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HABITAT MANAGEMENT AND MONITORING PLAN

PLANIT

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1 INTRODUCTION

Scope and Purpose

This Habitat Management & Monitoring Plan (HMMP) has been prepared by Planit. It provides information about the landscape and habitat management for the proposed development at All Saints Library.

Planning

This report has been prepared to support the new All Saints Library development. Planning reference: *144697/FO/2025*.

The HMMP has been produced in response to the condition as follows:

144697/FO/2025 - Condition 5:

Prior to the commencement of development, a 30-year Habitat Management and Monitoring Plan for the on-site biodiversity enhancements shall be submitted to and approved in writing by the Local Planning Authority. The development shall be implemented and maintained in accordance with the agreed details, which shall be retained thereafter.

As the habitats proposed are minimal and comprise a small number of trees, some introduced shrub and boundary planting, the use of the Natural England HMMP template was considered to be disproportionate and not required. Therefore, this bespoke HMMP has been produced broadly following the principles of a Landscape Ecology and Management Plan (LEMP).

The report outlines the various soft landscape zones and elements which will be created as part of this proposal and puts forward the necessary actions required for their ongoing maintenance and management to ensure that the proposed Biodiversity Net Gain (BNG) is delivered.

The soft landscape has been designed to contribute to the ecological value of the proposals including pollinators, native, semi-native varieties and those that attract insects or provide habitat for invertebrates.

Consideration is given to the ecological trends and constraints on site that might influence management. Local and regional actions plans have been considered during the design process including Greater Manchester's Local Nature Recovery Strategy.

This HMMP sets out the management framework and prescriptions for the proposed soft landscaping.

A detailed habitat/planting plan with species schedules will be submitted to and approved by the Local Planning Authority prior to implementation, to ensure delivery in line with the management objectives set out in this document. Please refer to the proposed detailed planting schedule included within this document on page 16-17.

Purpose of the Management Plan

The purpose of the Habitat Management & Monitoring Plan (HMMP) is to:

• Provide a detailed breakdown of the proposed management plan that relates to the new All Saints Library.

• Give assurance that management requirements are integral to the development and that they are sustainable.

• Ensure there is a long-term management plan in place that will maintain a high-quality scheme for the future. This includes the management of habitats and publicly accessible areas.

Timescales

This HMMP will cover the initial five-year establishment maintenance of the whole scheme as well as a further twenty-five years of long-term management, giving a total minimum period of 30 years management for the All Saints Library development.

This document will secure the sustainable management of the landscape and ecological features into the long-term future.

The plan should be reviewed annually to ensure a high-quality and ecologically rich environment is maintained.

The management plan must be fluid and adaptable, acting as a working handbook for day-to-day management activities as well as annual reviews.

It should be capable of being updated to capture changes in the natural evolution of habitats as well as changes in site use, biodiversity opportunities, and climate change.

Roles and Responsibilities

It is vital for any Management Plan to move forward the key parties and their roles are defined at the earliest stage. In respect of the site the key parties will be:-

Site Owner (Manchester Metropolitan University)

Manchester Metropolitan University will deliver the scheme in accordance with the approved plans and are responsible for the maintenance of the site.

The site owner will appoint a suitable Management Company who will appoint and coordinate a Management Team to carry out the physical operations to maintain the site for the 30 year period and long term future.

They will be responsible for appointing and coordinating a Management Team to carry out the physical maintenance operations in line with the aims and objectives.

They will work closely with the Management Team to ensure the HMMP is reviewed and updated to respond to the site as it develops and to current guidelines.



2 ECOLOGICAL OBJECTIVES

Ecological Objectives

The HMMP is to ensure that impacts on any ecological receptors are adequately mitigated and compensated for. This report describes measures to avoid, reduce, mitigate, enhance and compensate for likely adverse effects on ecological receptors resulting from the development.

The HMMP aligns with the post-development habitat condition requirements within the biodiversity net gain metric, as provided by Tyler Grange. The results of the Statutory Biodiversity Metric are based on the retained, and created habitats within the site being maintained at a certain condition, as prescribed by the condition assessment sheets published by Natural England. In order to achieve these conditions and maintain them, specific establishment and management practices will be required. Details of habitat establishment and long-term management have been provided by this HMMP. This sets out the prescriptions for the establishment and maintenance of the habitats on site for 30 years.

The HMMP addresses the potential impacts of the proposed development on the existing ecology and nature conservation at the Site and within the immediate surrounding land, having due regard to recommended avoidance, mitigation and compensation measures in accordance with BS42020 (2013): Biodiversity – Code of practice for planning and development.

The measures proposed will ensure that the biodiversity protection and enhancements for the site are incorporated into both the construction and operational phases of the development, and that overall there is a net gain in the biodiversity value of the Site in accordance with National Planning Policy Framework (NPPF) and the Planning Practice Guidance (PPG).

The NPPF advises that “opportunities to incorporate biodiversity in and around developments should be encouraged” (paragraph 118) and paragraph 109 advises that the planning system should contribute to and enhance the natural and local environment through a number of means, including

“Minimising impacts on biodiversity and providing net gains in biodiversity where possible, contributing to the Government’s commitment to halt the overall decline in biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures.”

Ecology Baseline

The following Information has been extracted from Tyler Grange's All Saints Library Ecology Report, [19/11/2025]. TG Report No. 13126_R06b_MF.

Baseline Information and Overview

This Section provides the baseline conditions for the ecology of the Site and an assessment of the impacts resulting from the proposed development.

The desk study found: No statutory or non-statutory nature conservation designations are likely to be affected by the proposed development;

- Habitats on-site consist of a building, hardstanding and five trees with the additional note of a small area of introduced shrub to the south of the site and other green roof on the roof of B1 of which will be included in the updated habitat features plan.
- Habitats present on site were of negligible ecological importance.
- The five trees within the site boundary are mature but not native species. The tree canopy is predominantly continuous, with gaps in canopy cover making up <10% of total area and no individual gap being >5m wide.
- There is little or no evidence of an adverse impact on tree health by human activities (such as vandalism, herbicide or detrimental agricultural activity). Natural ecological niches for vertebrates and invertebrates are present, such as presence of deadwood, cavities, ivy or loose bark.
- No evidence was found to show that void-dwelling bat species were present and there was no direct evidence of bats recorded externally or internally;
- A number of features offer 'low' suitability for roosting bats including holes in brickwork, and gaps in windows leading directly into the interior of the building. Given the structure of this building (i.e. no roof void), the high temperate of the spaces with crevices and the urbanised location, it is considered to be of low potential for roosting bats.
- All offsite trees to be of low or negligible potential to bats. All other trees including five on-site trees in north-east of site were identified to provide negligible bat roosting potential, however each possess bird boxes.

Refer to the BNG Metrics and Reports produced for this development, should further information on habitats and their condition and distinctiveness be required:

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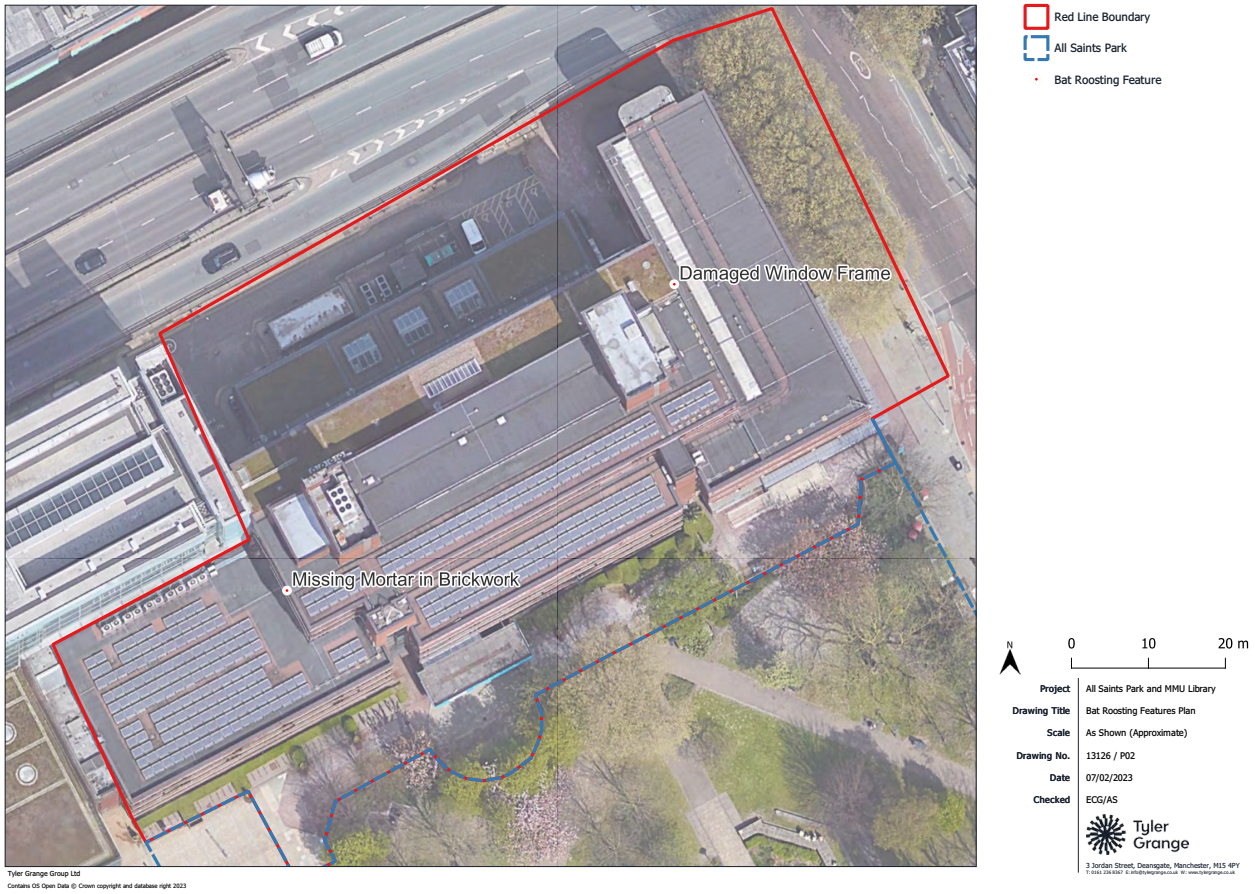
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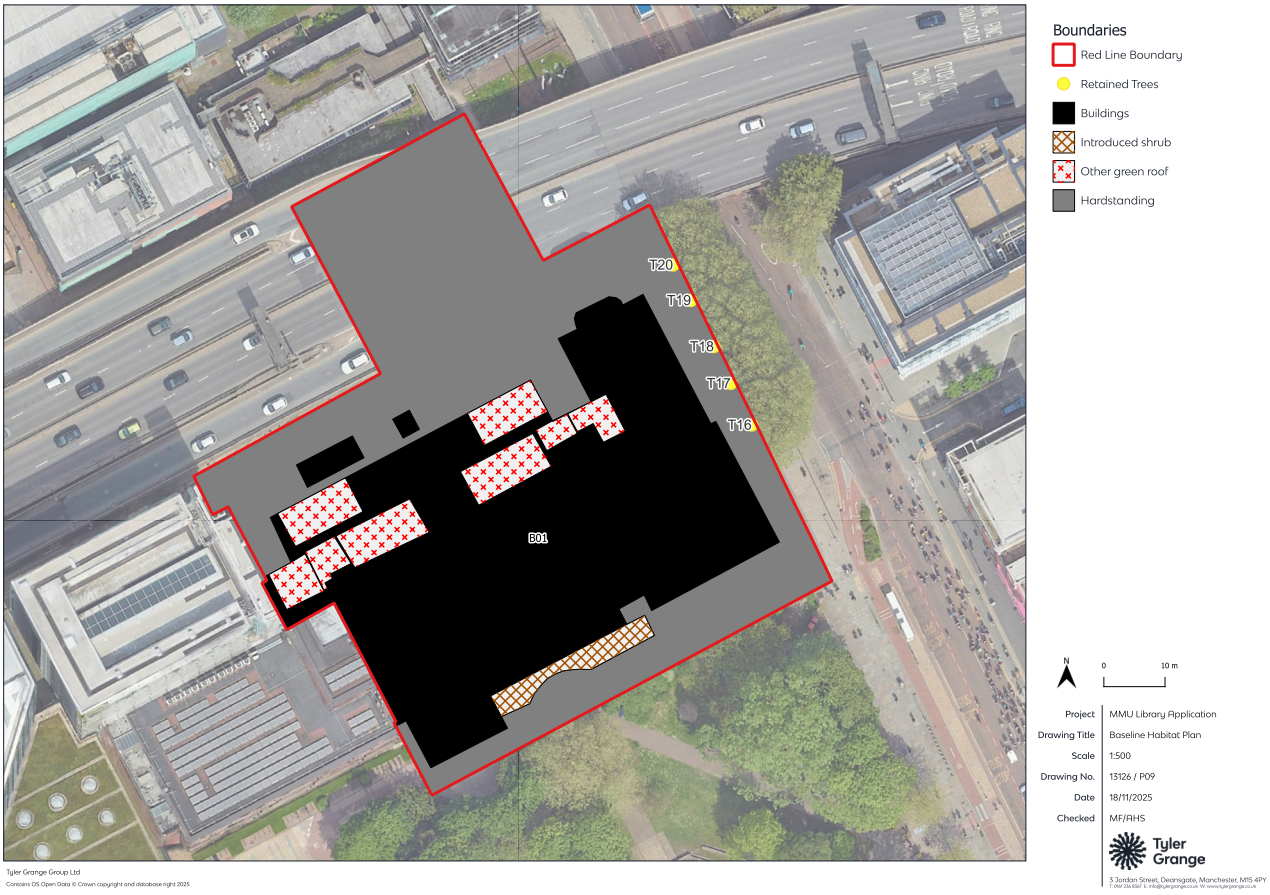
13126_R08a_Library_Application_Report_27112025_PLAN_BatRoosting

13126_R08b_Library_Application_Report_08122025

13126_Biodiversity Statutory Metric _27112025_Application



Bat Roosting Plan



Baseline Habitat Plan



3 LANDSCAPE PROPOSALS

Landscape Vision

The landscape masterplan for the public realm looks to create a series of high quality connecting and dwell spaces that support the new library and existing University campus.

This draws upon the recently installed public realm proposals to All Saints Park and surrounding streets, with the ambition to create a high quality, holistic campus wide public realm aesthetic.

The proposals look to connect back with the Oxford Road corridor creating an improved, welcoming arrival to the new library.

The five existing mature plane trees between the library and the road will be retained. A long-term management regime will be implemented to manage the crown size, open up views and ensure the good health of the trees for years to come.

Creation of a primary pedestrian route fronting the library is proposed providing generous circulation spaces with an enhanced library arrival and an improved connection to All Saints Park.

A Boulevard of multi-stem trees and lush ornamental planting framing intimate learning pockets is proposed to the corridor between the new All Saints Library and the All Saints West Gateway building. Feature seating marks the interface with the main circulation zone.

Pedestrian movement routes reflect desire lines and enable access for maintenance equipment.



1. Arrival space
2. Primary pedestrian route
3. The boulevard
4. Service yard
5. Mancanian Way
6. Oxford Road
7. All Saints Park

N

Landscape Proposals

Landscape features / habitats

1. Existing trees - Retained

The five existing mature plane trees (Platanus x hispanica) between the library and the Oxford Road Corridor will be retained. A long-term management regime will be implemented (to be secured via submission of this management and monitoring plan). This will help to manage the crown size, open up views and ensure the good health of the trees going forward.

For more detailed information on species and management, refer to Arboricultural reports:

12748AIAv3 - Arboricultural Impact Assessment
12748AMSv3 - Arboricultural Method Statement
12748TCRv3 - Tree Survey and Constraints Report

2. Proposed trees

Individual trees will be planted for their distinctive form, seasonal interest, or ecological value. Trees will be of an appropriate scale for the site and, where possible, native species or forms of native species will be used.

Trees will be of a character in keeping with those of the local area such as All Saints Park to establish a cohesive character.

Anchor trees will be included to highlight entry points and key views. Evergreen tree species will be proposed to the boulevard to ensure a lush and verdant corridor with year round interest.

3. Ornamental planting PL1

Shrub and herbaceous planting enhances the visual appeal of the landscape while providing ecological value. This typically consists of a mix of herbaceous perennials, shrubs, ferns and bulbs, selected for their aesthetic qualities and value to wildlife.

Planting will include high percentages of evergreen and semi evergreen species that will ensure structure and visual interest all year round. These will be interspersed with colourful highlights of foliage, flowers and grasses that display seasonal interest and contribute to the ecological value of the proposals including pollinators, native, semi- native varieties and those that attract insects or provide habitat.

The palette has been enhanced to include additional species that can boost the planted area's longevity, and resilience. Species selected will be easy to maintain and are safe to be included within a public environment.

4. Robust planting PL2

This typology is used in areas that require a harder-wearing planting mix, for example planting beds adjacent to the road or to the boundary of the service yard. Low maintenance, evergreen shrubs be selected to provide structure and screening all year round. This will consist of ground-layer vegetation, and evergreen shrubs that thrive in exposed, low nutrient and shady conditions.

Low maintenance soft planting under the existing retained trees along Oxford Road will be planted to help protect the root protection areas, increase biodiversity value and create a welcoming approach to the library main entrance.

5. Boundary planting

Boundary planting will be used to provide structure, seasonal interest, and add valuable habitats for wildlife within the landscape. They are positioned to provide a natural boundary and screening of the service yard and car park under the Mancunian Way.

Ornamental species have been selected for their aesthetic appeal and to complement the adjacent ornamental planting beds. Hedging could offer nesting sites for birds or shelter for small mammals.

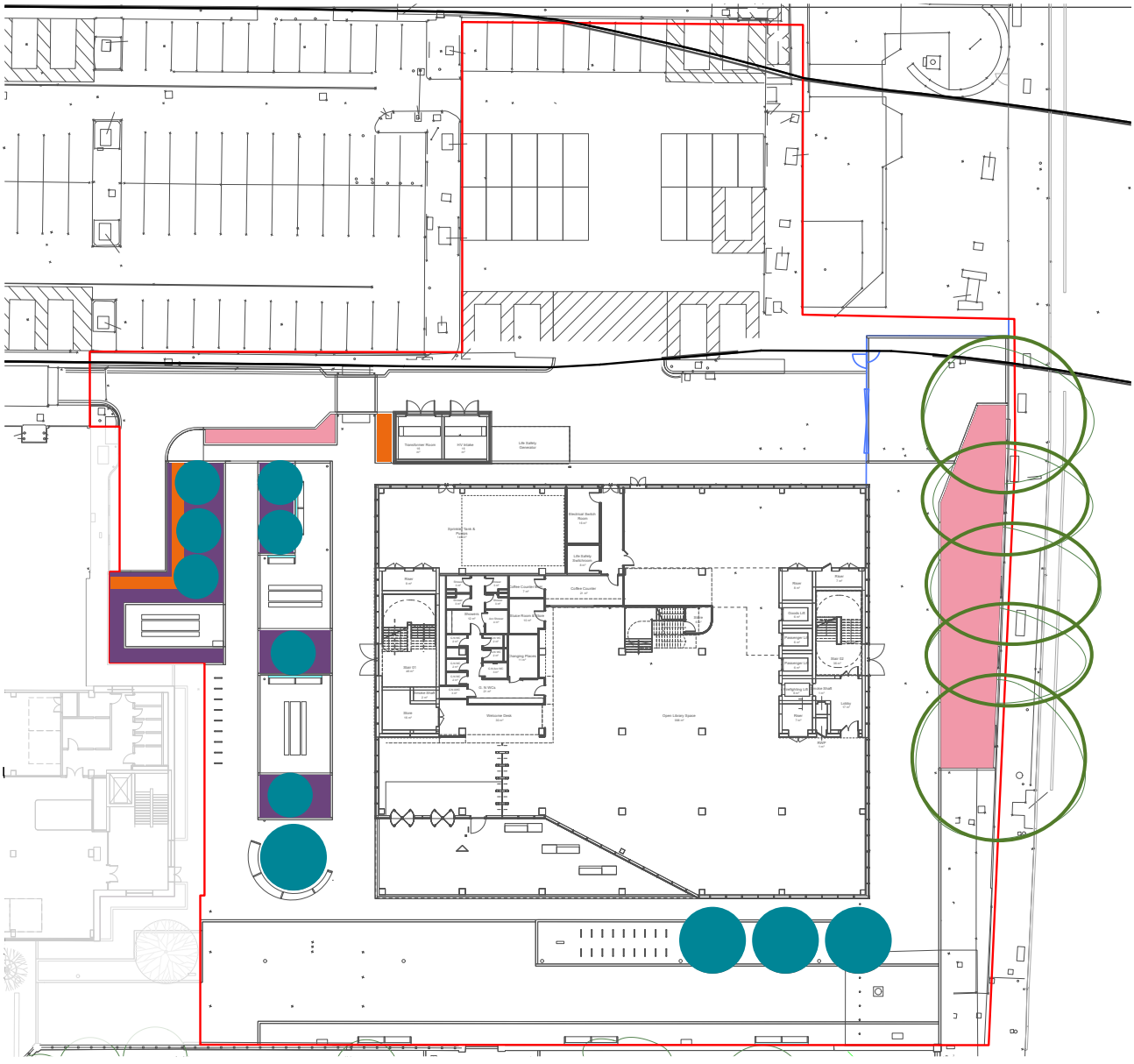
1. Retained Existing Trees

2. Proposed Trees

3. Ornamental planting PL1

4. Robust planting PL2

5. Boundary planting



Landscape Features / Habitats Plan

LTP Trees				
Latin Name	Form	Girth	Size	Root Zone
Acer campestre 'Streetwise'	Standard	40-45cm	5-6x transplanted, semi mature, 2m min clear stem	RB
Betula utilis jacquemontii 'Snow Queen'	Multistem	N/A	5x 400-500cm height, 150-200cm spread, Multistem, 3 stems minimum	RB
Osmanthus × burkwoodii	Multistem	N/A	450cm, Umbrella Multistem, 5 breaks, Clear stem min 75cm	RB
Tilia cordata 'Greenspire'	Standard	40-45cm	5-6x transplanted, semi mature, 2m min clear stem	RB

Tree Planting Schedule



Softworks Plan

Ornamental Planting PL1			
Latin Name	Abbreviation	Pot Size	Density
Ajuga reptans 'Catlin's Giant'	Aj r CG	3l	8/m2
Alchemilla mollis	Al m	3l	8/m2
Anemanthele lessoniana	An l	3l	5/m2
Anemone hupehensis var. japonica 'Prinz Heinrich'	An h PH	3l	5/m2
Anemone x hybrida 'Honorine Jobert'	An h HJ	3l	5/m2
Asplenium scolopendrium	As s	3l	8/m2
Carex 'Ice dance'	Ca ID	3l	5/m2
Choisya × dewitteana Apple Blossom	Cxd	5l	5/m2
Crocosmia 'Lucifer'	Cr L	3l	5/m2
Fatsia japonica	Fj	5l	1/m2
Geranium macrorrhizum 'White-ness'	Ge m WN	5l	5/m2
Geranium 'Roazanne'	Ge R	3l	5/m2
Gillenia trifoliata	Gi t	5l	5/m2
Hakonechloa macra	Ha m	3l	5/m2
Helleborus argutifolius	He a	3l	5/m2
Helleborus niger	He n	3l	5/m2
Heuchera 'Green Spice'	He c G	3l	8/m2
Liriope muscari 'Monroe White'	Lm MW	3l	8/m2
Lunaria redviva	Lu r	3l	8/m2
Luzula nivea	Lu n	3l	5/m2
Matteuccia struthiopteris	Ma s	3l	8/m2
Molinia 'Poul Petersen'	Mo PP	5l	5/m2
Persicaria affinis 'Darljeeling Red'	Pe a DR	3l	8/m2
Persicaria bistorta 'Superba'	Pe b S	5l	5/m2
Polystichum setiferum 'Herrenhausen'	Po s	5l	5/m2
Tellima grandiflora	Te g	5l	5/m2
Tiarella cordifolia	Ti c	3l	8/m2

Bulb Layer			
Narcissus 'Cheerfulness'	Na C	14/16cm	10/m2
Narcissus obvallaris	Na o	14/16cm	10/m2

Screening Planting PL2			
Latin Name	Abbreviation	Pot Size	Density
Asplenium scolopendrium	As s	2l	8/m2
Euphorbia amygdaloides 'Purpurea'	Eu a P	2l	8/m2
Euphorbia amygdaloides 'Robbiae'	Eu a R	2l	8/m2
Fatsia japonica	Fj	10l	5/m2
Geranium macrorrhizum 'White-ness'	Ge m WN	2l	5/m2
Hedera helix 'Arborescens'	Hh A	2l	8/m2
Liriope muscari	Lm	2l	8/m2
Liriope muscari 'Monroe White'	Lm MW	2l	8/m2
Luzula nivea	Lu n	2l	5/m2
Mahonia eurybracteata	Ma e	2l	5/m2
Pachysandra terminalis	Pa t	2l	10/m2
Ruscus aculeatus	Ru a	2l	5/m2
Sarcococca confusa	Sa c	2l	5/m2
Skimmia japonica 'Fragrans'	Sk j F	2l	5/m2
Viburnum davidii	Vi d	2l	8/m2

Boundary Planting				Column1
Latin Name	Abbreviation	Pot Size	Height	Notes
Carpinus betulus	Cb	Instant Screen / Boundary	1200mm high	Plant 1300mm high and cut top to provide an neat overall hedge height of 1200mm



4 ARBICULTURAL OBJECTIVES

Arboricultural Objectives

The following Information has been extracted from Amenity Tree arboricultural report All Saints Library Development, Manchester No. 12748_v3-AIA/AMS/TCR

Overview and report summary

The tree survey was completed by a suitably qualified Arboricultural Surveyor - Amenity Tree - on 7th August 2025. The survey was completed in accordance with BS5837. A measured topographical survey was used to identify the location of trees and their surrounding context.

All trees within the site boundary are due to be retained and protected.

The scheme will deliver an improvement in the trees long term health as the amelioration of the soils in the immediate vicinity of tree stems is proposed.

The protection of the retained trees during the construction stage is detailed in the Arboricultural Method Statement (AMS). This report provides recommendations for protection to demonstrate how this can be achieved.

Root Protection Areas have been plotted in line with the guidance given in BS 5837: 2012 where ground constraints have had or are likely to effect the root morphology of trees e.g. where underground utilities or building foundations have obstructed root growth this shall require formal confirmation by excavation to establish presence or absence of significant rooting material. No RPA modifications have been shown for this scheme.

The scheme proposes the introduction of 11 new trees in various areas including street trees within the arrival and movement zone and multi stem trees within the boulevard.

Long-term Tree Management and Social Proximity

The proximity associated with retained trees has been recognised in relation to the potential impacts of tree shading and future canopy growth towards new structures and habitable spaces.

A long-term management plan has been proposed for the retained trees to reduce crowns to create space around the trees and allow more light through the canopy over time. Management will consider the long term health and safety of the trees;

Management and Maintenance Operations

All tree surgery work should be undertaken in accordance with the requirements of BS 3998:2010 British Standard Recommendations for Tree Work and BS 5837:2012 Trees in Relation to Design, Demolition and Construction.

Any tree works should be undertaken outside of the bird breeding season (March to August inclusive) or following prior inspection for nesting birds by an ecologist.

Management Objectives

The main management objective for trees and shrubs is to ensure the establishment and maintenance of healthy attractive and safe specimens which support a variety of wildlife.

All tree surgery work should be undertaken in accordance with the requirements of BS 3998:2010 British Standard Recommendations for Tree Work and BS 5837:2012 Trees in Relation to Design, Demolition and Construction.

Specific Management Prescriptions

Master planning of the development has been informed by arboricultural recommendations to retain all five existing trees on site. These will continue to be managed in accordance with BS 5837:2012. Critically, this requires the implementation of physical protection measures to safeguard the retained trees, including robust protection in the form of a barrier to BS 5837:2012, during all phases of construction work. The importance of such matters cannot be overlooked if a successful outcome is to be ensured. Further details will be provided prior to construction in a Tree Protection Plan (TPP) and Arboricultural Method Statement (AMS).

Retained Trees Management Objectives

The landscaping plan and proposed management have been developed to enhance the biodiversity of the site.

Influencing Factors for Management

Existing trees will be managed to maintain their health and amenity value as well as to contribute to the ecological value of the Site.

Objectives

Retain trees and carry out a long-term management plan to reduce crowns whilst considering the health and safety of the trees;

Create space around the trees and allow more light through the canopy over time, creating a more welcoming entrance to the library.

During Construction

During the construction phase of the development the retained trees will be protected by adopting appropriate measures as set out in BS 5837:2012 'Trees in relation to design, demolition and construction'. This will include the use of Heras fencing to demarcate protection zones.

During initial construction stages the existing surface finish will be retained and supplemented with ground spreader mats as required to protect the roots of existing trees. Any localised excavations should be in accordance with the requirements of BS5837:2012.

When replacing the existing surfacing, excavations should be undertaken in accordance with BS5837:2012. Slit trenches would suggest limited root presence within the top 300mm (existing build up) which corresponds with the proposed rigid build up. Excavations below this may encounter root presence and should be undertaken in accordance with BS5837:2012,

Monitoring and Remediation

Trees are to be inspected annually for disease, damage and potential problems. Remedial work is to be carried out as required to meet the objectives set out above and in accordance with BS 3998:2010 'Tree work. Recommendations'. Any dead trees are to be replaced in the next available planting season. The reason for the trees' failure is to be assessed and its replacement determined accordingly.

No tree should be pruned without first establishing clearly defined pruning objectives. This evaluation process should be undertaken by a qualified arboricultural practitioner, as it is an essential part of planning the management of any tree or tree population and should be recorded as part of a tree management schedule.

In accordance with item 4.2.4 (c) of BS 5837:2012, the items inspected and detailed within the AIA report have been selected for inclusion due to the likely influence of any proposed development on the trees, rather than strictly adhering to the curtilage of the site. However, it must be understood that there may be trees beyond the site and not included in this survey which may exert an influence on the development.

Where works for cultural, health and safety, quality of life, or development purposes have been recommended on trees outside the ownership of the site, these can only progress with the agreement of the owner, except where it involves portions of the trees overhanging the boundary.

Proposed Urban Tree Planting Management Objectives

Influencing Factors for Management

Newly planted trees must be managed to maintain their health and amenity value as well as to contribute to the ecological value of the Site. Dead wood should be retained, where possible, for its biodiversity value, however, safety is paramount.

Refer to the planting schedule on page 16 of this document for further information.

Objectives

The objective for planting native trees at the Site is to increase its biodiversity value, to enhance connectivity for wildlife through appropriate management, and to create structural diversity across the Site as quickly as possible. Where possible, nectar / pollen / berry-rich species will be incorporated. Management objectives for the tree habitats are to:

- Ensure satisfactory establishment and growth of new planting;
- Maintain planting in a healthy and attractive condition, to retain their contribution to the landscape structure, biodiversity, as a food source to wildlife, and amenity value in accordance with BS3998:2010; and
- Retain dead wood at the Site for biodiversity value.

Urban tree BNG Objectives

Post-development habitat condition requirements within the BNG Metric. Target condition of poor in 27 years Comprises all individual trees to be planted within the site which are targeted to achieve 'poor' condition by passing the following condition criteria:

a. Tree canopy cover is predominantly continuous; and
b. More than 20% of the tree canopy area is oversailing vegetation beneath. And failing the following condition criteria:
c. More than 50% of trees are mature or veteran (few mature / veteran trees noted);
d. There is little to no evidence of an adverse effect on tree health from anthropogenic activities; and
e. Micro-habitats for fauna species are present (very few or none noted on majority of trees).

Implementation

A range of species including native species, and those of known value to wildlife, are to be incorporated which will enhance the ecological value of the Site and provide foraging and connectivity for invertebrates, birds and bats. All trees must be in accordance with BS 3936 'Nursery Stock Specification for Trees and Shrubs'.

Planting

Prior to planting, the ground will be prepared such that the plants can grow successfully. The soil should have a good tilth (particle size, moisture content, degree of aeration, rate of water infiltration, and drainage) so that the roots can establish. Planting will not be undertaken if the ground is suffering from hard frost or is heavily water logged, however, planting should be undertaken during the late autumn and winter months when the trees are dormant, in the next available planting season following completion of the development.

Management

New trees are to be watered at least weekly between May and September during the first two years, should two weeks pass without rainfall. Following this, trees are to be watered only if showing signs of drought stress. Dead wood and suckers are to be removed as required to ensure development of a main leader and to ensure statutory clearance from roads and footpaths is maintained, however, where possible dead wood should be retained for its biodiversity value.

Monitoring and Remediation

Trees are to be inspected annually by a qualified arboriculturalist for disease, damage and potential problems. Remedial work is to be carried out as required to meet the objectives set out above and in accordance with BS 3998:2010 'Tree work. Recommendations'.

Boundary Planting Management Objectives

29m2 of boundary planting (Capinus betulus) will be introduced to screen the view of the service yard from the public realm.

The boundary planting should be managed in a manner which maintains their integrity and longevity to ensure the existing structure and character is maintained as far as possible. Management of screen planting should be targeted to encourage a dense, bushy structure.

The Carpinus betulus plants will be subject to a regular management cycle that seeks to maintain them in a healthy dense form so they are able to provide a strong boundary. The general elements that make up this management cycle will guide the long-term management on-site and can be summarised as:

- Early years establishment - Trimming to shape recently planted or laid shrubs as it grows up to the desired shape, height and density;
- Mid-term general management - Cutting shrubs that have grown up into the general desired height range of between 2-3m on a three-year rotation, increasing the cut height by 10cm each time; and
- End of useful life rejuvenation - Laying the planting once it has grown up to the desired height.

Cutting

Cutting should be carried out between October and February during the plants dormancy period and to avoid bird nesting periods.

Only cut each shrub every two or three years, except where necessary (for health and safety etc) and if possible only trim one side of a shrub in any given year.

Regular trimming in the early years will help to make it dense.

Gapping up boundary planting

Gapping up may be required at the outset to return the boundary planting to the required density. Gaps should be planted with new ornamental species, during the plants dormant period, ideally October to February.

Reporting and Monitoring Procedures

In accordance with item 6.3 of BS 5837:2012, the site and associated development should be monitored regularly by a competent arboriculturalist to ensure that the arboricultural aspects of the planning permission (e.g. the installation and maintenance of protective measures and the supervision of specialist working techniques) are implemented. Furthermore, regular contact between the Site Manager and the Arboriculturalist allows them to effectively deal with and advise on any tree related problems that may occur during the development process. Further details will be provided in a Arboricultural Method Statement (AMS) prior to construction.

This system should be auditable. Should any issues arise during the arboricultural monitoring of the development the Arboriculturalist will contact the Local Planning Authority and appropriate action taken only with the prior permission of the site management.



5 MANAGEMENT

Existing and Proposed Trees

Landscape Typology and Overview

The five existing mature plane trees (Platanus x hispanica) between the library and the Oxford Road Corridor will be retained. A long-term management regime will be implemented (to be secured via submission of this management and monitoring plan). This will help to manage the crown size, open up views and ensure the good health of the trees going forward.

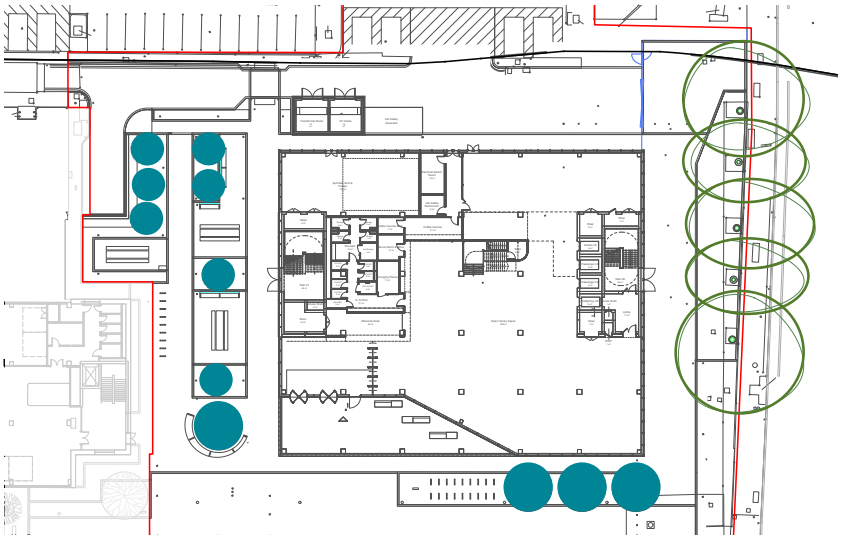
Individual trees will be planted for their distinctive form, seasonal interest, or ecological value. Trees will be of an appropriate scale for the site and, where possible, native species or forms of native species will be used. Trees will be of a character in keeping with those of the local area, such as All Saints Park, to establish a cohesive character. Anchor trees will be included to highlight entry points and key views. Evergreen tree species will be proposed to the boulevard to ensure a lush and verdant corridor with year round interest. Refer to the planting schedule on page 16 of this document for further information.

Objectives

- Selection Criteria: structurally sound trees with high aesthetic and wildlife value.
- Ecological Role: Provides nesting sites, shade, and food for birds, insects, and small mammals.
- Maintenance: Regular inspections, formative pruning, and disease management to ensure tree health and longevity.

Key actions

- All tree works must be carried out in accordance with BS 3998:2010 (Tree Work – Recommendations) and BS 5837:2012 (Trees in Relation to Design, Demolition and Construction – Recommendations).
- Where trees exhibit features with potential to support roosting bats, works must stop immediately and the area left undisturbed until advice is obtained from a licensed ecologist, in compliance with relevant wildlife legislation.
- Tree works should take place outside the bird nesting season (March to August inclusive). If works are required during this period, a nesting bird survey must first be carried out by a qualified ecologist.
- Refer to Section 3: Arboricultural Objectives for detailed information on specific tree works and associated requirements.
- A full arboricultural survey and report by a qualified arboriculturalist is recommended on a 5–7 year cycle, starting in Year 5 post-implementation.
- The survey should assess the condition and vitality of all planted trees and recommend any necessary interventions to support long-term tree health and compliance with the management plan.



1. Retained Existing Trees

2. Proposed Trees

Existing and proposed trees on site

Management Actions	Year (s)	Season	Frequency (per year)
Existing Trees			
Check for damaged, falling or dangerous branches and remove.	1-5 and onwards	November - March	Annual inspection and following severe weather
Tree hazard inspections will be undertaken at least annually		April - October	Annually initially, and then as required by the project Arboricultural consultant
Thinning assessment of established trees.		Autumn	As required by the project Arboricultural consultant

For details on management of Existing trees, please refer to the Arboricologist Report.

Management Actions	Year (s)	Season	Frequency (per year)
New Tree Planting			
Exclude aggressively competitive plants from around the base of each plant. Weed control to be carried out by hand or by strimming (using appropriate guards to avoid damage to the plant) and / or herbicide application.	1-3	As required	As required
Check stakes and ties for looseness, breaks or decay and adjust, re-fix or replace defective items.	1-5		Each maintenance visit / 12 visits
Remove all stakes and ties	5	Autumn	As required
Plants are to be maintained upright and adjustments to be made during strong winds. Ensure trees remain firmly bedded after disturbance and re-firm as necessary	1-5	As required	Each maintenance visit / as required
New trees to be inspected by a suitably experience arborist. Monitoring to inform action required to aid establishment, including watering and application of mulch and / or fertilisers.	1-5 and onwards	May - September	1
Water as necessary to ensure establishment and continuing health	1-3	As required	As required
Control all pests and diseases as necessary	1-5 and onwards		
Replace any dead or dying trees with trees of similar species and local origin. Approval of replacement by Landscape Architect is required.		November - March	1
Pruning - To be carried out in Winter to encourage growth. Deadwood and diseased limbs to be removed in Spring / summer.		Winter / Spring	As required
Inspection / maintenance times: Quarterly and after strong winds. Replace or re-secure loose or missing stakes / ties.	1-5 and onwards	As required	
Ensure trees remain firmly bedded after disturbance and re-firm as necessary	1-5		
Top up mulch planting to original specification at the end of year three	3	Spring	1

Shrub and Herbaceous Planting

Landscape Typology and Overview

Shrub and herbaceous planting enhances the visual appeal of the landscape while providing ecological value. This typically consists of a mix of herbaceous perennials, shrubs, ferns and bulbs, selected for their aesthetic qualities and value to wildlife.

Planting will include high percentages of evergreen and semi evergreen species that will ensure structure and visual interest all year round. These will be interspersed with colourful highlights of foliage, flowers and grasses that display seasonal interest and contribute to the ecological value of the proposals including pollinators, native, semi- native varieties and those that attract insects or provide habitat.

The palette has been enhanced to include additional species that can boost the planted area's longevity, and resilience. Species selected will be easy to maintain and are safe to be included within a public environment.

Robust planting is used in areas that require a harder-wearing planting mix, for example planting beds adjacent to the road or to the boundary of the service yard. Low maintenance, evergreen shrubs be selected to provide structure and screening all year round. This will consist of ground-layer vegetation, and evergreen shrubs that thrive in exposed, low nutrient and shady conditions.

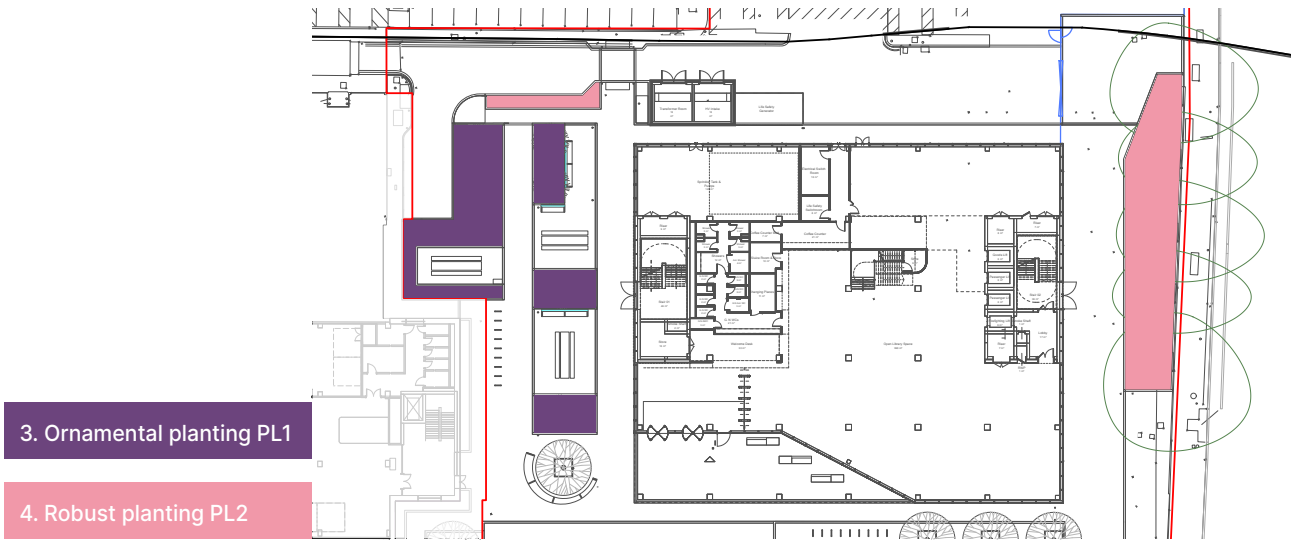
Low maintenance soft planting under the existing retained trees along Oxford Road will be planted to help protect the root protection areas, increase biodiversity value and create a welcoming approach to the library main entrance. Refer to the planting schedule on page 16 / 17 of this document for further information on species selection.

Objectives

- Species Selection: High percentages of evergreen and semi evergreen
- Structure and Function: Provides food and shelter for insects, birds, and small mammals while stabilising soil and preventing erosion.
- Management: Minimal intervention, with occasional clearance of invasive species and enrichment planting where necessary.

Key actions

- Plant native shrub and ground flora species to enhance understorey diversity.
- Control invasive species to prevent dominance over native plants.
- Encourage soil health through natural processes such as leaf litter decomposition and mycorrhizal fungi interactions.
- Limit winter cut-back to leave standing dead material and seed heads as a source of food and shelter to invertebrates, and small birds and mammals.



Proposed Shrub and Herbaceous Planting

Management Actions	Year (s)	Season	Frequency (per year)
Shrub and Herbaceous Planting			
Maintain all areas in a weed free condition through hand weeding operations. Herbicide applications on instruction only.	1-5 and onwards	As required	As required
Water as necessary to ensure establishment and continuing health		As required	As required
Ensure plants remain firmly bedded after planting and re-firm if necessary			
Control all pests and diseases as necessary			1
Replace any dead or dying plants		Autumn	
Prune early flowering shrubs after flowering		Early summer	
Prune late flowering shrubs before new growth		Early spring	
Prune evergreen shrubs		Mid spring	
Prune herbaceous perennials as required to maintain form and supply supports as needed		Early summer	

Boundary Planting

Landscape Typology and Overview

Boundary planting will be used to provide structure, seasonal interest, and add valuable habitats for wildlife within the landscape. They are positioned to provide a natural boundary and screening of the service yard and car park under the Mancunian Way.

Ornamental species have been selected for their aesthetic appeal and to complement the adjacent ornamental planting beds. Boundary planting could offer nesting sites for birds or shelter for small mammals.

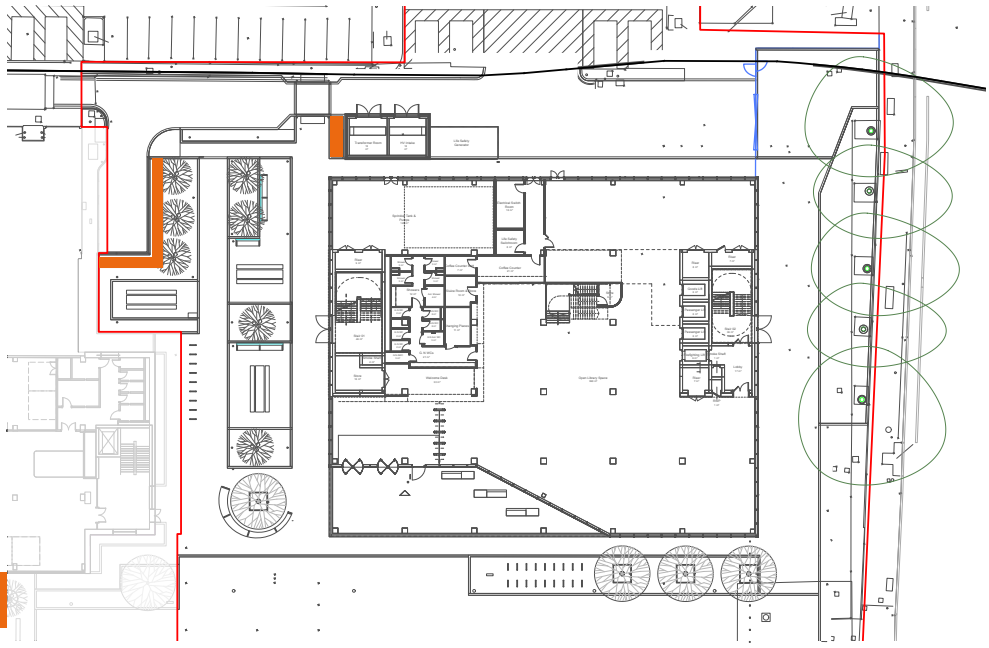
Refer to the planting schedule on page 16 / 17 of this document for further information on species selection.

Objectives

- To screen views and access to service yard
- Provide habitat
- Provide structure, seasonal interest and aesthetic appeal

Key actions

- Any works to trees or large shrubs to be carried out in October- February to avoid bird nesting season.
- Ensure an appropriate maintenance regime is in place to establish continued health and that high quality areas are being achieved.
- Monitor the management regime every 5 years with an annual review to identify public health and safety concerns for at least 30years.



5. Boundary planting

Proposed hedge planting

Maintenance Actions	Year (s)	Season	Frequency (per year)
Boundary Planting			
Monitor boundary planting to identify any gaps	1-5	Spring	1
Suppress weeds (invasive species and undesirable species) and control all pests and diseases as necessary	1-5	Spring	1
Trim boundary planting annually outside of the bird nesting season. Trim in a slight 'A' shape to ensure the base remains thick and height and width remain a minimum of 1.5m	3-5	Winter (Ideally January/ February)	Annually
Top up bark mulch annually	1-5	Spring	Annually
Operations post year 5 (in addition to year 1-5 operations)			
Remove dead or dying material and replace with suitable ornamental species. Undertake investigations to ascertain why species may have failed.	6+	Spring	1

Management aims and objectives

Vegetation Types and Management Objectives

A number of vegetation types exist and are proposed for the site. These are:

- Existing retained trees
- Proposed tree planting
- Proposed ornamental shrub and herbaceous planting (PL1)
- Proposed robust shrub and herbaceous planting (PL2)
- Proposed boundary planting

The above will require varying management in order to successfully achieve the design objectives.

Set out in the following pages are the maintenance operations that will be carried out over the next 5 years in order to achieve the design objectives. They have been set out in a format that can be easily followed by all parties, ensuring that the Management Plan exists and a working document and not an archived report. The management prescriptions are flexible such that each section can be changed and updated on an annual basis, allowing targets to be set, progress monitored and accurate reporting made.



6 BIODIVERISTY ENHANCEMENT MEASURES

Biodiversity Enhancement Measures

The following key actions have been identified as the most promising and realistically achievable measures to enhance the biodiversity value of the development:

- Increased variety of flora from the proposed shrub and herbaceous planting which provides suitable habitat for a greater variety of invertebrates.
- Trees for nesting and foraging
- Hedgerows to nesting

A description of how the soft landscape elements provide ecology enhancements for habitats and species is provided in this section of the report.

Habitat Creation and Management

- Habitat enhancement will be delivered across the site to increase biodiversity value, including:
- Planting of hedgerows and trees to provide foraging, nesting and commuting corridors for wildlife;
- Retention and sympathetic management of existing trees

Species

A description of how the new habitats would benefit fauna using the site are described below.

Breeding birds

The five existing mature plane trees between the library and the Oxford Road Corridor will be retained. As a result, there will not be a significant reduction in breeding bird habitat as part of the proposals.

Additionally, the created habitats in the post-development would also provide a varied foraging resource for birds. This would also provide suitable habitats for a greater variety and abundance of invertebrates, providing greater quantity food source for bird species.

Invertebrates

A greater variety of flora would provide suitable habitat for a greater variety of invertebrates. They in turn would provide a food source for a variety of fauna, including birds and bats. The greater floral diversity could also provide food plants for invertebrate species.



7 ONGOING MAINTENANCE

General Management actions

Workmanship

Where and to the extent that materials and workmanship are not fully specified they are to be:

- Suitable for the purposes of the stated objectives; and
- In accordance with good horticultural practice or the current British Standard with particular reference to:
  - BS 3998: Recommendations for tree work;
  - BS 4428: Code of practice for general landscape operations; and
  - BS 7370: Grounds maintenance.
    - Part 1: Recommendations for establishing and managing grounds maintenance organisations and for design considerations related to maintenance;
    - Part 2: Maintenance of hard areas;
    - Part 4: Maintenance of soft landscape (other than amenity turf).

Competence

- Tree work: To be carried out by an approved member of the Arboricultural Association Defective, diseased, unsafe or weak parts of trees additional to those scheduled for attention: Give notice if detected.
- Prevention of Wound Bleeding Standard: To BS 3998, clause 8.
- Prevention of Disease Transmission Standard: To BS 3998, clause 9 and Appendix B.

Health and safety

The contractor shall refer to the sites Health and Safety File for residual risks and ensure strict compliance to any health and safety measures set out.

All maintenance operations shall only be carried out with due consideration to the welfare of the landscape maintenance operatives and members of the public.

The contractor shall carry out his own risk assessment(s) as necessary to assess current conditions at the time of operation, including compliance when making use of any subcontractors to carry out specialist areas of works.

Litter Control

Routine monitoring and removal of litter and other debris and / or fly tipping from all areas of hard and soft landscaping would be undertaken fortnightly. After each litter control visit, all hard and soft landscaped area to be completely litter free.

Maintenance Tasks and the use of Chemicals

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.

Plant nutrients / fertiliser will only be applied to other planting if poor growth and signs of deficiency appear subject to soil / leaf analysis and further advice. The use of any fertilisers shall be in strict accordance with the manufacturer's recommendations.

Management of trees

New tree planting within the public-realm areas and in areas of green open spaces will be managed to ensure that stock establishes and thrives in accordance with the soft landscape proposals.

New planting will be watered as required until established and watering shall only be carried out to maintain the health and continued vigour of the trees until fully established. Water usage shall be controlled and monitored at all times to avoid waste.

Individual trees planted as specimens - At Year 3, they shall have established a single leader or multi-stemmed habit where intended. They shall retain their lower branches unless a clear stem is required to avoid encroachment upon footpaths or carriageways.

They shall be maintained thereafter to develop and retain a well-balanced and healthy crown, with the shape and character typical of the species with any crossing or rubbing branches removed, including the removal and / or treatment of any dead, dying or diseased timbers. Remedial pruning / tree surgery as necessary in accordance with BS:3998 or to remove growth obstructing paths, carriageways, lighting and signs.

Replacement trees are to be of the same specification and size as the original plants.

To ensure all mature trees are in a safe and healthy condition all existing mature trees shall be inspected by a qualified and experienced arboriculturalist annually. All survey results shall be recorded and passed to the Contract Administrator. Additional inspections shall be tasked after storms / periods of bad weather.

Complete pruning / dead wooding as recommended by the above survey; all works to accord with BS3998:2010. Do not disturb nesting birds or roosting bats.

Tree Work Generally

- Identification: Before starting work agree which trees are to be removed or pruned
- Protection: avoid damage to neighbouring trees, plants and buildings
- Standards: To BS 3998 and Health & Safety Executive (HSE) 'Forestry and arboriculture safety leaflets'
- Removing branches: Cut as shown in Arboricultural Association Leaflet No 8 'Mature tree maintenance'. Cut vertical branches similarly, with no more slope on the cut surface than is necessary to shed rainwater.
- Appearance: Leave trees with a well balanced natural appearance
- Chain saw work: Operatives must hold a Certificate of Competence
- A bat licensed ecologist will be consulted and appropriate survey / licensing undertaken prior to any arboricultural works being undertaken in accordance with relevant wildlife legislation (particularly for roosting bats and nesting birds).

Pruning

All pruning to be undertaken between October and February (inclusive) to avoid nesting birds. Any proposed pruning to be done outside of this period would need ecological supervision.

Leaf Fall

At regular intervals during the autumn / winter months, fallen leaves will be removed from paved areas. Fallen leaves in planting areas will be retained to form a natural mulch and humus layer and only remove if they are likely to smother smaller plants.

Watering generally

Manual landscape irrigation should only be carried out in order to ensure the establishment and continuing plant health of any planting that is not yet established. Watering of trees is required during establishment (first 2 seasons) and periods of prolonged drought (in excess of 14 days). Particular care should be taken during such periods to ensure sufficient watering is carried out to facilitate healthy growth. Watering should be targeted at the base of plants rather than a general hosing of foliage, which may lead to scorch in sunny weather. Watering should not take place when and where local water restrictions are in place. Nurseries that supply trees and shrubs can advise as to how much watering each of the trees will need. Water usage shall be controlled and monitored at all times to avoid waste.

Areas which become prone to waterlogging shall be alleviated suitably, and / or drainage added as required.

Monitoring and Inspection

Provide routine monitoring to ensure that operations are undertaken as programmed and to take appropriate action to deal with damage and debris arising from storms, flood events and heavy snowfall.

Personnel completing inspections to be suitably qualified and experienced in monitoring landscape works (such as a Member of Landscape Institute).

Timing of Operations - 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. In addition, those species listed on Schedule 1 of the WCA are also protected against disturbance whilst making or on a nest. 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.

Avoid clearance, pruning and trimming operations during the bird nesting period, generally March to August inclusive. If operations have to take place during this time, then a suitably qualified ecologist shall check in advance that there are no birds nesting in the planned area of operation.

Biosecurity

The threat of pest and diseases that affect plant species is widely recognised and all landscape practitioners have a responsibility in detecting, monitoring and controlling pests and diseases at every stage of a plants life from growing, specifying, handling, managing and destroying plants.

Wherever possible all planting shall be specified from local province with supporting paperwork provided at each stage to support an auditable supply chain.

Reference shall be made regularly to updates from DEFRA and the Forestry Commission with any recommendations or warnings strictly adhered to, to prevent further spread of disease.

Good plant husbandry shall be implemented on site to prevent further spread of diseases particularly where symptoms or confirmed outbreaks of disease has occurred.

Ongoing Monitoring and Remedial Measures

Once the proposals are delivered, monitoring will vary depending on the landscape and ecological objectives. Monitoring will inform the evolution and adaptation of management and maintenance regimes to be able to respond to the specific needs of the landscape and ecological environment as these change.

The party(ies) responsible for landscape maintenance will be able to review and monitor the condition of new and existing plant material, and the success rates of newly planted material. This will inform recommendations for both immediate and longer-term changes to management regimes. This document provides expected typical work schedules for landscape / ecological feature for a period of five years, after which time, maintenance and management regimes may be reviewed as necessary.

The process of establishing new habitats and the enhancement of existing habitats will take some time, and it is not possible to forecast the precise rate of change and the subsequent ecological response. Ecological monitoring in the first five years will oversee the progress of habitat establishment. Monitoring is designed to assess the progress of the site against clear targets, which if not met, will result in adaptive management actions. Intervention should be undertaken if further work is needed to remedy an issue. These issues may include failure of habitat establishment or the presence of invasive animal and plant species.

This table on the following page includes an overview of the monitoring and remedial measures required for the landscape / ecological components within the site, it also includes who's responsibility it is to carry out those actions. Detailed management prescriptions and timings are included in Section 4 of this document.

The following table includes an overview of the monitoring and remedial measures required for the landscape / ecological components within the site, it also includes who's responsibility it is to carry out those actions.

Landscape / Ecological component	Operation	Frequency	Owner of action
General			
	Review of the HMMP in coordination with the Management Team.	Annually	Site Management Company
	Meeting to ensure to maintenance programs and regimes are working together successfully. Review of the Management Teams responsibilities and actions to maintain the site in accordance with the HMMP.	Quarterly	Site Management Company and Site Management Team
	Site walk around and inspections of planting and seeding works, wearing surfaces, timber goods. Carry out repairs / replacement where required.	Biannually	Site Management Team
Existing Trees			
	Survey for pests and diseases. Advise on action to be taken. Removal or treatment where required.	Annually	Site Management Team - Appointed Arboriculturist
	Hazards or risks assessment to monitor condition of tree and strength of limbs and clear stem height where required. Carry out measures to ensure safety risks are removed / minimised.	Annually or after severe winds	Site Management Team - Arboriculturist
New Trees, Boundary Planting and Shrub planting			
	Monitor strength of limbs and keep clear stem height Check for pests and disease and treat where necessary	Annually or after severe winds	Site Management Team - Arboriculturist
	Monitor cutting cycle to promote wildlife benefits.	Annually	Approved / qualified ecologist
	Monitor establishment and replacement of any failing plant or one which has reached maturity.	Annually	Site Management Team
Habitats			
	Habitat review - site walkover survey within site boundary • Record and recommend removal of the presence of any invasive plant species identified	Annually (April-September)	Approved / qualified ecologist

Schedule of Work

Set out in the following table are the typical maintenance operations that should be carried out over the next 5 years and beyond in order to achieve the design objectives. They have been set out in a format that can be easily followed by all parties, ensuring that the Management Plan exists as a working document and not an archived report. The management prescriptions are flexible such that each section can be changed and updated on an annual basis, allowing targets to be set, progress monitored and accurate reporting made.

ACTIVITY	J		F		M		A		M		J		J		A		S		O		N		D	
ORNAMENTAL AND HEDGE PLANTING:																								
Maintain mulch																								
Weed control																								
Selective pruning																								
Hedge Clipping																								
Trim groundcover																								
Watering (until establishment)																								
INDIVIDUAL TREES:																								
Check and adjust support																								
Formative pruning																								
Remedial pruning																								
LITTER CONTROL:																								
Collect litter																								
HARD AREAS:																								
Sweeping																								
Control moss/algae																								
Weed control																								
Ice and snow removal																								
LEAF FALL:																								
Clear fallen leaves																								
MONITORING AND INSPECTION:																								
Generally																								
TIMING OF OPERATIONS:																								
Avoid nesting birds																								

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