UK and Greater Manchester BAP, including priority bird and bat species.

Roles and responsibilities are set out below:

- Management and any remedial actions are proposed to be undertaken by the grounds maintenance team.
- Monitoring is proposed to be undertaken by a suitably qualified ecologist (SQE). This monitoring will inform the requirement for any remedial actions.
- Powerleague Fives Limited will be responsible for ensuring that the management and monitoring is undertaken.

The management actions are summarised in Table 5.1. The table outlines the necessary responsibilities and key objectives for the first 5 years with monitoring surveys conducted in the summer, informing any management actions necessary to be undertaken in the autumn.

Table 5.1 Summary of management actions for first 5 Years (to be extended to 30 year period as appropriate)

Stage	Habitat Management Plan
Construction/ installation	Owing to specific habitat requirements, SQE to oversee installation of brownfield habitat
Upon project completion	Post-construction inspection to verify installed features match the plans across site
Management and monitoring actions post completion	Monitoring Actions - Single site visit to be conducted between May and August by a suitably qualified ecologist (SQE) to confirm: - Trees have not failed - Species diversity of grassland and sward length - Establishment of scrub - Establishment of biodiverse brownfield habitat including plant species mix, condition of substrate and condition of invertebrate enhancement features
	Management/Remedial Actions - Management (to be undertaken as required) - Watering of trees and scrub as required during first year after establishment - Yearly single late August/September cut of grassland labelled WF1 at Appendix A - Biannual cut back of scrub to restrict encroachment onto grassland (outside of nesting season) - Remedial (requirement based on findings of monitoring survey) - Replace any dead trees/scrub - Re-seeded grassland, thin out dominant species - Re-seed biodiverse brownfield habitat, thin out dominant species and remove invasive non- native species - Top up brownfield substrate - Replace/repair invertebrate features

5.2 ECOLOGICAL CONSTRAINTS TO MANAGEMENT

To avoid disturbing, harming or killing any nesting birds or their young, any maintenance and management of trees/scrub will take place outside of the breeding bird season (the breeding season is typically recognised as March-August inclusive). If this is not possible, a nesting bird check must take place, undertaken by an SQE, prior to any works taking place.

6.0 SUMMARY AND CONCLUSIONS

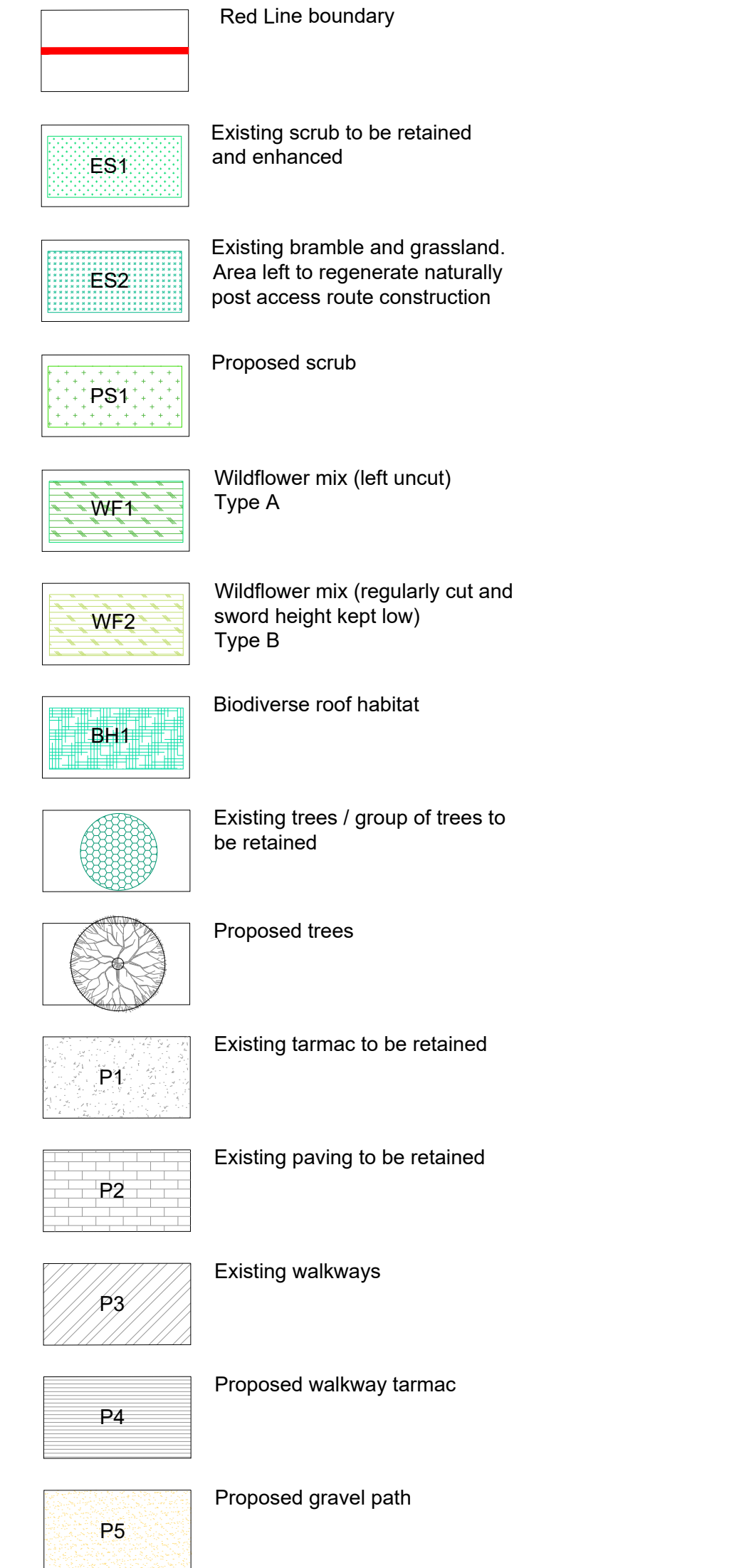
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Net gains in ecological value will be delivered in the medium to longer terms as a result of the proposed ecological enhancements and site management.

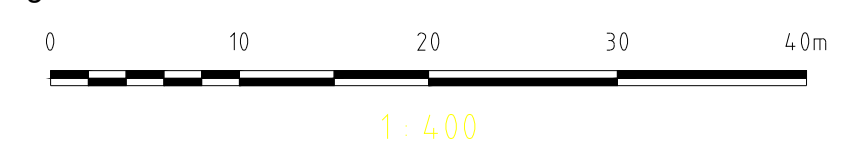
Legend

Application Boundary



Notes:

1. All buildups / structural support and footings to Engineers details.
2. For detailed site levels and drainage/SUDs, refer to drawings prepared by Architects and Engineers.
3. All materials subject are to be secured under condition.
4. For the padel court layout and canopy details, refer to Architects drawings.



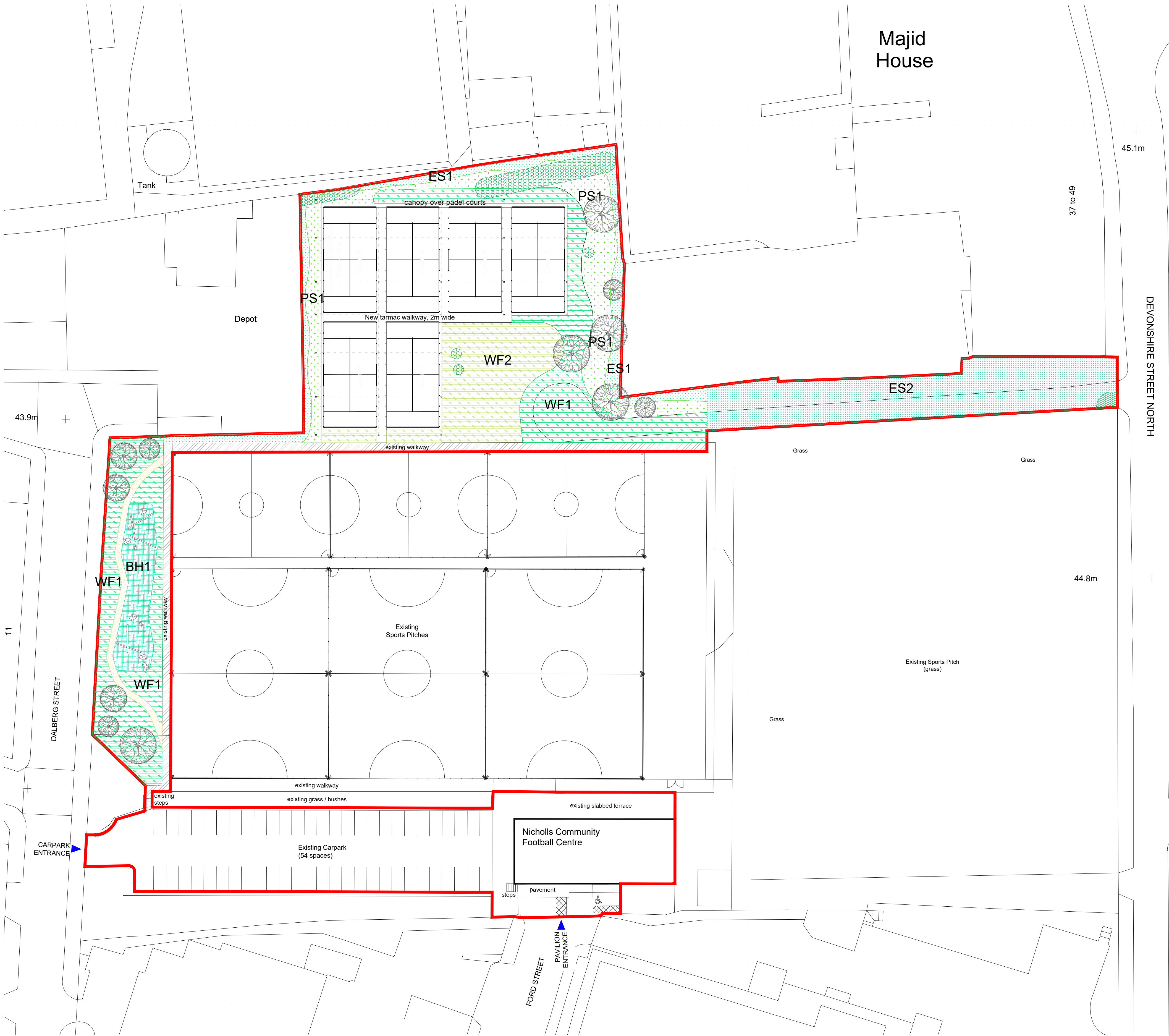
PLANNING

Powerleague,
Manchester Nicholls

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Project	Powerleague, Manchester Nicholls
Client	Powerleague Fives Ltd

Drawing Title	Date	Drawn	
Landscape General Arrangement Plan	25-03-2024	FM	Urban Landscape Partnership
Description	Scale	Check	
	1:400 at A1	NS	Trading name of SS Consulting (London) Ltd
Drawing Number	Rev.		
L050-PL-01	-		T: +44 (0) 7825 291 651 W: urbanlandscapepartnership.com



This drawing is to be read in conjunction with drawings prepared by the architects, structural engineers and service consultants and all other relevant details and information.
Any queries or discrepancies must be reported immediately to the landscape architect.
Do not scale: use figured dimensions only.
Drawing not for construction

Legend

Application Boundary

- Red Line boundary
- ES1 Existing scrub to be retained and enhanced.
Size of planting: Whips
Species: hawthorn, blackthorn, hazel
- ES2 Existing bramble and grassland.
Allow to regenerate naturally
post access route construction
- PS1 Proposed scrub with clearings.
Size of planting: Whips and feathered species
Species: hawthorn, blackthorn, dogwood, elm, rowan, elder
- WF1 Wildflower mix (left uncut)
Type A
Emorsgate EM2 - Standard General Purpose Meadow Mixture
- WF2 Wildflower mix (regularly cut and sword height kept low)
Type B
Emorsgate EL1 - Flowering Lawn Mixture
- BH1 Biodiverse roof habitat at ground level.
Low organic substrate (e.g recycled crushed brick, expanded clay, shale, composted pine bark) to be set out in mounds varying between 150mm-200mm in depth.
Substrate to be seeded with wildflower seed mix: BauderGREEN Flora Seed Mix.
Additional biodiversity interest provided by log piles, sandy piles, water trays and stone piles.

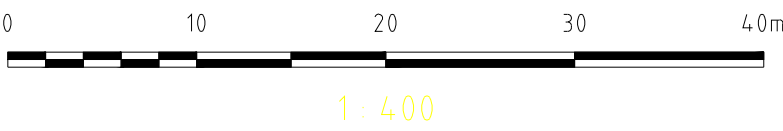
Notes:

- To be read in conjunction with L050-RP01 Landscape Statement, Arboricultural report by Arbtech and Ecological Report by Greengage.
- All planting proposals dependent on detailed soil sample testing and subject to detailed design layouts.

GENERAL NOTES:
This drawing is to be used for planting information only, and is subject to alteration through changes to the site layout or until approved by the area designer.

Any species substitution by the contractor must be verified with the Landscape Architect through the Job Architect.

Excavations: Contractors must ensure that they have full information relating to service and drainage positions before undertaking any excavations.



PLANNING

Powerleague,
Manchester Nicholls



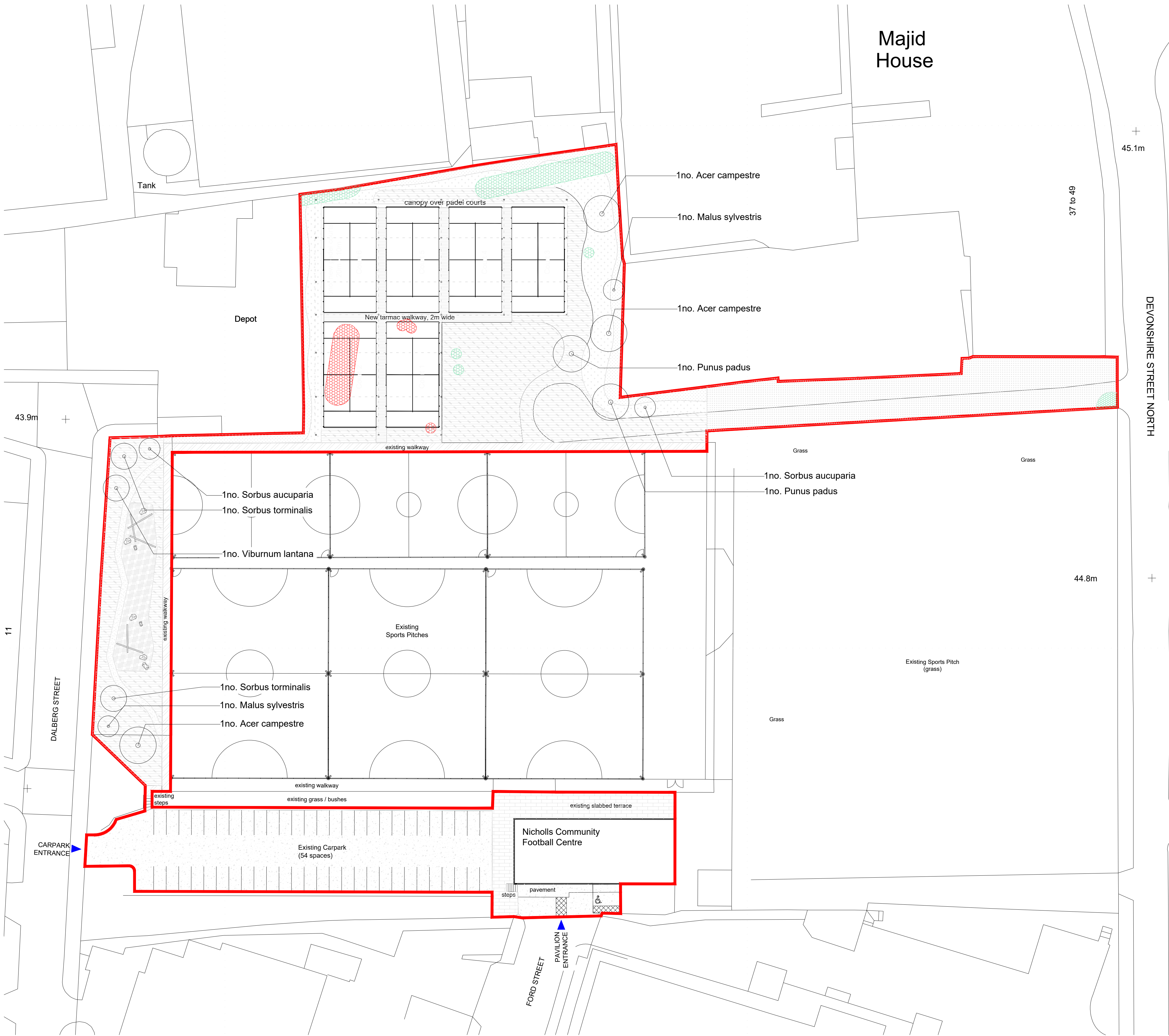
Rev.	Date	Drawn	Check	Item

Rev.	Date	Drawn	Check	Item

Project	Powerleague, Manchester
Client	Powerleague Fives Limited

Drawing Title	Planting Strategy Plan	Date	25-03-2024	Drawn	FM
Description		Scale	1:400 at A1	Check	NS
Drawing Number	L050-PL-03	Rev.	-		

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Any queries or discrepancies must be reported immediately to the landscape architect.

Do not scale: use figured dimensions only.

Drawing not for construction

Legend

Application Boundary

- Red Line boundary
- Existing tree / group of trees to be removed
Refer to drawings prepared by Arbrech Consulting Ltd
- Existing trees / tree group to be retained
Refer to drawings prepared by Arbrech Consulting Ltd
- Proposed trees
14-16cm girth
1.5m clear stem
Container grown

Notes:

- To be read in conjunction with L050-RP01 Landscape Statement, Arboricultural report by Arbrech and Ecological Report by Greengage.
- Exact tree locations may vary on site due to unknown services and below ground services.
- Planting in visibility splays to be under 600mm.
- All planting proposals dependent on detailed soil sample testing and subject to detailed design layouts.
- All tree planting within 3.0m of proposed subterranean drainage connections to have root barriers to engineers specification.
- Strata cells by GreenBlue Urban (or equivalent) to be used for tree root space to ensure longevity and success of specified tree.

GENERAL NOTES:
This drawing is to be used for planting information only, and is subject to alteration through changes to the site layout or until approved by the area designer.

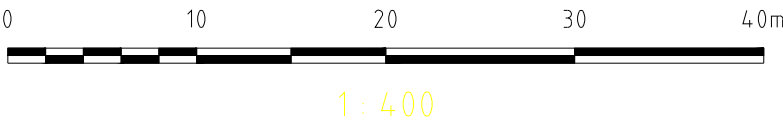
Any species substitution by the contractor must be verified with the Landscape Architect through the Job Architect.

Excavations: Contractors must ensure that they have full information relating to service and drainage positions before undertaking any excavations.

Tree bases to be mulched with ornamental bark mulch to a consolidated depth of 50mm.

Root barriers to be used for tree planting adjacent to kerbs/ services/ footpaths etc- Greenleaf Reroot 1000, or similar application refer to manufacturer's instructions.

All trees to be supplied clear stem 1.5m except feathered/multistem specimens where applicable.



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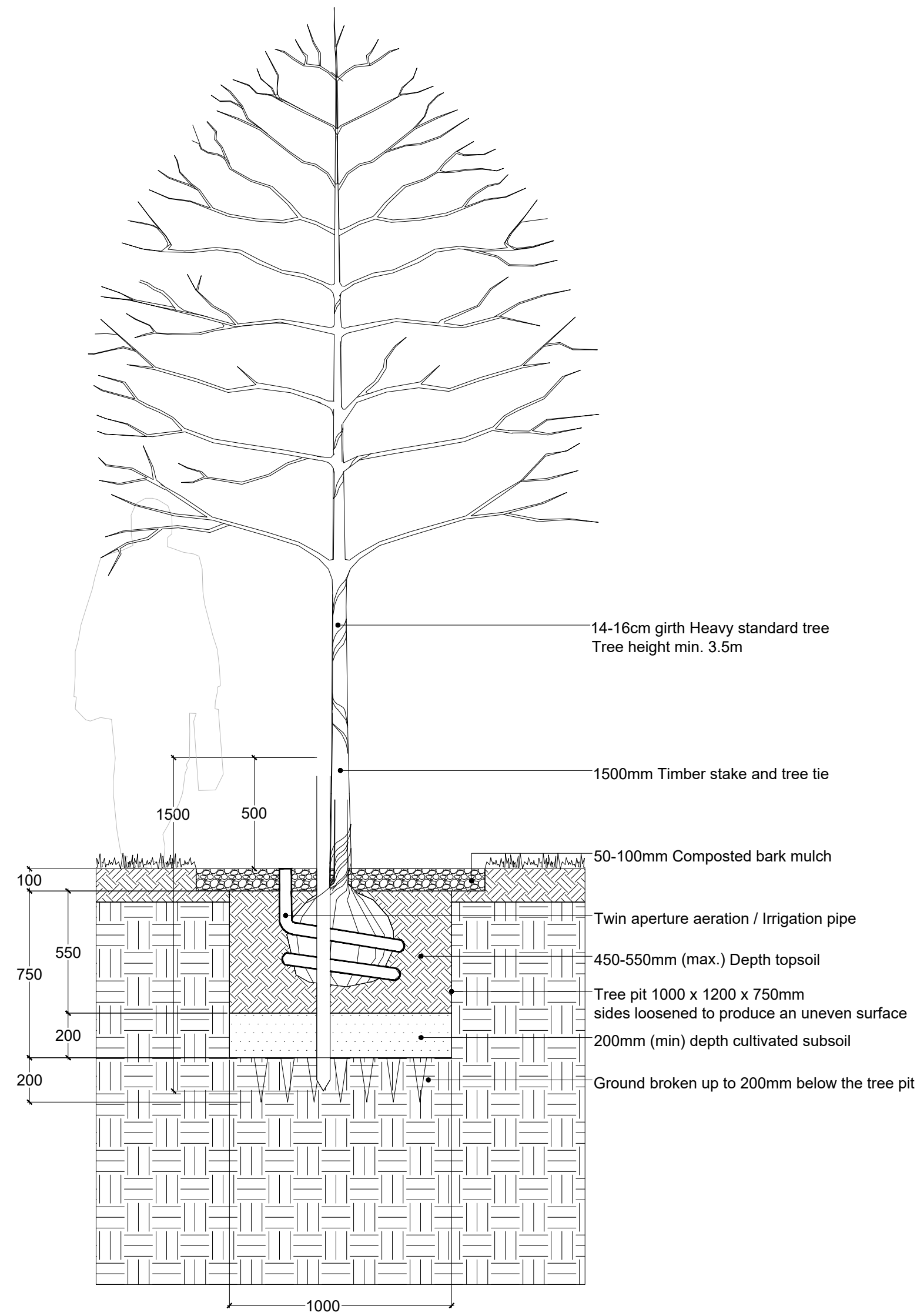


Rev.	Date	Drawn	Check	Item

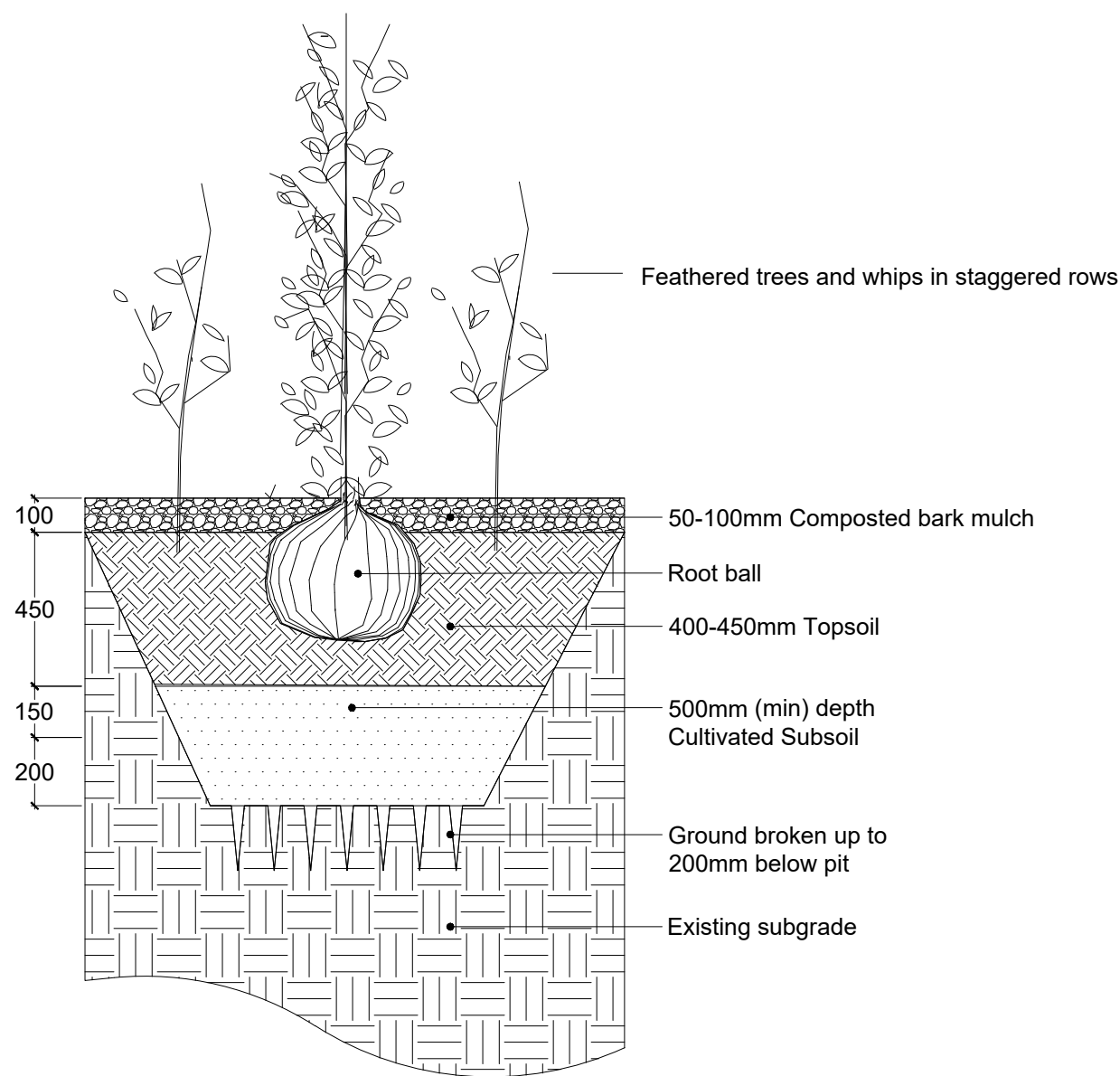
Rev.	Date	Drawn	Check	Item

Project	Powerleague, Manchester
Client	Powerleague Fives Limited

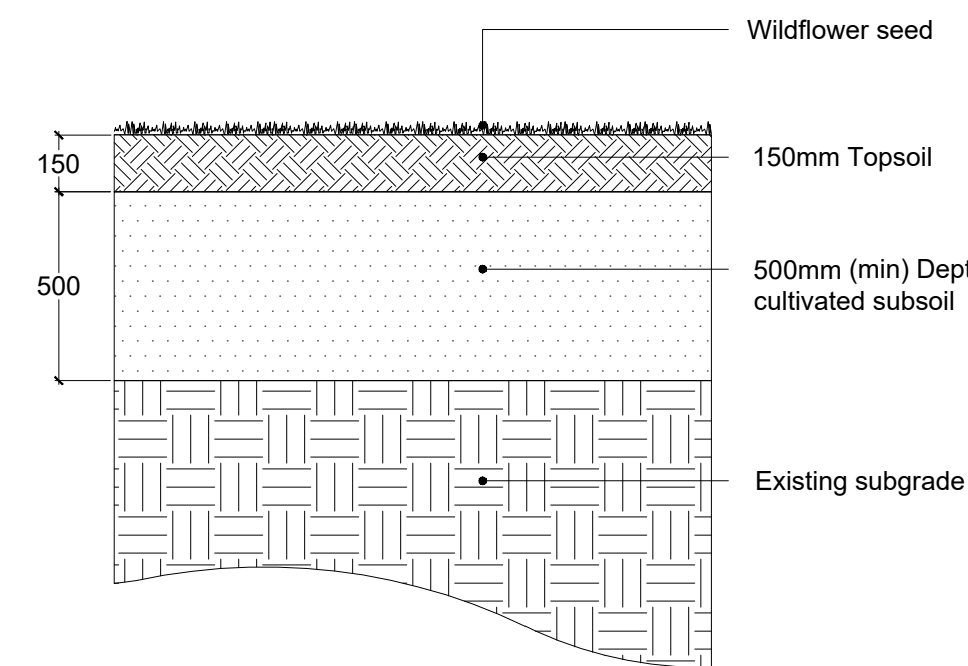
Drawing Title	Tree Planting Plan	Date	25-03-2024	Drawn	FM
Description		Scale	1:400 at A1	Check	NS
Drawing Number	L050-PL-02	Rev.	-		



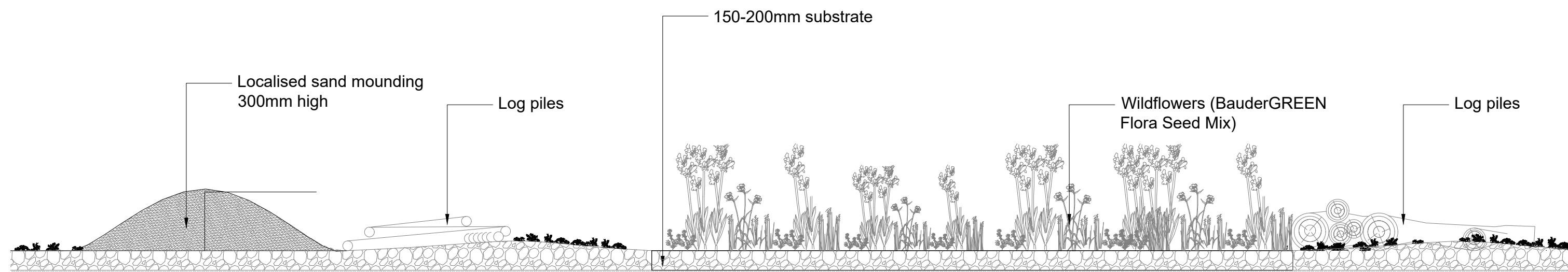
A Typical 'extra heavy' standard tree planting



B Typical scrub planting detail



C Typical wildflower detail



D Biodiverse roof habitat at ground level



1 : 20

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Powerleague,
Manchester Nicholls



Rev.	Date	Drawn	Check	Item

Rev.	Date	Drawn	Check	Item

Project	Powerleague, Manchester
Client	Powerleague Fives Limited

Drawing Title	Date	Drawn
Typical Landscape Details	25-03-2024	FM
Description	Scale	Check
	1:20 at A1	NS
Drawing Number	Rev.	
L050-PL-04	-	

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APPENDIX A LANDSCAPING PLANS

APPENDIX B LEGISLATION AND POLICY

B.1 LEGISLATION

Current key legislation relating to ecology includes The Environment Act³ Wildlife and Countryside Act 1981 (as amended)⁴; The Conservation of Habitats and Species Regulations 2019 ('Habitats & Species Regulations')⁵, The Countryside and Rights of Way Act 2000 (CRoW Act)⁶, and The Natural Environment and Rural Communities Act, 2006⁷.

The Environment Act, 2021

The Environment Act, 2021 mandates the requirement for new development in England to deliver a minimum 10% biodiversity net gain (BNG), as measured by the agreed metric (the current relevant version being the Statutory Metric), secured through planning condition as standard (as per schedule 14 of the Act). Approach to the delivery of BNG must follow the mitigation hierarchy, with avoidance of impact and on-site compensation/gains prioritised, ahead of the use of offsite biodiversity unit offsets, or the purchase of biodiversity credits.

The Act introduces the condition that no development may begin unless a biodiversity net gain plan has been submitted and approved by the local planning authority (LPA).

The Act also amends requirements of the NERC Act, 2006, adding the need to not just conserve, but enhance biodiversity through planning projects. Furthermore, it introduces the need for the LPA to have regard to relevant local nature recovery strategies and relevant species/protected site conservation strategies, when making their decision.

Under the Act, the enhancements must be maintained for at least 30 years.

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

The Conservation of Habitats & Species Regulations replace The Conservation (Natural Habitats, etc.) Regulations 1994 (as amended)⁸, and transpose Council Directive 92/43/EEC on the Conservation of Natural Habitats and Wild Fauna and Flora ('EU Habitats Directive')⁹, and Council Directive 79/409/EEC on the Conservation of Wild Birds ('Birds Directive')¹⁰ into UK law (in conjunction with the Wildlife and Countryside Act).

Regulation 43 and 47 respectively of the Conservation of Habitats & Species Regulations makes it an offence (subject to exceptions) to deliberately capture, kill, disturb, or trade in the animals listed in Schedule 2 (European protected species of animals), or pick, collect, cut, uproot, destroy, or trade in the plants listed in Schedule 5 (European protected species of plant). Development that would contravene the protection afforded to European protected species requires a derogation (in the form of a licence) from the provisions of the Habitats Directive.

Regulation 63 (1) states: 'A competent authority, before deciding to undertake, or give any consent, permission or other authorisation for, a plan or project which —

(a) is likely to have a significant effect on a European site or a European offshore marine site (either alone or in combination with other plans or projects); and

(b) is not directly connected with or necessary to the management of that site;

must make an appropriate assessment of the implications for that site in view of that site's conservation objectives.'

Wildlife and Countryside Act 1981 (as amended)

The Wildlife and Countryside Act 1981 (as amended) is the principal mechanism for the legislative protection of wildlife in Great Britain. This legislation is the means by which the Convention on the Conservation of European Wildlife and Natural Habitats¹¹ (the 'Bern Convention') and the Birds Directive and EU Habitats Directive are implemented in Great Britain.

The Countryside and Rights of Way Act 2000

The Wildlife and Countryside Act has been updated by the CROW Act. The CROW Act amends the law relating to nature conservation and protection of wildlife. In relation to threatened species it strengthens the legal protection and adds the word 'reckless' to the offences of damaging, disturbing, or obstructing access to any structure or place a protected species uses for shelter or protection, and disturbing any protected species whilst it is occupying a structure or place it uses for shelter or protection.

The Natural Environment and Rural Communities Act 2006

The Natural Environment and Rural Communities Act 2006 states that every public authority must, in exercising its functions, have regard, so far as is consistent with the proper exercise of those functions, to the purpose of conserving biodiversity. Biodiversity Action Plans provide a framework for prioritising conservation actions for biodiversity.

Section 41 of the Natural Environment and Rural Communities Act requires the Secretary of State to publish a list of species of flora and fauna and habitats considered to be of principal importance for the purpose of conserving biodiversity. The list, a result of the most comprehensive analysis ever undertaken in the UK, currently contains 1,149 species, including for example, hedgehog (*Erinaceus europaeus*), and 65 habitats that were listed as priorities for conservation action under the now defunct UK Biodiversity Action Plan¹² (UK BAP). Despite the devolution of the UK BAP and succession of the UK Post-2010 Biodiversity Framework¹³ (and Biodiversity 2020 strategy¹⁴ in England), as a response to the Convention on Biological Diversity's (CBD's) Strategic Plan for Biodiversity 2011-2020¹⁵ and EU Biodiversity Strategy (EUBS)¹⁶, this list (now referred to as the list of Species and Habitats of Principal Importance in England) will be used to guide decision-makers such as public bodies, including local and regional authorities, in implementing their duty under section 41 of the Natural Environment and Rural Communities Act 2006 'to have regard' to the conservation of biodiversity in England, when carrying out their normal functions.

Biodiversity Action Plans

Non-statutory Biodiversity Action Plans (BAPs) have been prepared on a local and regional scale throughout the UK over the past 15 years. Such plans provide a mechanism for implementing the government's broad strategy for conserving and enhancing the most endangered ('priority') habitats and species in the UK for the next 20 years. As described above the UK BAP was succeeded in England by Biodiversity 2020 although the list of priority habitats and species remains valid as the list of Species of Principal Importance for Nature Conservation.

Regional and local BAPs are still valid however and continue to be updated and produced.

Detail on the relevant BAPs for this site are provided in the main text of this report.

Legislation Relating to Nesting Birds

Nesting birds, with certain exceptions, are protected from intentional killing, destruction of nests and destruction/taking of eggs under the Wildlife and Countryside Act 1981 (as amended) and the CROW Act. Any clearance of dense vegetation should therefore be undertaken outside of the nesting bird season, taken to run conservatively from March to August (inclusive), unless an ecologist confirms the absence of active nests prior to clearance.

Legislation Relating to Bats

All UK bats and their roosts are protected by law. Since the first legislation was introduced in 1981, which gave strong legal protection to all bat species and their roosts in England, Scotland and Wales, additional legislation and amendments have been implemented throughout the UK.

Six of the 18 British species of bat have Biodiversity Action Plans (BAPs) assigned to them, which highlights the importance of specific habitats to species, details of the threats they face and proposes measures to aid in the reduction of population declines.

Although habitats that are important for bats are not legally protected, care should be taken when dealing with the modification or development of an area if aspects of it are deemed important to bats such as flight corridors and foraging areas.

The Wildlife & Countryside Act 1981 (WCA) was the first legislation to provide protection for all bats and their roosts in England, Scotland and Wales (earlier legislation gave protection to horseshoe bats only.)

All eighteen British bat species are listed in Schedule 5 of the Wildlife and Countryside Act, 1981 and under Annex IV of the Habitats Directive, 1992 as a European protected species. They are therefore fully protected under Section 9 of the 1981 Act and under Regulation 43 of the Conservation of Habitats and Species Regulations 2017, which transposes the Habitats Directive into UK law.

Consequently, it is an offence to:

- Deliberately capture, injure or kill a bat;
- Intentionally or recklessly disturb a bat in its roost or deliberately disturb a group of bats;

- Damage or destroy a bat roosting place (even if bats are not occupying the roost at the time);
- Possess or advertise/sell/exchange a bat (dead or alive) or any part of a bat; and
- Intentionally or recklessly obstruct access to a bat roost.

This legislation applies to all bat life stages.

The implications of the above in relation to the proposals are that where it is necessary during construction to remove trees, buildings or structures in which bats roost, it must first be determined that work is compulsory and if so, appropriate licenses must be obtained from Natural England.

B.2 PLANNING POLICY

National

National Planning Policy Framework

The National Planning Policy Framework (NPPF) 2023¹⁷ sets out the Government's planning policies for England, including how plans and decisions are expected to apply a presumption in favour of sustainable development. Chapter 15 of the NPPF focuses on conservation and enhancement of the natural environment, stating plans should 'identify and pursue opportunities for securing measurable net gains for biodiversity'.

It goes on to state: 'if significant harm to biodiversity resulting from a development cannot be avoided (through locating on an alternative site with less harmful impacts), adequately mitigated, or, as a last resort, compensated for, then planning permission should be refused'. Alongside this, it acknowledges that planning should be refused where irreplaceable habitats such as ancient woodland are lost.

Local

Manchester's Core Strategy¹⁸

Policy EN9 Green infrastructure

New development will be expected to maintain existing green infrastructure in terms of its quantity, quality, and multiple function. Where the opportunity arises and in accordance with current Green Infrastructure Strategies the Council will encourage developers to enhance the quality and quantity of green infrastructure, improve the performance of its functions and create and improve linkages to and between areas of green infrastructure. Where the benefits of a proposed development are considered to outweigh the loss of an existing element of green infrastructure, the developer will be required to demonstrate how this loss will be mitigated in terms of quantity, quality, function and future management. Key features of Manchester's green infrastructure will include:

- The continued development of a network of green spaces, water bodies, canals, paths and cycleways, with priority given to those parts of the City where there is an identified existing lack of open space. The Council will seek to protect existing street trees and promote new planting, particularly where this can enhance green links in the urban area.

- The continued maintenance and management of the Rivers Mersey and Irwell and their tributaries, for example the River Irk, River Medlock, Chorlton Platt Gore, Gatley Brook, Moston Brook and adjoining land, with regard to their multiple functions including recreation, flood management, and biodiversity.
- The provision of new, and improvements to the quality and accessibility of existing green infrastructure assets, to mitigate for any loss of green infrastructure as a result of development such as the Metrolink extension programme.
- The encouragement of green roofs, green walls, tree planting and other forms of green infrastructure to allow for the adaption to climate change in heavily urbanised areas.

New green infrastructure provision should be an exemplar of best practice and innovation in terms of both its design and management.

Policy EN 15 Biodiversity and Geological Conservation

The Council will seek to maintain or enhance sites of biodiversity and geological value throughout the City. Particular consideration will be given to:

- sites with international or national designations for their biodiversity value. Manchester contains one Site of Special Scientific Interest (SSSI) (Cotteril Clough); there is a Special Area of Conservation (SAC) and an SSSI just over the border in Oldham (both on the Rochdale Canal within Oldham);
- other sites of biodiversity value, including Sites of Biological Importance (SBIs) and Local Nature Reserves (LNRs); Manchester currently has 35 SBIs (including the Rochdale and Ashton Canals) and 7 LNRs; priority habitats found within Manchester, as listed in the Manchester Biodiversity Strategy and included in the Greater Manchester Biodiversity Action Plan (GM BAP);
- protected and priority species, as listed in the Manchester Biodiversity Strategy and included in the Greater Manchester Biodiversity Action Plan (GM BAP);
- sites that are recognised for their geological importance;
- the Council's objective to protect and conserve the City's existing trees and woodlands and the aim for a net increase in trees across the City.

Developers will be expected to identify and implement reasonable opportunities to enhance, restore or create new biodiversity, either on-site or adjacent to the site, contributing to linkages between valuable or potentially valuable habitat areas where appropriate, with reference to:

- the Manchester Biodiversity Strategy, which provides further details of priority habitats within Manchester and opportunities for biodiversity enhancement including corridors such as the Mersey, Medlock and Irk river valleys, the canals and disused railway lines and areas of managed greenspace particularly in parks;
- the Green Infrastructure Framework for Greater Manchester, which encompasses an ecological framework that seeks to guide and inform habitat creation and repair,

- including identifying large 'biodiversity opportunity areas' including the Moston Brook Corridor and Nutsford Vale;
- the Open Space, Sport & Recreation Study, which identifies areas where there is a deficit of natural and semi-natural greenspace, opportunities for green corridors and other linkages;
- Manchester's Climate Change Action Plan;
- the Strategic Flood Risk Assessment (SFRA) for Manchester;
- the Habitats Regulations Assessment (HRA) for Manchester, which gives detailed consideration to Special Areas of Conservation (SACs), including the Rochdale Canal SAC just outside the district boundary;
- the River Basin Management Plan for the North West;
- the Manchester Tree Strategy.

Any adverse impacts on biodiversity will need to be justified against the wider benefits of the proposal, assessed against other LDF policies. Where adverse impacts are unavoidable, developers will be required to provide appropriate mitigation and/or compensation.

Development should wherever possible seek to maintain, enhance or restore existing geology.

REFERENCES

- ¹ Bauder (2015); *Technical Data Sheet: Bauder Biodiverse Substrate*. Bauder, Ipswich
- ² Bauder (2015); *Flora 3 Seed Mix Leaflet*. Bauder, Ipswich
- ³ GOV.UK. (2021). *Environment Act 2021*. Available at: <https://www.legislation.gov.uk/ukpga/2021/30/contents/enacted>
- ⁴ HM Government, (1981); *Part I and Part II of Wildlife and Countryside Act (as amended)*. HMSO
- ⁵ HM Government, (2017); *The Conservation of Habitats and Species Regulations 2017*. Statutory Instrument 2017 no. 490
Wildlife Countryside. OPSI
- ⁶ HM Government, (2000); *The Countryside and Rights of Way Act*. HMSO
- ⁷ HM Government, (2006); *Natural Environment and Rural Communities Act 2006*. HMSO
- ⁸ HM Government, (1994); *The Conservation (Natural Habitats, &c.) Regulations*. HMSO
- ⁹ CEC (Council of the European Communities), (1992); *Council Directive 92/43/EEC of 21 May 1992 on the conservation of natural habitats and of wild fauna and flora*
- ¹⁰ The European Parliament And Of The Council, (30 November 2009); *Directive 2009/147/EC On The Conservation Of Wild Birds (Codified Version)*
- ¹¹ CEC (Council of the European Communities), (1979); *Convention on the Conservation of European Wildlife and Natural Habitats (Bern, 19.IX.1979)*. EC
- ¹² UK Biodiversity Action Plan (2007). *UKBAP Priority Species and Habitats*. <http://www.ukbap.org.uk/newprioritylist.aspx>
- ¹³ JNCC and Defra (on behalf of the Four Countries' Biodiversity Group) (2012). *UK Post-2010 Biodiversity Framework*. July 2012. Available from: <http://jncc.defra.gov.uk/page-6189>
- ¹⁴ Defra (2011). *Biodiversity 2020: A strategy for England's wildlife and ecosystem services*
- ¹⁵ Convention on Biological Diversity (CBD) (2010). *Decision X/2 Strategic Plan for Biodiversity 2011-2020, including Aichi Biodiversity Targets*. Available at <https://www.cbd.int/decision/cop/?id=12268>
- ¹⁶ European Commission (2012). *Our life insurance, our natural capital: an EU biodiversity strategy to 2020* European Parliament resolution of 20 April 2012 on our life insurance, our natural capital: an EU biodiversity strategy to 2020 (2011/2307(INI))
- ¹⁷ GOV.UK. (2023). <https://www.gov.uk/government/publications/national-planning-policy-framework--2>
- ¹⁸ Manchester City Council (2012) *Manchester's Local Development Framework. Core Strategy Development Plan Document*