



Landscape Management Plan

Upper Heyford Phase 10

November 2022

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APPENDIX 1 – LANDSCAPE PROPOSALS

REVISIONS:

Date	Rev	Description	Initials
07.11.22	-	First Issue	DP

1. INTRODUCTION

1.1 LandArb Solutions Ltd were asked to prepare a Landscape and Ecological Management Plan for the development at Upper Heyford Phase 10. BSG Ecology have provided ecological input into this management plan.

1.2 As part of the planning permission for phase 10, condition 11 of the permission requires the following;

Condition 11:

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

- 1.3 Where it is intended to create semi-natural habitats, all species used in the planting proposals shall be locally native species of local provenance unless otherwise agreed in writing with the local planning authority.
- 1.4 This document has been prepared by a Chartered Member of the Landscape Institute.
- 1.5 This document should be seen as an operational guide, which covers both hard and soft landscaping, and is subject to amendment in the light of changing conditions. Trees, hedges, shrubs, scrub planting and grass are living features which establish and grow, and it is therefore recommended that this management plan be at regular intervals to ensure that the management aims and tasks are still required.

2. MANAGEMENT PLAN

Responsibilities

2.1 After Practical Completion Heyford Park Estate Limited will manage all areas of hard and soft landscaping (Appendix 1) in public open spaces.

Purpose

2.2 The purpose of this management plan is to:

- To retain and enhance the value of existing landscape features;
- To secure the successful delivery and long-term management of the strategic landscape and Green Infrastructure as part of the development proposals;
- To implement a range of on-site habitat improvements to encourage wildlife;
- To set out the agreed objectives for sustainable landscape and ecological management;
- To establish landscape and ecological maintenance responsibilities;
- To set clear standards for the performance of landscape and ecological maintenance work;
- To carry out maintenance work according to best practice using sustainable techniques and materials;
- To assist in the development of work programmes for maintenance staff; and
- To provide a mechanism to monitor progress, success or otherwise of the aims and objectives.

2.3 This management plan is an iterative process. It sets out the Green Infrastructure management for the first five years of the operation of the residential development, and should be seen as an operational guide that is subject to amendment in the light of changing conditions. Different landscape and ecological elements mature and develop, and it is therefore recommended that this management plan be reviewed at five yearly intervals to ensure that the management aims and tasks are still relevant and required.

2.4 This management plan document sets out how the valuable Green Infrastructure and ecological features of the site will be protected during the construction phase and how, during the operational phase of the site, Green Infrastructure and ecological enhancements can be managed to increase the value of the site for wildlife.

- 2.5 The overall aim of this management plan is to ensure the features of existing Green Infrastructure and ecological value on the site are protected during construction and that the potential biodiversity value of the development site is realised.

Green Infrastructure (GI) and Landscape Proposals

- 2.6 The design evolution for the development site has incorporated the concept of Green Infrastructure. Green Infrastructure seeks to create connected and multi-functional networks of green spaces and green corridors, inter-linking the development with the surrounding context.
- 2.7 Green Infrastructure has many benefits associated with the concept; however, it is the existing and proposed GI assets that relate to the development site and their management that are of relevance within this management plan.
- 2.8 In order to provide management and maintenance of GI within the development site, the elements to be protected (where relevant), and managed need to be identified. The management strategy provides objectives and actions for each of the landscape components followed by a timetable for the carrying out of the various maintenance prescriptions.

Existing Green Infrastructure Assets

- 2.9 Key existing GI assets within the development site are as follows:
- Existing trees

Proposed Green Infrastructure Assets

- 2.10 Key proposed GI assets within the development site are as follows:
- Proposed tree planting
 - Proposed mixed native hedge/scrub planting
 - Proposed streetscape planting – mixed native/ornamental tree and shrub planting
 - Proposed grassland/wildflower areas
 - Proposed amenity grass
 - Proposed pathways
 - Proposed street furniture (including fencing and enclosures, bin storage, dog waste bins, signage where applicable)
 - Proposed SUDS
- 2.11 Green Infrastructure encompasses Landscape and Ecological objectives and creates an overarching Green Infrastructure Strategy (GIS) for the site. The subsequent

management objectives during construction and operation, and associated maintenance schedules will be set out to ensure the overarching GIS can be successfully delivered in the short and long term. The following are Landscape and Ecological objectives that form part of the proposals for the development site.

- 2.12 The above Landscape, Green Infrastructure and Ecological objectives have been combined into overarching objectives for the management plan. These objectives have been split into construction phase and operational phase objectives. Each of the construction and operational phase objectives will have management prescriptions that are put in place to help achieve each of overarching objectives of the management plan.

C1, C2, C3...= Construction phase objective

O1, O2, O3...= Operational phase objective

Construction Phase Objectives

- 2.13 The following construction phase objectives have been identified to help ensure the overarching aims of the management plan area achieved.

Objective C1: To protect existing and retained Green Infrastructure (GI) assets within the site from damage and unnecessary disturbance during construction

- 2.14 The group of trees in the south-western corner of the site make an important contribution to the character of the site and immediate area and will be protected to ensure that adverse effects upon these GI assets are avoided. Tree protection barriers will be erected before any construction work starts on site in order to protect the trees in accordance with BS5837:2012 and an approved arboricultural implications/method statement.

Objective C2: To create new habitats through planting of appropriate species

- 2.15 The design and layout of new and compensatory habitats will include tree planting, ornamental shrub planting, native scrub and hedge planting, species-rich grassland/wildflowers, amenity grassland, and wetland/Suds areas.
- 2.16 New native hedgerow species will include species of local provenance such as Hawthorn, Blackthorn, Field Maple, Hazel, Dogwood, Privet, Holly and Guelder Rose, and be planted at the rate of 5 per linear metre, in a double staggered row.
- 2.17 Planting proposals will vary between strategic areas of green space and more manicured streetscapes and amenity areas. Planting of trees and shrubs will be appropriate for their location, using species of local provenance where practicable.

- 2.18 Planting proposals will also include sowing Wildflowers/Grassland areas to supplement existing boundaries and within open space areas.

Operational Phase Objectives

- 2.19 The following operational phase objectives have been identified which, when achieved, will ensure the overarching aims of the plan are achieved.

Objective O1: To manage the northern boundary habitat for a range of species and to ensure the trees establish and grow to enhance the transition between the flying field and the site.

- 2.20 The mounds, grassland tree planting will be managed to ensure each tree establishes and grows, ensuring each group thrives and creates scattered groupings of mature canopy cover to mitigate trees removed as part of the proposals and emulate the existing character of the flying field context.

Objective O2: To manage grassland areas with open spaces containing Suds features

- 2.21 Grassland within Suds features will be managed to ensure a diverse sward is established, with the principal method of management being mechanical cutting.

Objective O3: To monitor the site and assess the success of management

- 2.22 In order to deliver the proposed management plan objectives, monitoring of the effects of management prescriptions will be required in order to ensure that these are effective, and to inform any necessary refinement of the site management.

- 2.23 The below management objectives set out for each landscape and ecological component will contribute to helping to achieve the overarching management plan objectives set out in section 2. The subsequent maintenance schedules for each landscape and ecological component define specific actions required to ensure the Green Infrastructure assets associated with the development site are managed to a high standard, and to ensure the delivery of the management objectives and overarching management plan aims.

- 2.24 Management objectives and maintenance prescriptions for each landscape and ecological component are set out below, complete with maintenance schedules that set out tasks, methods and timings.

Existing Green Infrastructure Assets

Existing trees

2.25 Management objectives:

- Retain, protect and enhance (where practicable) the existing trees;
- To maintain the health, safety and visual amenity of retained trees;
- To take care in construction and maintenance operations near to existing retained trees;
- Retain deadwood habitats for wildlife (where safety allows); and
- To enhance the trees ecological/biodiversity value.

2.26 Maintenance Prescriptions:

- Existing trees will be subject to annual visual tree assessments in order to identify structural and physiological defects and carry out necessary maintenance work.
- Monitoring will be undertaken by a suitably qualified and certified arboriculturist, with any tree works being carried out in accordance with BS: 3998:2010.
- Any trees found to be of veteran status will be re-inspected on a biennial cycle, or a shorter period if appropriate.

Proposed Green Infrastructure Assets

Proposed tree planting

2.27 Management objectives:

- To maintain all tree planting to a good standard and ensure a good survival rate and establishment;
- Use native species (where practicable) of local provenance to enhance opportunities for wildlife on site; and
- Keep planted areas free from litter and rubbish.

2.28 Maintenance Prescriptions:

- Tree planting will be done in accordance with horticultural best practice and be in accordance with BS: 8545:2014;
- Inspect the success or otherwise of the establishment of tree planting areas;
- Check stakes and ties, adjust and remove when the tree ins self-supporting;
- Keep paths, highways, parking areas clear from over hanging branches, and ensure sightlines remain unobstructed;

- Replace dead, dying or diseased trees as agreed with the site supervisor for the first 5 years after practical completion. Replacements to be of the same species and specification as the failed specimens, unless advised otherwise by a qualified landscape architect; and
- Avoid damage to tree trunks through maintenance operations such as grass mowing and weeding.

Proposed mixed native hedge and scrub planting

2.29 Management objectives:

- To establish new areas of native transplants;
- To maintain newly planted areas of transplants to ensure a good survival rate and establishment;
- To control and make good damage from pests, diseases, mammalian damage and vandalism; and
- Use native species (where practicable) of local provenance to enhance opportunities for wildlife on site.

2.30 Maintenance Prescriptions:

- Visually inspect to check for sign of damaged tree/shrub shelters and signs of bark damage;
- Visually inspect for signs of vandalism and pests and diseases;
- Thin or replace selected species where appropriate;
- Prune to promote bushy, healthy growth. Occasional standard trees to be left to mature within hedgerow;
- Trim back growth overhanging adjacent footpaths, parking areas, paved areas;
- Cut areas of hedging once every 2 years, with arisings to be used to create habitat piles;
- Remove areas of litter and debris; and
- Remove shrub shelters (when required) to allow transplants to grow into healthy trees and shrubs.

Proposed ornamental shrub planting

2.31 Management objectives:

- Establish new areas of proposed ornamental shrub planting and to present a visible indication of high quality with regular site maintenance
- Maintain shrub planting to ensure a good survival rate and successful establishment;
- Minimise competition from grass and weeds; and
- Keep planted areas free from litter and debris.

2.32 Maintenance Prescriptions:

- Monitor and record and plant losses and report to the client;
- Prune/cut back shrubs to keep the pathways/highways clear from vegetation;
- Inspect and check health of ornamental shrub planting; and
- Remove litter and debris from planting areas.

Proposed grassland/wildflower areas

2.33 Management objectives:

- Maintain to present a visible indication of high quality and effective grassland management for maximum wildlife and amenity value;
- Maintain at the specified height, and manage to allow bulbs and wildflowers to flower each year;
- Maintain in good condition; and
- Control injurious/invasive weeds throughout all grassland areas.

2.34 Maintenance Prescriptions:

- Cut to the recommended height as suggested by the supplier after flowering and allow seeds to fall;
- Cut to the recommended height as suggested by the supplier in spring;
- Check for damaged areas, areas of erosion, weed problems or failures in grassland areas; and
- Remove litter, dog waste and debris from grassland areas.

Proposed amenity grass areas

2.35 Management objectives:

- Maintain to present a visible indication of high quality and effective grassland management for maximum amenity value;
- Maintain the amenity grass at the specified height;
- Repair worn areas; and
- Control weeds in amenity lawns.

2.36 Maintenance Prescriptions:

- Cut grass to between 25-50mm;
- Trim edges to shrub beds, paths, car parks, hard landscaped areas,
- Remove litter, dog waste and debris from amenity grass areas.

Sustainable Urban Drainage features

2.37 Management objectives:

- Maintain the Suds basins and drainage channels as attractive landscape features with ecological value;
- Maximise the biodiversity value of the features;
- Keep the Suds features in a safe and attractive condition; and

2.38 Maintenance Prescriptions:

- Check areas of grassland are maintained within and adjacent basins;
- Remove dead or diseased vegetation;
- Inspect outfalls, culverts and grilles, remove blockages and carry out necessary repairs;
- Remove silt build up from basins;
- Remove litter and debris; and
- Control invasive species.

Footpaths and paved areas

2.39 Management objectives:

- Present a visible indication of high quality;
- Maintain paths/paved areas in a safe and useable condition; and
- Prevent/minimise weed colonisation.

2.40 Maintenance Prescriptions:

- Keep paths and paved areas free from litter and dog faeces;
- Keep paths and paved areas free from leaf and tree litter/debris;
- Keep paths and paved areas free from weeds; and
- Check paths and paved areas for areas of damage, vandalism and repair as required using same material.

Street Furniture and Fencing

2.41 Management objectives:

- Inspect and maintain all elements of street furniture and fencing to a safe condition and a visible sign of high quality;

2.42 Maintenance Prescriptions:

- Carry out safety checks to all signage, fencing, seating, bins, picnic areas, play equipment; and
- Maintain cleanliness of feature areas and the emptying of litter bins, dog bins.

Monitoring and Ongoing Remedial Measures

Landscape Monitoring

- 2.43 A suitably qualified landscape management company shall carry out a site inspection annually and should record the effectiveness of the proposed landscape planting and record any species that are struggling to establish. A record of species failures, probable reasons for failures and numbers of replacements needed should be recorded. The management company will also monitor the establishment of the northern boundary tree planting and Suds features within the site, as well as the existing trees being retained.
- 2.44 Monitoring will help ensure the protection of trees and help ensure landscape planting is establishing as intended. Monitoring will also give an early warning of any injurious weeds or vegetation failure that may occur, or any loss or fragmentation of existing and proposed assets. Over time the monitoring information will build up a picture of the success or otherwise of the management plan and inform any amendments that may be required.
- 2.45 Recommendations will be made where relevant to update and amend the management plan and inform the objectives to ensure they are still required and relevant. All adjustments shall be agreed in writing with the local planning authority prior to any alterations in management practices.

Ecological Monitoring

- 2.46 The monitoring would be implemented yearly for 5 years then every 2 years, by fully qualified ecologists, to determine whether the grassland has established and whether corrective action is needed. To do this, a visit in June or July by an ecologist would be recommended. This would aim to obtain a species list for floral species. As an establishment “target”, it is recommended that a diversity of at least 6 species/m² is obtained and that dominant and undesirable species, such as creeping thistle, white

clover, cow parsley and common nettle, account for no more than 5% of vegetation cover.

3. IMPLEMENTATION SPECIFICATION AND MAINTENANCE DURING FIRST GROWING SEASON

3.1 Planting Timings

- Bare root/rootballed deciduous trees and shrubs: Mid October to late March
- Rootballed conifers and evergreens: September/October or April/May
- Clumps of herbaceous plants: September/October or March/April
- Container grown trees and shrubs: At any time of year if ground and weather conditions are favourable

3.2 Existing trees on or adjacent to site are to be retained shall be protected in accordance with BS 5837:2012 Trees in relation to design, demolition and construction. Recommendations from commencement to completion of all works on site.

3.3 All excavated areas to be backfilled with imported subsoil to BS 8601:2013 Specification for subsoil and requirements for use (imported subsoil to be laid on site's existing subsoil profiles) and overlaid with topsoil to BS 3882:2015 Specification for topsoil BS 3882 – General purpose grade. All topsoiled areas to be clear of rocks and rubble larger than 50mm diameter and any other debris that may interfere with the establishment of plants. Shrub areas to have a minimum depth of 400 mm topsoil. Grassed area to have a minimum depth of 150mm. Tree pit soil depth/volume in accordance with BS 8545:2014 Trees: from nursery to independence in the landscape. Recommendations.

3.4 All plants are to be supplied in accordance with Horticultural Trade Association's National Plant Specification and from a HTA certified nursery. Delivery and backfilling of all plant material to be in accordance with BS4428/JCLI/CPSE Code of Practice for 'Handling and Establishing Landscape Plants, Parts I, II and III.

3.5 All specimen and ground cover shrubs to be planted in accordance with BS 3936: - Specification for Nursery Stock. Part 1 Trees and shrubs (1992) and Part 10 Ground cover plants (1989)

3.6 All trees shall be planted in accordance with BS: 8545:2014.

- 3.7 All planting and grass establishment / maintenance operations to be in accordance with BS 4428:1989 Code of practice for general landscape operations (excluding hard surfaces). Trees are to be established / maintained in accordance with BS8545.
- 3.8 Planting will not be carried out when the ground is waterlogged, frost bound or during periods of cold drying winds.
- 3.9 All bare-root planting stock will be kept covered until actually planted in order to minimise water-loss and prevent the roots from drying out.
- 3.10 All bare-root planting stock will be root dipped in an approved water-retaining polymer.
- 3.11 If the formation level is compacted it should be ripped through before topsoiling. Recommended topsoil depths are 450mm for shrubs and 150mm for grass.

4. Tree Planting

Ground Preparation and Tree Pit Excavation

- 4.1 If the formation level is compacted it will be ripped through before topsoiling.
- 4.2 Where necessary existing weeds will be treated with a suitable glyphosate-based herbicide and a suitable period allowed to elapse, as recommended by the manufacturer, for the herbicide to take effect.
- 4.3 Tree pits will be excavated to at least twice the diameter of the root spread and to be planted in accordance with BS 4428 (1989). The bottom and sides shall be forked to break up the subsoil. All extraneous matter such as plastic, wood, metal and stones greater than 50mm diameter in any dimension will be removed from site.

Planting

- 4.4 Trees are to be placed into the pits and backfilled with local topsoil previously stripped from the site. A general-purpose slow-release fertiliser (at the rate of 75gm/m²) and Tree Planting and Mulching Compost (at the rate of 20litres/m²) are to be incorporated into the top 150mm of topsoil during backfilling. Where tree pits are more than 300mm deep, backfilled material shall be consolidated/firmed in 150mm layers.
- 4.5 Trees shall be well firmed-in and secured with stakes, proprietary rubber tree ties and spacers as below.
- 4.6 All newly planted trees over 1.5m high will be held so that movement at the root collar is minimised until new roots have developed to anchor the tree. Therefore, low staking

(75mm dia x 1.5m length) will be used and attached to the tree at approximately 600mm above ground level. Stakes will be driven 300mm into undisturbed ground before planting the tree, taking care to avoid underground services and cables. The trees will be staked using proprietary rubber ties and must be firmly fixed with a spacing device used to prevent chafing against the tree.

- 4.7 Trees up to (but not including) extra heavy standard trees shall be single staked. Extra heavy standard trees shall be double staked.
- 4.8 Where there is concern that adjacent services or areas of hard standing may be affected by growing root systems then Green Blue Urban (or similar approved alternative) 'RERoot 1000' deflecting ribs will be installed as per manufacturers recommendations in the locations as shown on the landscape proposals plan.
- 4.9 A properly installed root barrier will in effect form a container and should be fitted to the edges of the planting pit. The barrier must be installed from surface level to a minimum of 1.0 m below surface level with joints overlapped by 300 mm.
- 4.10 Composted bark mulch will be spread to a depth of 75mm across in a 1.0m diameter circle around all individual trees, ensuring that desirable groundcover plants (where present) are not buried.
- 4.11 All trees and shrubs shall be watered in at the end of each day of planting. Tree moisture levels are to be monitored in accordance with BS8545 11.3 Irrigation.
- 4.12 Shrubs and hedges are to be set out as shown on the drawing and pit planted into the prepared soil at the specified centres with minimal disturbance to the rootball and well firmed in. Spread ornamental pine bark mulch to a depth of 75mm across all new planting areas, ensuring groundcover plants are not buried.
- 4.13 Unless otherwise stated planting shall be carried out during the period of 1 November to 31 March when the ground is not frozen, or waterlogged. If planting is required outside this period agreement shall be sought and all bare root plants shall be substituted with container grown stock.

Maintenance during first growing season

- 4.14 All dead, dying or diseased trees will be replaced with trees of similar size and species. If the failure of the tree is due to disease and the disease is considered likely to re-occur then an alternative species may be used as replacement if agreed with the LPA.

- 4.15 The site is to be visited as required throughout the year to undertake the following operations:
- 4.16 Weed clearance: All planting areas will be kept weed free by hand weeding or herbicide treatment.
- 4.17 Checking trees: All tree ties and stakes will be checked and adjusted if too loose, too tight or if chafing is occurring. Any broken stakes will be replaced.
- 4.18 Formative pruning: Any damaged shoots/branches will be pruned back to healthy wood. Plants will be pruned in accordance with good horticultural practice to maintain healthy well-shaped specimens.

Watering during first growing season

- 4.19 The requirement for watering of newly planted trees will generally be dependent on weather conditions during the first growing season following planting. In a dry season watering may be required on a fortnightly basis from immediately after planting until the end of the growing season, but in a wet season watering may not be required at all. Therefore, trees shall be monitored regularly by test digging down to root level to assess the water content of the soil, with watering undertaken as required to ensure that the soil is at field capacity 2-3 days after watering.

5. Native Hedge Transplants and Native Scrub Planting

Ground Preparation

- 5.1 Where necessary existing weeds will be treated with a glyphosate-based herbicide and a suitable period allowed to elapse, as recommended by the manufacturer, for the herbicide to take effect.
- 5.2 All extraneous matter such as plastic, wood, metal and stones greater than 50mm diameter will be removed from site to a registered waste disposal facility.

Planting

- 5.3 Bare-root hedge plants shall be notch planted in a double staggered row at the rate of 5 plants per linear metre (for hedge planting) and at 1m centres for scrub planting areas (using L-, T-, H-shaped or straight notches) using spades of a design suitable for this purpose. The notches must be vertical and deep enough for the roots to hang freely, with the transplant being planted so that the root collar is exactly level with the

ground surface. The notch must then be closed and the soil will be well firmed round the roots in line with the guidelines as set out in BS 4428 (1989).

- 5.4 Container-grown hedge plants will be planted into a pit dug 1.5x the diameter of the root mass, with the bottom and sides of the planting pit broken up to aid root expansion. The plants will be planted so that the root collar is exactly level with the ground surface.
- 5.5 All bare-root hedge planting stock will be protected from rabbit damage using approved proprietary 600mm clear plastic spiral guards, supported with 0.9m 12/14lb canes as advised by the manufacturer.
- 5.6 All container-grown shrubs will be protected from rabbit damage using approved proprietary 600mm plastic shrub shelters, supported with 0.9m x 32 mm x 32mm softwood stakes as advised by the manufacturer.

Maintenance during first growing season

- 5.7 All dead, dying or diseased hedge plants will be replaced with plants of similar size and species. If the failure of the plant is due to disease and the disease is considered likely to re-occur then an alternative species may be used as replacement if agreed with the LPA.
- 5.8 The planting area will be kept weed free throughout the maintenance period using approved herbicides in April, June and August.

6. Grass

Preparation

- 6.1 The area to be seeded will be cultivated to a depth of 100mm removing all weeds, debris and stones over 25mm diameter. The surface will be raked to smooth flowing contours with a fine tilth, incorporating pre-seeding fertiliser at 70 g/m².

Seeding

- 6.2 Grass seed will be sown in accordance with BS 4428 (1989), and will be sown from April to May or from September to October, during calm weather and not when the ground is frost bound or waterlogged. Seed will be sown in two equal sowings in transverse directions at 5g/m² for EG8 Mix, and 4g/m² for EL1 and EM3 mixes. After sowing the seed will be lightly raked to create intimate contact with the soil.

Grass/Wildflower Mix Cutting

EL1 Mix

First year management

- 6.3 The wild flower and grass species in this mix are perennial; they will be slow to germinate and grow and will not usually flower in their first growing season. There will often be a flush of annual weeds from the soil in the first growing season. This annual weed growth is easily controlled by repeated mowing.
- 6.4 Mow newly sown flowering lawns regularly (every 7 -10 days during growing season) throughout the first year of establishment. Cut to a height of 40-60mm, removing cuttings if dense. This will gradually develop a good sward structure, help maintain balance between faster growing grasses and slower developing wild flowers, and control annual weeds.
- 6.5 Dig out any residual perennial weeds such as docks.

Management once established

- 6.6 Mow regularly as a lawn but not too short (25-40mm).
- 6.7 To permit flowering, mowing can be relaxed from late June. Cut again when the sward gets untidy (after 4-8 weeks). Mowing may be suspended earlier in the year to allow cowslips to flower. Heavy quantities of cuttings should be collected and removed from site.

EG8 Mix

First year management

- 6.8 Growth and establishment of wild grasses may be slow initially, especially at low sowing rates (2-5g/m²). There will often be a flush of annual weeds from the soil in the first growing season. This weed growth is easily controlled by topping or mowing.
- 6.9 Mow all plant growth (sown grasses and weeds) regularly to 40-60mm throughout the first growing season to prevent weeds smothering the slower-growing grasses. Remove cuttings if dense, more frequent and regular topping will minimise the number of toppings produced each time so they can be left to disperse.

Management once established

- 6.10 In the second and subsequent years grass sowings can be managed in a number of ways which, in association with soil fertility, will determine the character of the grassland.
- 6.11 Regular mowing will produce a short turf or lawn.
- 6.12 The sowing can be managed as a meadow allowing the grasses to grow tall, flower and seed from May through to July/August. The grass meadow should be cut back and mowing resumed in late summer.
- 6.13 Grassland which is not cut each year will eventually become coarse and tussocky in character.

EM3 Mix

First year management

- 6.14 Most of the sown meadow species are perennial and are slow to establish. Soon after sowing there will be a flush of annual weeds, arising from the soil seed bank. These weeds can look unsightly, but they will offer shelter to the sown seedlings, are great for bugs, and they will die before the year is out. So resist cutting the annual weeds until mid to late summer, especially if the mixture contains Yellow Rattle, or has been sown with a nurse of cornfield annuals. Then cut, remove and compost. Early August is a good time. This will reveal the young meadow, which can then be kept short by grazing or mowing through to the end of March of the following year.
- 6.15 Dig out any residual perennial weeds such as docks.

Management once established

- 6.16 In the second and subsequent years EM3 sowings can be managed in a number of ways which, in association with soil fertility, will determine the character of the grassland. The best results are usually obtained by traditional meadow management based around a main summer hay cut in combination with autumn and possibly spring mowing.
- 6.17 Meadow grassland is not cut from spring through to late July/August to give the sown species an opportunity to flower. After flowering in July or August take a 'hay cut': cut

back with a scythe, petrol strimmer or tractor mower to c 50mm. Leave the 'hay' to dry and shed seed for 1-7 days then remove from site.

- 6.18 Mow the re-growth through to late autumn/winter to c 50mm and again in spring if needed.

EM6 Mix

First year management

- 6.19 Most of the sown meadow species are perennial and are slow to establish. Soon after sowing there will be a flush of annual weeds, arising from the soil seed bank. These weeds can look unsightly, but they will offer shelter to the sown seedlings, are great for bugs, and they will die before the year is out. So resist cutting the annual weeds until mid to late summer, especially if the mixture contains Yellow Rattle, or has been sown with a nurse of cornfield annuals. Then cut, remove and compost. Early August is a good time. This will reveal the young meadow, which can then be kept short by grazing or mowing through to the end of March of the following year.
- 6.20 Dig out any residual perennial weeds such as docks.

Management once established

- 6.21 In the second and subsequent years EM6 sowings can be managed in a number of ways which, in association with soil fertility, will determine the character of the grassland.
- 6.22 On poor shallow soils one or two cuts at the end of the summer, may be all that is required to maintain diversity and interest.
- 6.23 On deeper soils best results are usually obtained by traditional meadow management based around a main summer hay cut in combination with autumn and possibly spring mowing. Meadow grassland is not cut from spring through to late July/August to give the sown species an opportunity to flower.
- 6.24 After flowering in July or August take a 'hay cut': cut back with a scythe, petrol strimmer or tractor mower to c 50mm. Leave the 'hay' to dry and shed seed for 1-7 days then remove from site.
- 6.25 Mow the re-growth through to late autumn/winter to c 50mm and again in spring if needed.

7. Watering

Trees

- 7.1 Watering is one of the prime keys to successful establishment after planting a tree.
- 7.2 Use a watering can with a rose attachment on the end to water, a hose pipe or other such method that will administer water slowly and at a low pressure, mimicking rainfall.
- 7.3 Water should be applied to the base of the trees, evenly distributed over the entirety of the root-ball to encourage even root development.

Immediately after planting

- 7.4 In spring and summer, water newly planted trees immediately (known as 'watering in').
- 7.5 In autumn and winter, it depends how wet the ground is, or if rain is due. At this time of year, it's only really necessary to water in if we are experiencing a dry spell, to make sure the roots don't dry out.
- 7.6 A newly planted tree should be watered in when planted, and at the point of bud burst in the spring and should be continued throughout the spring and summer until the leaves have fallen in autumn (for deciduous trees).

In the first year after planting

- 7.7 From mid-March until the end of September, water trees two to three times a week. Increase this regime if we have a particularly hot and dry spell, and vice versa, reduce if the weather is very wet. Bear in mind that rain doesn't necessarily get to where it's needed, if the leaf canopy creates a 'rain shadow'. Dig down a little into the soil if you want to check how moist it is under the surface. During the height of summer, water should be applied at a rate of 2 domestic buckets full (or 20 litres of water) every other day. This figure is the aim to reach during the height of summer and can be gradually increased to this in the spring and decreased before ceasing watering in the autumn.
- 7.8 It's best not to water every day, but to let the ground dry out a little bit, encouraging roots to spread out in search of water. If a drought is on the horizon, however, consider beginning to water before things get dry.

- 7.9 In autumn and winter, watering isn't generally necessary, unless we have an unseasonally warm and dry period.
- 7.10 Watering is advised for the first 2 summers after planting, further to this the tree should be able to access water from the surrounding soil.
- 7.11 Use bark mulch at the base of the tree to help retain water, prevent weed growth and also give you an indication of where you need to water.
- 7.12 Be mindful that newly planted trees do need watering, even if it has been raining! Rain is useful in slowing up the volume of water needed by a newly planted tree, as it is often cooler during such periods, however it is the root-ball of the tree that needs watering and often rainfall will not fall this close to the base of the tree, due to the width of the canopy
- 7.13 Ensure that water is draining well away after 10 minutes of application of water.

2-3 years after planting

- 7.14 After the first year, enough roots may have grown into the soil to allow the plant to drink up enough to support itself, but as a precautionary measure carry on watering during dry spells. Monitor the plants to help you decide whether to water. If they begin to look at all floppy, drench them. Yellowing, dropping leaves, on the other hand, can indicate over watering (but not always).
- 7.15 You can water further away from the stem during this time, as the root zone will have widened out. Watering further away will also encourage roots to spread out.

Native Hedge/ Scrub Planting

- 7.16 Do not let the soil dry out at all in the first 12 months. Even if the plants appear dormant, the roots will be starting to grow under the ground. It is better to soak the soil twice a week than it is to sprinkle it with water every day. The water needs to sink as far as possible into the ground to encourage deep rooting. To make life easier, consider an automated irrigation system.
- 7.17 New planting areas need to be kept well-watered if the weather is dry. As a guide, a new scrub/hedge planting areas will need at least 5-10 litres per metre, twice a week but larger rootball plants will need substantially more.

Peak watering times

- 7.18 Plants need most water when they are in active growth. Deciduous trees which lose their leaves in autumn, are in this state in spring and summer.
- 7.19 It's important that trees don't dry out completely, at any time of year.
- 7.20 Watering in the early morning or in the evening is most efficient.

8. Management Objectives and Schedules

General Whole Site – Management Objectives

Management objective	Maintenance Task	Method	Timing	Years
Litter Picking	To maintain high standard of appearance	All contents to be bagged up and disposed of in the appropriate manner off site	Weekly	1,2,3,4,5
Emptying/clean litterbins. Dispose of waste. Clean as required including cigarette stub plates if applicable and immediate surrounding area.	To maintain high standard of appearance to area and cleanliness. Ensures litterbins are useable at all times.	All contents to be bagged up and disposed of in the appropriate manner off site	Weekly	1,2,3,4,5
Manual weed control	To ensure ongoing success of landscape planting and hard surfaces remain weed free.	To be undertaken by hand, using hand tools only throughout all planted areas and hard surfaces. All weeds to be removed, bagged up and disposed of off site	Monthly	1,2,3,4,5
Chemical weed control (non-residual)	To ensure ongoing success of landscape planting.	Generally utilised where all other methods of weed control are proven to be unsuccessful.	As required and approved (generally monthly during growing season)	1,2,3,4,5
Mechanical cleaning of hard surfaces	To ensure all hard surfaces remain weed free.	Spot-application to areas of hard surfaces where all other methods of weed control are proven to be unsuccessful.	As required and approved (generally monthly during growing season)	1,2,3,4,5
Removal of dog dirt from dog bins and ground	To maintain high standard of appearance to area and to ensure all hard surfaces remain free from debris/trip hazards	Road/path sweepers and pressure washers only permitted; use of chemical not permitted.	As required and approved (generally monthly)	1,2,3,4,5
Graffiti removal	To ensure the park remains a clean, safe and pleasant environment for all users.	Remove dirt and dispose of by bagging and disposal off site.	Weekly	1,2,3,4,5

Clearance of fallen leaves	To maintain high standard of appearance	Leaf litter to be disposed of off-site in a sustainable manner i.e. to a composting facility	Monthly	1,2,3,4,5
Watering	To reduce potential slip hazards	Watering is envisaged to be required predominantly at regular intervals throughout the spring and summer months following planting works, however some additional watering may be required during excessive dry spells throughout the year.	Twice a month during Oct / Nov / Dec	1,2,3,4,5
Snow removal	All planting and seeded areas as required to ensure successful establishment and create a high quality pleasant landscaped environment.	Excessive snow to be removed from shrub / tree planting to avoid damage to planting due to weight from snow build up.	As required (Generally 1-3 times a week during spring and summer and once a week outside this period).	1,2,3,4,5
Ice removal/gritting	Removal of snow from all hard surfaces, mature shrubs and trees.	Any products used must be non-toxic to humans and animals, and 100% biodegradable and eco-friendly.	As required during winter months	1,2,3,4,5

Existing Trees – Management Objectives

- To maintain the health, safety and visual amenity of retained trees
- To take care in construction and maintenance operations near to trees
- To manage the trees for their amenity value
- To enhance their ecological/biodiversity value

Note: Tree works should be carried out between August and March in order to avoid the bird-nesting season unless the works are essential for public safety

Management objective	Maintenance Task	Method	Timing	Years
Check tree safety	Identify hazards and carry out necessary maintenance work. Keep records up to date	Visual tree assessment with instrumental backup where necessary. Monitoring to be undertaken by qualified arboriculturalists. Tree works to be carried out to BS:3998:2010	Annual	1,2,3,4,5
Preserve habitats for invertebrates' birds and other creatures in, on and around the tree.	Identify potential habitats and carry out maintenance only where essential. Keep records up to date	Allow natural tree habitats to develop unless they are creating a safety hazard. Only sever ivy where it is growing into tree canopy and is likely to cause a sail hazard.	As required	1,2,3,4,5
Control exotic tree and shrub species that do not belong in a native tree setting.	Check and remove any exotic species	Dig by hand and remove from site or treat with a brush wood killer	Annual	1,2,3,4,5

Tree Planting – Management Objectives

- To ensure successful establishment of tree planting
- To maintain newly planted trees to ensure a good survival rate and development
- To minimise competition from grass and weeds

Note: Until well established all trees are to be watered during the growing season following any dry periods of 7 days. Tree planting areas are to be brought up to field capacity at each visit and each tree is to receive 90 litres.

Management Objective	Maintenance Task	Method	Timing	Years
Ensure successful establishment of tree planting	Check stakes and ties	Adjust/replace stakes and ties and remove when the tree is self-supporting	Twice yearly, spring and autumn	1,2,3
Keep planted areas free from weeds to reduce competition	Weeding	Weed clearance by hand, hoe or fork. Take care not to disturb roots and avoid excessive treading of bed surface	Monthly from March to October or as required	1,2,3,4,5
Maintain integrity of planting scheme	Monitor and record any tree losses/vandalism	Maintain tree planting and replace any losses. Check and mark dead trees in August/September – replace in the next growing	October/ November	1,2,3,4,5
Avoid damage to trunks of trees	Keep weed free area around tree trunks	Take care during mowing operations. The use of strimmers within 1m of tree is not acceptable	Whenever mowing and strimming operations take place	1,2,3,4,5
Keep planting areas free from excess leaf litter and fallen twigs and branches.	Removal of leaves and tree debris.	Leaf blower and leaf collection equipment.	November to December.	1,2,3,4,5
Keep paths/highways/parking areas clear from branches/vegetation.	Pruning/cutting back.	Prune back tree branches/vegetation from encroaching onto adjacent paths and highways, to a height of 5m over highways and 3m over paths.	As required from March to October.	1,2,3,4,5
Watering newly planted trees	Water trees	Use watering can or hose pipe.	Every 3-5 days	1, 2

Native Hedge/Scrub Planting – Management Objectives

- To establish new areas of planting
- To maintain newly planted areas of native transplants to ensure good survival rate and establishment
- To minimise competition from grass and weeds from around newly planted areas
- To control and make good damage from pests and disease, including animals

Note: Where possible, native plant stock shall be obtained from local sources and at the very least shall be propagated in the UK by an approved supplier.

Management Objective	Maintenance Task	Method	Timing	Years
Keep tree/shrub surrounds free from weeds to reduce competition for water/nutrients.	Visual inspection to check that mulch mats are effective.	Replace mulch if missing. Hand weed shelters. Do not use strimmers in these areas.	March and June.	1,2,3,4,5
Keep transplants protected from animal damage.	Visual inspection to check for damaged shelters and signs of bark damage.	Replace shelters and guards as necessary.	Monthly.	1,2,3,4,5
Keep transplants free from pests and diseases.	Qualified horticultural staff to inspect and check on health of transplants.	Deal with individual problems as they arise – ideally with no/minimum pesticide intervention.	Monthly from March to October.	1,2,3,4,5
Make good damage caused by vandalism.	Visual inspection to check for vandalism.	Replace vandalised transplants to fill in gaps.	November to March.	1,2,3,4,5
Keep planted areas clear of litter and fly tipped rubbish.	Remove litter and fly tipped rubbish.	Remove by hand.	Monthly.	1,2,3,4,5
Allow transplants to develop into healthy hedges.	Remove shelters from transplants.	To avoid damaging plants cut shelters away and remove stakes – take to legal tip.	Approx. 5 years after planting.	5
Watering newly planted hedge/scrub planting	Water transplants	Hand watering with hose pipe.	Twice a week.	1, 2
Cut hedges every 2 years	Cut back hedges in early spring.	Prune to remove any frost damage or diseased shoots. Cut to within 15cm of the base of the young leading shoots to encourage vigorous side branching.	February	1,3,5

Proposed Ornamental Shrub Planting

Management Objective	Maintenance Task	Method	Timing	Years
Keep planted beds free from weeds to reduce competition and improve visual amenity.	Weeding.	Weed clearance by hand, hoe or fork as required. Take care not to disturb shrub roots and avoid excessive treading of bed surface. Avoid use of herbicide until 75% of the ground is covered.	Monthly from March to October or as required.	1,2,3,4,5
Maintain integrity of planting scheme.	Monitor and record any plant losses. Report to client.	Replace missing plants and maintain to ensure survival.	October/ November.	1,2,3,4,5
Keep paths/highways clear from vegetation.	Pruning/cutting back.	Prune back shrubs from encroaching onto adjacent paths and highways to prevent encroachment.	As required from March to October.	1,2,3,4,5
To keep newly planted shrubs and ground cover in prime condition and appearance.	Qualified horticultural staff to inspect and check on condition of ornamental planting.	Prune dead foliage and flowers and extension growth as necessary. Remedial pruning to maintain plant vigour and amenity.	As required depending on species. Annually outside of growing season.	1,2,3,4,5
To keep newly planted shrubs free from pests and disease.	Qualified horticultural staff to inspect and check on health of ornamental planting.	Deal with individual problems as they arise keeping use of pesticides to a minimum.	Monthly from March to October.	1,2,3,4,5
To keep newly planted shrub beds free from litter	Remove litter	Remove by hand.	Monthly.	1,2,3,4,5

Grassland/Wildflowers

Management Objective	Maintenance Task	Method	Timing	Years
Allow meadow areas to regenerate.	Cut to 50mm after flowering and allow seeds to fall.	Leave arising for 2 to 3 days. Rake up arising's using a stiff tined rake to pull out any accumulated thatch – create habitat piles at the margins using arisings.	Cut in late July/August and September or April depending on weather conditions.	1,2,3,4,5
Allow insects to overwinter.	Cut to 50mm in spring.	Allow grass to grow after flowering then cut in spring. Rake up arising's using a stiff tined rake to pull out any accumulated thatch – create habitat piles at the margins using arisings.	Cut in April/March.	1,2,3,4,5
Keep the sward in good condition.	Check for damaged areas.	Repair damaged areas and sow seed.	April or September.	1,2,3,4,5
Keep weeds under control.	Check before each cut for weed problems.	Treat according to problem using best horticultural practice.	As necessary.	1,2,3,4,5
Keep all grass areas free from litter.	Litter removal.	Hand picking.	Monthly.	1,2,3,4,5
Meadow Grass Monitoring.	Monitor the Meadow Grass.	A visual inspection to be carried out.	At the start of flowering season – best time to check establishment, dominant species etc.	1,2,3,4,5

Amenity Grass

Management Objective	Maintenance Task	Method	Timing	Years
Control height of amenity grass for recreational use.	Cut grass to between 25-40mm.	Mow large areas with a tractor drawn gang mower and smaller areas with pedestrian or sit-on mowers as necessary – arising's should be removed from site and composted. Trim around obstacles such as fences, walls and posts to same standard as the surrounding grass area. Clean path areas after mowing.	Approx. 16-20 times during growing season. April – October (every 7 to 10 days during May, June, July and August but do not cut in drought conditions).	1,2,3,4,5
Keep edges to amenity grass areas neat and tidy.	Trim edges to shrub beds and hard surfaces.	By hand using long handled edging shears (shrub beds) or an edging iron (hard surfaces). The use of strimmers is not acceptable.	May, July, September.	1,2,3,4,5
Keep all grass areas free from litter and dog faeces.	Litter/faeces removal.	Hand picking.	Before each cut and monthly October - March.	1,2,3,4,5

Sustainable Urban Drainage Features

Management Objective	Maintenance Task	Method	Timing	Years
Maintain diversity of plant species.	Control invasive weeds.	Cut or pull by hand.	June/July.	1,2,3,4,5
Keep SUDS features free of litter and rubbish.	Remove litter and fly tipped rubbish.	Remove by hand.	Monthly.	1,2,3,4,5
Maintain out falls, culverts and grilles in good working order.	Inspect system and remove blockages or carry out repairs.	Remove blockages and repair damage to SUDS system – take arising's to legal tip or compost facility.	Monthly and as necessary after severe weather conditions.	1,2,3,4,5
Limit the amount of dead vegetation falling into SUDS features and channels.	Remove dead vegetation.	Rake of by hand after flowers have seeded.	Autumn.	1,2,3,4,5
Grass cutting within swales.	Grassed banks to be cut to a minimum 100mm height. Arising's to be dispersed.	Mow smaller areas with pedestrian or sit-on mowers as necessary. Trim around obstacles such as fences, to same standard as the surrounding grass area. Clean adjacent path areas after mowing.	Monthly during growing season.	1,2,3,4,5
Maintain habitats for small mammals.	Check that areas of areas of open grass are maintained adjacent to basins.	Cut down invasive weeds.	June /July.	1,2,3,4,5

Paths, Paved Areas, Fencing/Gates, Access and Signage

Management objective	Maintenance Task	Method	Timing	Years
Keep the access, parking, footpaths and paved areas free from litter.	Remove bags from litter bins and remove litter paths and paved areas.	Remove and replace bags from bins and deposit in legal tip. Sweep up litter from paths and paved areas.	Twice weekly April to September, weekly October to March.	1,2,3,4,5
	Bins to be chemically cleaned.	Using appropriate approved equipment and full PPE.	One year after bins were last cleaned.	1,2,3,4,5
Keep the access, parking, footpaths and paved areas free from leaf and tree debris.	Removal of tree litter and debris, including leaves, conkers, branches.	Removal, collection of all tree litter and debris, including leaves, conkers, branches and transport to tip.	November and December.	1,2,3,4,5
Keep the access, parking, footpaths and paved areas free of weeds.	Weed killing.	Spray with herbicide containing glyphosate using knapsack sprayer.	April/June and August.	1,2,3,4,5
Maintain paved areas in a safe condition.	Check for pot holes, potential trip hazards, vandalism and graffiti, or other issue to be repaired.	Repair using same material.	As necessary.	1,2,3,4,5
	Paths to be cleared of snow and gritted during periods of snow and ice.	-	As required during adverse weather.	1,2,3,4,5
To maintain visual appearance and condition of gates/signs/fencing, walls	Remove flaking paint and prepare a receptive surface finish for new finish.	Repaint or restain as appropriate.	Every 5 years.	1,5
	Damaged and vandalised walls/fencing to be repaired or replaced as appropriate.	-	As required.	1,2,3,4,5
	Spot spray weeds around bases.	Use appropriate approved herbicide using full PPE.	As required.	1,2,3,4,5

Play Areas

Note: All staff associated with playground inspections are to hold a disclosure applied for through the Criminal Records Bureau. All staff associated with playground inspections are to be certified to the appropriate levels of the Register of Playground Inspectors International as follows;

- Routine Inspectors – daily and weekly inspections
- Operational Inspectors – monthly and quarterly inspections
- Annual Inspectors – annual and post installation inspection

Whilst annual inspection is not mandatory a risk assessment is required by law under the Health and Safety Regulations.

Management Objective	Maintenance Task	Method	Timing	Years
To identify obvious hazards or respond to complaints by public.	Routine visual inspection of all play areas.	Check for signs of vandalism and remove any litter, glass etc. Check safety surface for faults/loose fill for depth. If parts are found to be unsafe and cannot be immediately repaired the equipment should be immobilised or cordoned off with a warning noticed attached. Record each visit on a spreadsheet.	Daily.	1,2,3,4,5
To check the operation and stability of the equipment.	Operational inspection of all items of equipment, fences and gates.	Check all working parts and oil and grease bearings as necessary. Check all ropes, chains and shackles. Check anti slip surfaces eg. on step treads. Check that structures and foundations are secure. Check for trip hazards and obstructions in surrounding area. Check for finger traps. Check wooden items for splinters and cracks. Check metal items for corrosion and sharp edges. Check that plastic/polythene items for brittleness and sharp edges. If parts found to be unsafe and cannot be immediately corrected the equipment should be removed or immobilised and cordoned off with a warning noticed attached. Check each item against a check list and record each visit on a spreadsheet.	Monthly.	1,2,3,4,5
To establish overall level of safety of the equipment. Whilst annual inspection is not	Annual technical inspection of all play areas.	To be carried out by ROSPA or manufacturers inspection engineers. Includes a non-dismantling inspection of all	Every 12 months	1,2,3,4,5



mandatory a risk assessment is required by law under the Health and Safety Regulations.		equipment supported by a detailed technical report highlighting any action required. If parts are found to be unsafe and cannot be repaired the equipment should be removed or immobilised and cordoned off with a warning notice attached.		
To repair defective equipment.	Notify the client within 12 hours of immobilising defective equipment.	On instruction from the client repair equipment in accordance with manufacturer's specification.	As necessary	1,2,3,4,5
To generally maintain superficial appearance of equipment and street furniture.	Visual inspection and repainting.	Sand down and repaint or restrain equipment, seats, bins and fences to specification supplied by supplier.		1,2,3,4,5
	Graffiti to be removed.		As necessary. Graffiti of an offensive nature to be removed within one week of reporting.	1,2,3,4,5
To keep play areas free of litter.	Litter removal.	Hand pick and empty litter bins – remove to a legal tip.	Twice weekly April to September, weekly October to March.	1,2,3,4,5

APPENDIX 1

LANDSCAPE PROPOSALS



- ### KEY
- #### Soft Landscaping
- Existing Trees Retained
 - Proposed Tree Planting
 - Proposed Native Hedge/Scrub Planting
 - Proposed Single Species Native Hedge
 - Proposed Shrub Planting
 - Proposed Amenity and Rear Garden Grass - Flowering Lawn Mixture EL1
 - Proposed Grassland/Wildflowers - EM3 Special General Purpose Meadow Mixture
 - Proposed Grassland - Damp tolerant grassland/wildflower mix EG8 tolerant of being seasonally wet and drier in summer
 - Proposed Grassland/Wildflowers - EM6 Meadow Mixture for Chalk and Limestone Soils
- #### Hard Landscaping
- Proposed Highway Access and Paths - Tarmac path with kerb edging
 - Proposed Road Access - Block Paving - Burnt Ochre Colour
 - Proposed Loose Stone Grid System
 - Proposed Transition Strips - Block Paving - Penant Grey
 - Proposed Paving - Front/rear garden paths, paving slabs 450x450mm
 - Proposed Wetpour Safety Surfacing
 - Proposed ReRoot 1000 Root Barrier
- #### Services
- Drainage Easement
 - Services Corridor
 - Proposed Foul Water Sewer
 - Proposed Surface Water Sewer
 - Proposed High Capacity Drainage Channel
- #### Boundary Treatments
- Proposed 2.5m Chain Link Cat Dog Fence
 - Proposed 1.8m High Close Board Fence
 - Proposed 1.5m High Screen Wall with 0.3m Timber Trellis
 - Proposed 1.0m High Bow Top Fencing with Self Closing Gates
 - Proposed 0.5m High Timber Knee Rail

TREE PLANTING

Species	Form	Glth cm	Height cm	Root condition	Quantity
Ametanchier lamarkii	EHS	14-16	425-600	65/85 L	5
Betula pendula	EHS	14-16	425-600	65/85 L	34
Carpinus betulus 'Frans Fontaine'	EHS	14-16	425-600	65/85 L	8
Fagus sylvatica	EHS	14-16	425-600	65/85 L	6
Larix decidua		120-150	15L		31
Pinus avium	EHS	14-16	425-600	65/85 L	18
Pinus sylvestris		120-150	15L		31
Prunus celtiana 'Chandicler'	EHS	14-16	425-600	65/85 L	8
Prunus nigra		120-150	15L		33
Tilia cordata	EHS	14-16	425-600	65/85 L	17
Tilia cordata 'Greenspire'	EHS	14-16	425-600	65/85 L	16
Sorbus aria	EHS	14-16	425-600	65/85 L	26
Sorbus aucuparia	EHS	14-16	425-600	65/85 L	18
Sorbus commata 'Embley'	EHS	14-16	425-600	65/85 L	14

SHRUB AND HEDGE PLANTING

Code	Species	Height spread cm	Pre size (culture)	Habit	Min no. of plants	No. / m ²
BCP	Bergenia cordifolia Purpurea	15-20	3L	-	-	5
BSF	Buxus sempervirens 'Faulkner'	30-40	3L	Bushy	5	5
CCD	Cotoneaster conspicuus Deonoe	30-40	3L	Bushy	3	2
CAE	Cornus alba 'Elegantissima'	40-60	3L	Branched	3	1.5
CK	Cornus alba 'Kesselringii'	40-60	3L	Branched	4	1.5
CBH	Carpinus betulus (hedge)	60-80	2L	Feathered	4	5/m
CSK	Cotoneaster 'Stogholm'	30-40	3L	Spreading	3	3
CSF	Cistus Silver Pink	30-40	3L	Bushy	4	3
CT	Choisya ternata	30-40	3L	Bushy	7	1.5
CTR	Ceanothus thyrsiflorus var. 'Revens'	30-40	3L	Bushy	5	4
EE	Elaeagnus x ebbingei	60-80	3L	Bushy	3	1.5
EAG	Euonymus Emerald 'n' Gold	20-30	3L	Bushy	7	5
EEO	Euonymus Emerald Galety	20-30	3L	Bushy	7	5
FSH	Fagus sylvatica (hedge)	60-80	2L	Feathered	4	5/m
GJB	Geranium 'Johnsons Blue'	20-30	2L	-	-	5
HAR	Hebe albicans 'Red Edge'	20-30	3L	Bushy	5	3
HR	Hebe rakaiensis	20-30	3L	Bushy	5	3
HH	Hypericum Hidzote	30-40	3L	Bushy	5	2
LAV	Lavandula Hidzote	20-30	3L	Bushy	5	3
LBC	Lonicera 'Baggesens Gold'	30-40	3L	Bushy	3	4
LM	Lonicera 'Maygreen'	30-40	2L	Bushy	3	3
MA	Malva 'Apollio'	30-40	3L	Bushy	3	2.5
OH	Osmanthus 'hawaii'	30-40	3L	Bushy	2	3
OB	Osmanthus burkwoodii	30-40	3L	Bushy	5	1.5
PAB	Potentilla 'Abbotswood'	30-40	3L	Bushy	4	2.5
PE	Potentilla Elizabeth	30-40	4L	Bushy	6	2.5
PRA	Potentilla Red Ace	30-40	3L	Bushy	4	2.5
POL	Prunus 'Ota Lukeyn'	30-40	3L	Bushy	3	2
PRR	Photinia x Fraseri 'Red Robin'	40-60	3L	Branched	6	1.5
RK	Rosa 'Kent'	30-40	3L	Bushy	4	3
RR	Rosa 'Hertfordshire'	30-40	3L	Bushy	3	3
RS	Rosa 'Suffolk'	30-40	3L	Bushy	4	3
SAW	Spiraea Anthony Waterer	30-40	3L	Branched	5	3
SG	Spiraea 'Goldflame'	20-30	2L	Bushy	5	3
SH	Symphoricarpos 'Hancock'	40-60	3L	Branched	2	2
DOK	Sarcococca hookeriana	30-40	3L	Bushy	3	2
SKW	Skimmia 'Kew White'	30-40	3L	Bushy	3	3
SR	Skimmia japonica 'Rubella'	30-40	3L	Bushy	3	3
SS	Senecio Sunline	30-40	3L	Bushy	4	2
VM	Vinca Minor	15-20	2L	Bushy	-	5
VD	Viburnum davidii	30-40	3L	Bushy	3	3
VTEP	Viburnum tinus 'Eve Price'	30-40	3L	Bushy	7	1.5

Emorsgate EL1 Flowering Lawn Mix sown at 4gms/m²

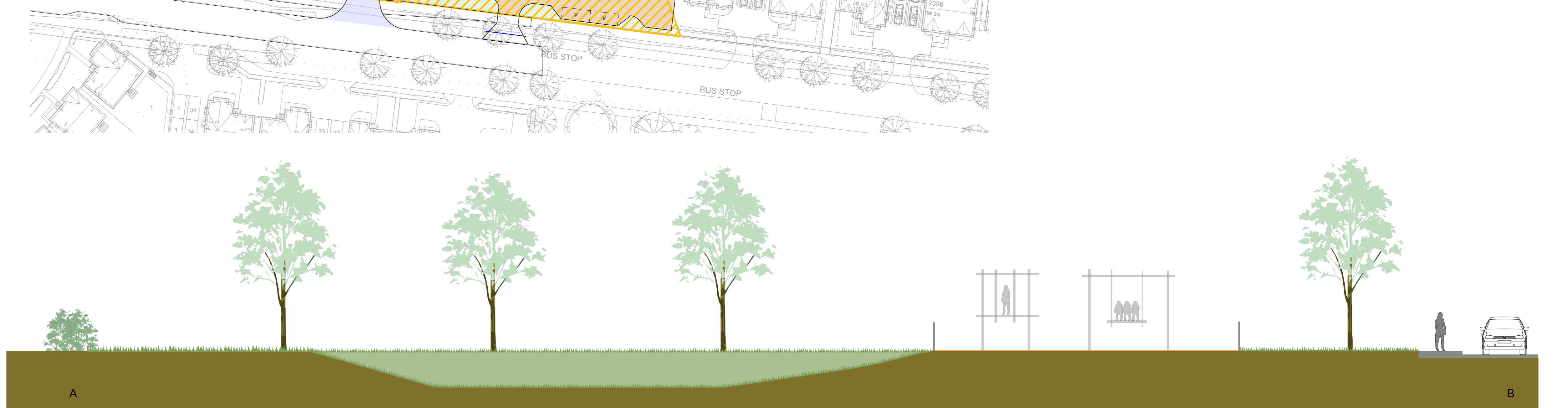
% Latin name	Common name
4 Galium verum	Lady's Bedstraw
0.5 Leontodon hispidus	Rough Hawkbit
1 Leucanthemum vulgare	Oxeye Daisy
3.7 Lotus corniculatus	Birdfoot Trefoil
3 Primula veris	Cowslip
4 Prunella vulgaris	Selfheal
3.5 Ranunculus acris	Meadow Buttercup
0.3 Trifolium pratense	Wild Red Clover

Emorsgate EG3 Meadow Mixture for Wet Soils sown at 5gms/m²

% Latin name	Common name
12.5 Agrostis capillaris	Common Bent
3.75 Alopecurus pratensis	Meadow Footfall (w)
3.75 Anthoxanthum odoratum	Sweet Vernal-grass (w)
3.75 Briza media	Quaking Grass (w)
32.5 Cynosurus cristatus	Crested Dogtail
2.5 Deschampsia cespitosa	Tufted Hair-grass (w)
35 Festuca rubra	Red Fescue
6.25 Schedonorus pratensis (Festuca pratensis)	Meadow Fescue

Emorsgate EM3 Special General-Purpose Meadow Mixture sown at 4gms/m²

% Latin name	Common name
0.5 Achillea millefolium	Yarrow
0.5 Centaurea nigra	Common Knapweed
0.8 Centaurea scabiosa	Greater Knopweed
0.6 Chaicus cordata	Wild Carrot
0.5 Filipendula ulmaria	Meadowsweet
1 Galium album - (Galium mollugo)	Galium verum
1 Knautia anvensis	Field Scabious
0.2 Leontodon hispidus	Rough Hawkbit
1 Leucanthemum vulgare	Oxeye Daisy
0.2 Lotus corniculatus	Birdfoot Trefoil
0.2 Plantago media	Hoary Plantain
1.5 Poterium sanguisorba - (Sanguisorba minor)	Salad Burnet
0.6 Primula veris	Cowslip
1 Prunella vulgaris	Selfheal
2.5 Ranunculus acris	Meadow Buttercup
1 Ranunculus bulbosus	Bulbous Buttercup
1 Rhinanthus minor	Yellow Rattle
0.4 Rumex acetosa	Common Sorrel
1 Silene dioica	Red Campion
1.5 Silene vulgaris	Bladder Campion
1 Viola cracca	Tufted Vetch



NATIVE SCRUB PLANTING @ 1M CTRS. AREAS B, C, D, E

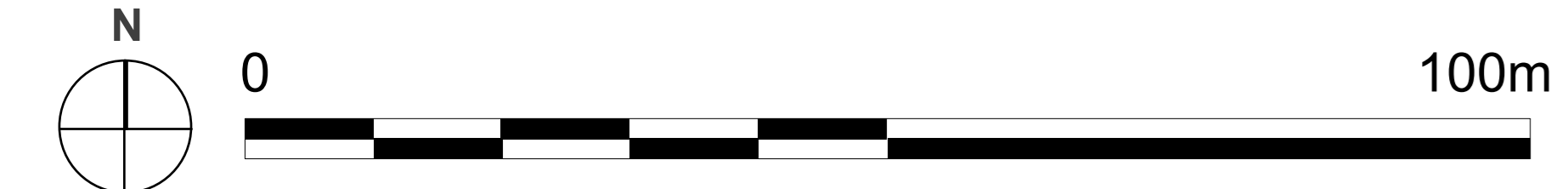
Code	Species	Root Condition	Age + Transpl	Height cm	Area B	Area C	Area D	Area E	Quantity
AC	Acer campestre (20%)	Bagged	1+1	40-60	6	6	10	16	38
CA	Cornus avellana (10%)	Bagged	1+1	40-60	3	3	5	8	19
CM	Cornus monostoma (20%)	Bagged	1+1	40-60	6	6	10	16	38
CS	Cornus sanguineum (10%)	Bagged	1+1	40-60	3	3	5	8	19
LV	Ligustrum vulgare (20%)	Bagged	1+1	40-60	6	6	10	16	38
LA	Ilex aquifolium (10%)	3L	-	40-60	3	3	5	8	19
VO	Viburnum opulus (10%)	Bagged	1+1	40-60	3	3	5	8	19

NATIVE HEDGE TRANSPLANTS @ 5 per linear metre in double staggered row - Area A

Code	Species	Root Condition	Age + Transpl	Height cm	Area A	Quantity
AC	Acer campestre (20%)	Bagged	1+1	40-60	70	70
CA	Cornus avellana (10%)	Bagged	1+1	40-60	35	35
CM	Cornus monostoma (20%)	Bagged	1+1	40-60	70	70
CS	Cornus sanguineum (10%)	Bagged	1+1	40-60	35	35
LV	Ligustrum vulgare (20%)	Bagged	1+1	40-60	70	70
LA	Ilex aquifolium (10%)	3L	-	40-60	35	35
VO	Viburnum opulus (10%)	Bagged	1+1	40-60	35	35

Emorsgate EM6 Meadow Mixture for Chalk and Limestone Soils sown at 4gms/m²

% Latin name	Common name
20% Wild Flowers	
0.5 Agrostis capillaris	Common Bent
3.75 Alopecurus pratensis	Meadow Footfall (w)
3.75 Anthoxanthum odoratum	Sweet Vernal-grass (w)
3.75 Briza media	Quaking Grass (w)
32.5 Cynosurus cristatus	Crested Dogtail
2.5 Deschampsia cespitosa	Tufted Hair-grass (w)
35 Festuca rubra	Red Fescue
6.25 Schedonorus pratensis (Festuca pratensis)	Meadow Fescue
20% Grasses	
1 Anthoxanthum odoratum - Sweet Vernal-grass	Briza media - Quaking Grass (w)
1 Bromopsis erecta - Upright Brome (w)	Cynosurus cristatus - Crested Dogtail (a)
1 Festuca ovina - Sheep's Fescue	Festuca rubra - Red Fescue
1 Festuca rubra - Red Fescue	Trisetum flavescens - Yellow Oat-grass (w)



Scale 1:100

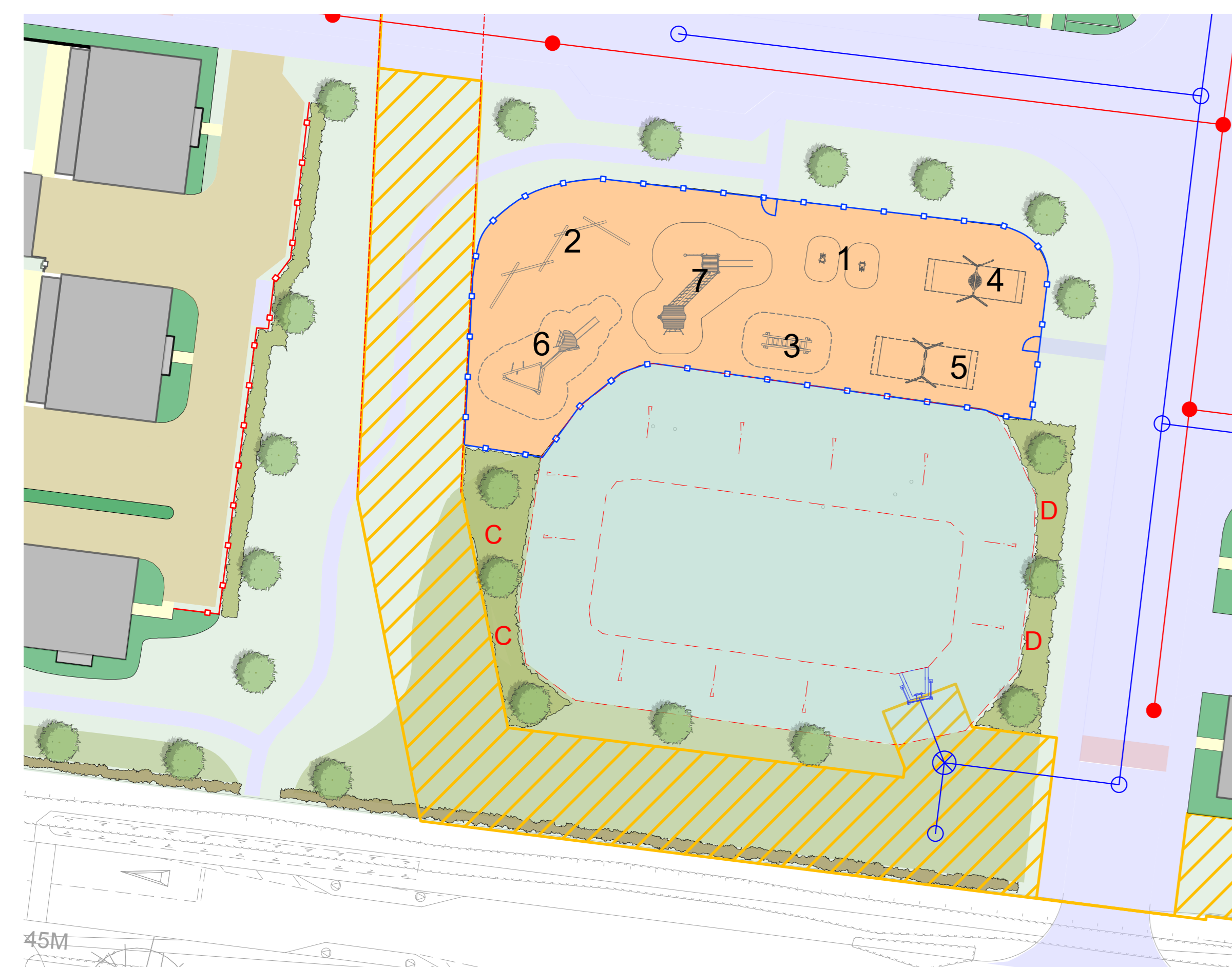
Scale 1:100



- KEY**
Soft Landscaping
- Mountain Ash - 18
 - Juneberry - 5
 - Austrian Pine - 33
 - Silver Birch - 34
 - Hornbeam 'Frans Fontaine' - 8
 - Common Beech - 6
 - Larch - 31
 - Wild Cherry - 18
 - Pear 'Chanticleer' - 8
 - Scots Pine - 31
 - Mountain Ash 'Commixta Embley' - 14
 - Small Leaved Lime - 17
 - Lime 'Greenspire' - 16
 - Whitebeam - 26
- Proposed ReRoot 1000 Root Barrier



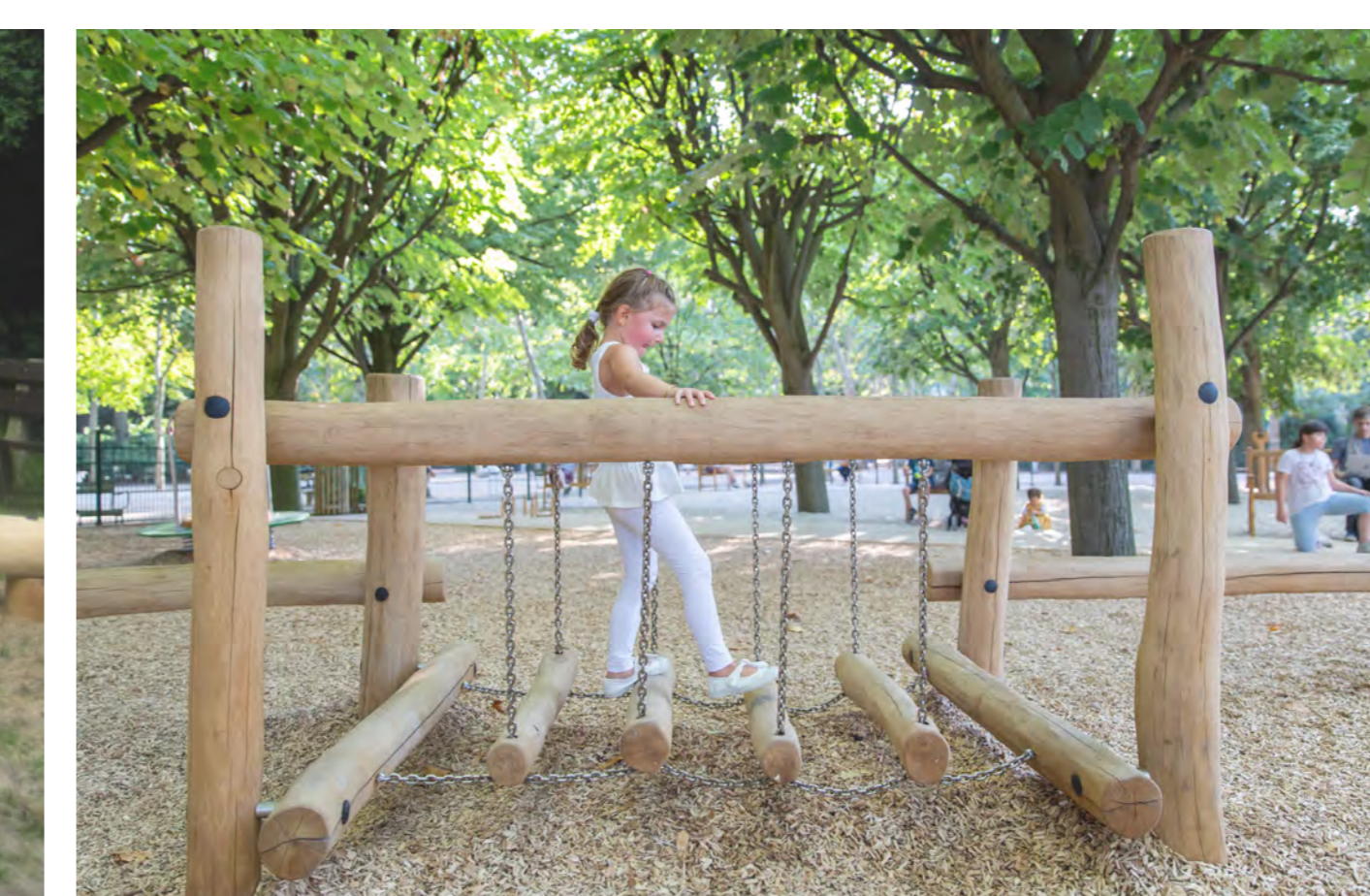
Play Area LAP/LEAP 1:300



1) Springers



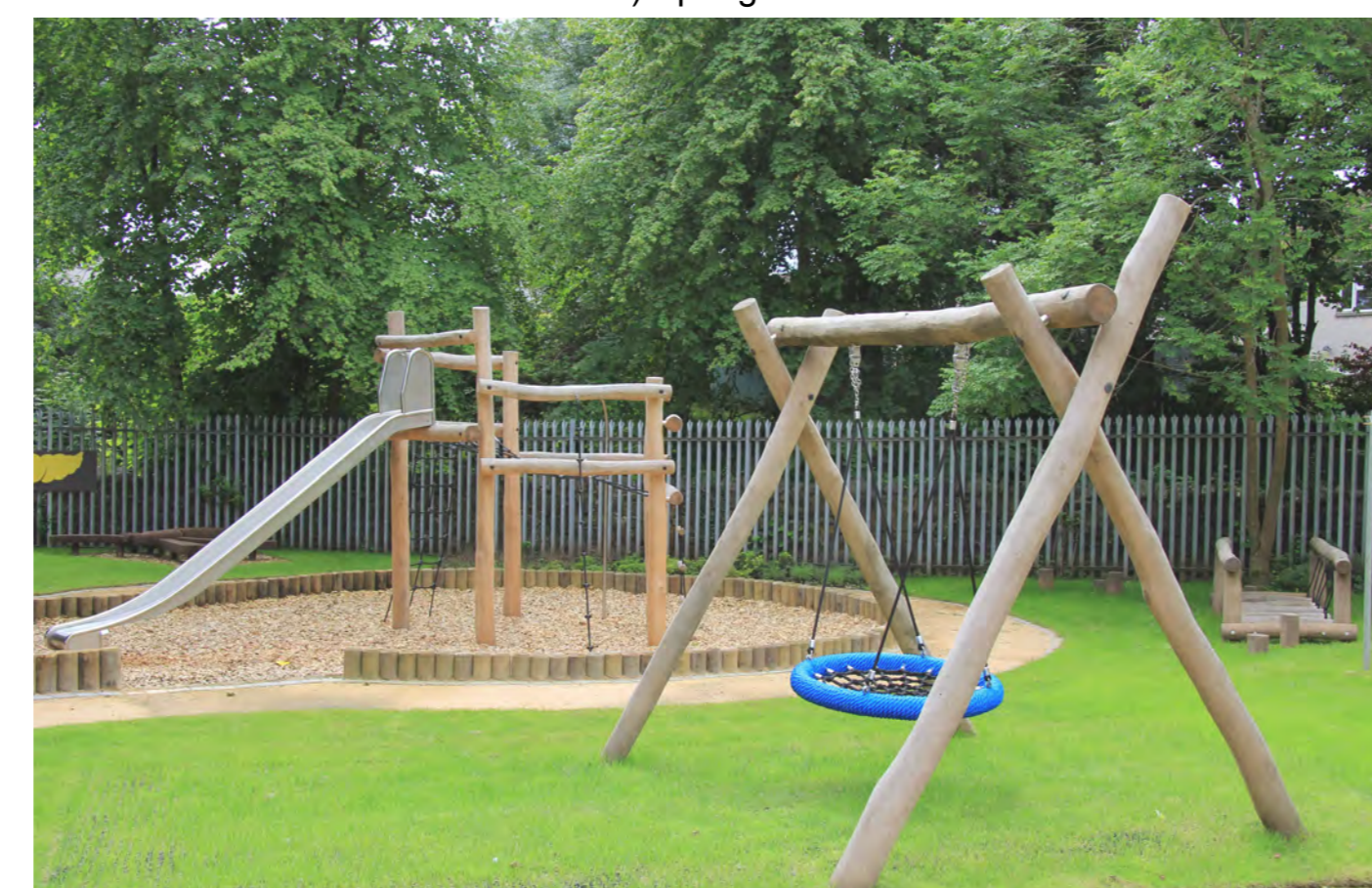
2) Balancing Logs



3) Balancing Beams



7) Double Tower with Valley Bridge



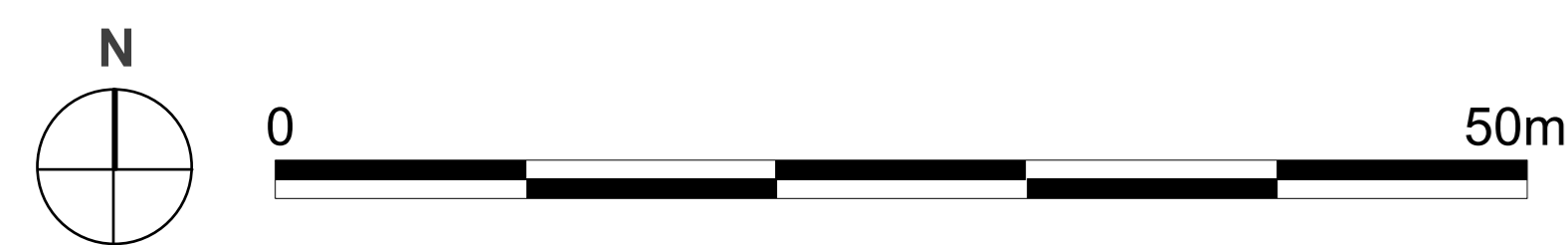
4) Nest Swing



5) Double Swing



6) Tower and Climber Multi Unit



Revision	Description	Date
	First Issue	30/11/21
A	Second Issue	9/5/22
B	Third Issue	14/6/22
C	Fourth Issue	29/6/22
D	Fifth Issue	7/11/22
E	Sixth Issue	13/12/22
F	Seventh Issue	15/12/22

LANDARB SOLUTIONS

Project:
Heyford Park, Phase 10

Description:
Landscape Proposals Plan - Sheet 2 of 2

Status:
For Planning

Scale: 1:500 @A0
Job Number: LAS 242

Drawn I Checked
DP MP
Drawing Number: 03

Date: 15/12/2022
Revision: F