



LANDSCAPE MANAGEMENT AND MAINTENANCE PLAN

FOR PLANNING

AT

St Georges Way, Eastleigh

FOR

Hendy Group

DEC 2022

Rev P01_ First Issue

Rev P02_ Planning comments incorporated.

Rev P03_ Planning comments incorporated.

CONTENTS

INTRODUCTION TO THE LANDSCAPE ESTABLISHMENT/ MAINTENANCE SPECIFICATION	1
DESIGN OBJECTIVES	1
GENERAL MANAGEMENT OBJECTIVES.....	2
SOFT LANDSCAPE ELEMENTS	2
Ornamental Shrub and Herbaceous	2
Trees	2
Native Shrub Planting	2
Hedgerow Planting	3
HARD LANDSCAPE ELEMENTS	3
Surface Materials and Street Furniture	3
ESTABLISHMENT/ MAINTENANCE PROGRAMME.....	3
General Management Objectives	3
Standards of Workmanship	4
Failure of Plant Material	4
ELEMENTS OF WORK (SPECIFICATION)	4
SOFT LANDSCAPE ELEMENTS	4
Ornamental Shrubs and Herbaceous	5
Trees	6
Native Shrub Planting	7
Hedgerow Planting	8
HARD LANDSCAPE ELEMENTS	9
Surface Materials and Street Furniture	9
PROCESS FOR MONITORING AND REVIEW	11
ANNUAL MAINTENANCE OPERATIONS SCHEDULE	12

INTRODUCTION TO THE LANDSCAPE ESTABLISHMENT/ MAINTENANCE SPECIFICATION

This Landscape Maintenance and Management Plan has been prepared by PRC Group and forms part of the planning application for the proposal of the development of a new car dealership facility at St Georges Way, Eastleigh. Reference should be made to the Site wide Layout drawing PL_004-P8 - Proposed Site Plan.

The purpose of this Maintenance and Management Plan is two-fold.

1. Setting out the long term aims and objectives for the site so that all stakeholders and relevant parties can understand how it is intended that the landscape components be developed and established.
2. Providing a prescriptive series of timed operations which will form a working document to instruct the Management Company / appointed Landscape Contractor on how the objectives will be achieved.

The purpose of this document is to ensure appropriate Short-term (first year) and longer-term (5 years) management of the vegetation and other landscape components

The landscape establishment maintenance specification document will set out the performance of the required soft landscape maintenance works during the 12 months Defects Liability Period (DLP) to ensure successful establishment and also covers the first five-year period from practical completion. The works are expected to be undertaken and completed to the highest quality befitting of this project. The document will assist those who supervise and carry out the landscape maintenance work and is intended for use by individuals or companies who have an understanding of landscape maintenance and of the general terms and standards.

Refer to drawings EVW-AHR-ZZ-ZZ-DR-L-0003-S2 for Landscape General Arrangement Plan.

The softworks package consists of a series of amenity grass, ornamental and shrub planting areas, specimen trees and hedgerow planting.

DESIGN OBJECTIVES

The landscape has been developed in such a way as to:

- Define and soften boundaries through the use of quality soft landscaping to aid the legibility of the scheme.
- Create opportunities for tree planting with species chosen to provide structure and an identifiable character to the landscape as well as contributing to the ecological value of the site;
- To use hedge planting to enhance the existing boundary and to provide a transition between the functional landscape of the site and the adjacent existing developments.

GENERAL MANAGEMENT OBJECTIVES

The site has been made up of various design elements and they all have a function to perform and have objectives in terms of establishment. The information below summarises the main functions and key objectives for the maintenance of the wider landscape and each element over a five-year period.

- To establish the long term design objectives of the landscape area and define management objectives and ensure the successful establishment and long term health of the plant stock through watering and pruning if and when required;
- To ensure use of good horticultural practices and best health & safety practices at all times;
- To create an interesting, diverse and interactive landscape for all users of the development and ensure that all surfaces are kept in a safe and tidy condition for members of the public and building occupiers;
- To create new habitats and maximise the wildlife value of the site;
- To enhance the amenity value of the site.

In addition to the landscape proposed within the development, there are also footpaths, paved areas, car parking and bin stores.

SOFT LANDSCAPE ELEMENTS

Wildflower and Grass Seeds Mix

Amenity function, the Wildflower and Grass Seeds Mix will have an important visual association with the proposed buildings and the landscape. Objective to provide habitat for pollinators, beneficial insects and wildlife, which is important for ecosystem and improve biodiversity on the site.

Ornamental Shrub and Herbaceous

Amenity function, occurring when formal and ornamental planting is required, such as visually important locations and in association with buildings, in particular entrances and gardens. The planting will give seasonal interest but also height and structure. Objective to establish as planted groups with a good visual display, preventing the incursion of weeds.

Trees

Amenity and screening function. Located as visual focal points, objective to establish young trees keeping the bases weed free.

Native Shrub Planting

Screening, amenity and nature conservation / biodiversity enhancement functions. Located along Southern site boundary. Objective to establish informal groups of shrubs, preventing the spread of competitive/ invasive weed species, maintaining the species mix and beginning to develop structural diversity by using techniques such as coppicing and thinning. Under planting of grass mix for hedgerows and woodland further contributes to suppressing competitive/invasive weed growth as well as providing more opportunities for biodiversity by providing sources of food and shelter, mostly to insects and birds.

Hedgerow Planting

Screening, amenity and nature conservation functions. Located near site boundaries. Objective to establish informal groups of tree and shrub, preventing the spread of competitive/ invasive weed species, maintaining the species mix and beginning to develop structural diversity by using techniques such as coppicing and thinning. In accordance with the approved landscape plan and specification new hedgerows must be protected from rabbits and hares with rabbit guards.

Management objectives should be reviewed on an annual basis to ensure that they are being achieved. Maintenance operations should also be refined over the life of the development to suit changes in growing needs of plant stock and improvements in equipment and horticultural aids.

HARD LANDSCAPE ELEMENTS

Surface Materials and Street Furniture

Surface treatments are designed to be robust and provide safe and attractive routes throughout the development. The road and footpath treatments consist of tarmac and block paving.

ESTABLISHMENT/ MAINTENANCE PROGRAMME

As part of the contract, and to ensure successful establishment, the Contractor is to be responsible for the maintenance of all hard and soft landscape components for the duration of the 12 months' DLP (full 12 months post planting) **and also covers the first five-year period from practical completion.**

The Contractor is responsible for, but not be limited to:

General Management Objectives

The works involves, but are not limited to, the following maintenance tasks:

- Ensure early establishment and healthy growth of all newly planted trees;
- Establish and encourage a well formed structure and hedgerow characteristics;
- Ensure health and structure to mature trees;
- Watering plants as necessary (with particular attention to trees) to aid establishment during the early years after planting, water to landscape maintenance to be provided by the landscape contractor;
- **Keeping planting areas generally free from weeds. At all times planted areas shall be kept clear of all litter and debris and the Contractor shall ensure that all paths are swept clean of arisings. Soil and arisings are to be removed from hard surfaces and grassed areas and removed from site;**
- Leave the works in a clean tidy condition and after any maintenance operations;

- Appropriate herbicides will be used to control weed growth, in line with standard horticultural practice;
- General pruning and trimming as required ensuring footways, signs etc. are not obscured;
- All plants are to be encouraged to grow to their natural shape unless stated otherwise;
- Fertilising of planting;
- Replacing plants that fail where required;
- Thinning of planting where required to allow healthy future growth;

Standards of Workmanship

The landscape maintenance is to be carried out to a high standard and where possible source locally based landscape contractor subject to the following;

- The contractor shall supply appropriately skilled and experienced operatives for the type and quality of the work and be familiar with this manual. The contractor shall supply a suitable experienced and qualified foreman, who shall attend the site at each and every visit. The foreman must be able to interpret and act on instructions given by the CA or his agents.
- All operations necessary shall be carried out without unreasonable noise and disturbance. The landscape maintenance contractor will ensure that the works themselves do not cause inconvenience or danger to the users of the site.

Failure of Plant Material

- Any tree, transplant, specimen plant, shrub or herbaceous material which has died or has not developed full foliage throughout its branches during the 5 years following planting to be replaced. Failures to be undertaken during the first planting season after failure and using matching species.
- All replacement plant material shall conform to the original Specification unless otherwise agreed in writing between the Contractor and the Landscape Architect.
- The Contractor shall make good at his own expense all necessary repairs to levels, grassed areas and paving required because of plant replacements.

ELEMENTS OF WORK (SPECIFICATION)

SOFT LANDSCAPE ELEMENTS

- Water to landscape maintenance to be provided by the landscape contractor.

Wildflower and Grass Seeds Mix

- All bare areas of grass, areas of dead grass or grass areas which in the opinion of the Landscape Architect are failing to make satisfactory growth shall be replaced by the Contractor. These areas are to be replaced with species composition appropriate to location.
- Tree stem Precautions: Do not use mowing machinery closer than 100 mm to tree stems. Use nylon filament rotary cutters and other hand held mechanical tools carefully to avoid damage to bark.

EM3 – Special General Purpose Meadow Mixture (*as advised by Emorsgate Seeds*).

- First Year Management - 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. Dig out any residual perennial weeds such as docks.
- Management Once Established 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 or grazing.
- Meadow grassland is not cut or grazed 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 trimmer or tractor mower to c 50mm. Leave the 'hay' to dry and shed seed for 1-7 days then remove from site.
- Mow or graze the re-growth through to late autumn/winter to c 50mm and again in spring if needed.

Ornamental Shrubs and Herbaceous

- When planting shrubs ensure that planting pit depth is 50mm greater than the root ball and all soil on sides and bottom of the pit are loose;
- Maintain healthy, vigorous shrub planting;
- Lightly clip over plants where required. Cut back flowering shoots after flowering;
- Water as necessary to secure healthy establishment and to avoid the need for replacement due to dry periods (less than 30mm rainfall at the end of a four week period), water to landscape maintenance to be provided by the landscape contractor;
- Remove suckers, dead, discoloured, weak or damaged stems, cut back any stems obstructing paths etc. Prune to reduce size if suppressing adjoining species;

- Species specific pruning at appropriate time of year to promote healthy growth and species specific shape and form. Ensure nursery's recommendations are followed for each particular species. Remove dead flowers to encourage repeat blooming
- Ornamental grasses shall be cut back annually in spring before, or just as new growth appears to within 100-150mm of the soil level. Dead, dying or broken flower stalks to be trimmed off. If the centre of a clump dies out then it shall be dug up, divided and the healthy portion replanted. If the plant becomes too large it shall be divided into more manageable clumps and replanted;
- Apply a slow release fertiliser in spring; **should be spread evenly according to manufacturer's recommendations in March or April.**
- Fallen leaves and clippings are not to accumulate and shall be collected and removed from site;
- Weed planting beds by the most appropriate means either by hand, mechanical and chemical use;
- **Ensure the area to be mulched is entirely free from both annual and perennial weeds Lay Melcourt Ornamental Bark Mulch (or similar approved) evenly onto freshly cultivated moist soil, after planting has been completed. The mulch should be laid at between 50 to 100mm depths, allowing at least 5% for settlement. For greatest longevity, do not disturb once applied**
- Bark mulch to be maintained to a depth of 75mm thickness at all times, and inspected three times a year in the active growing season. If mulch is found to be less than an even depth of 75mm, it shall then be topped up;
- Replace any failures of plants within the establishment period with immediate effect with the same species and size.

Trees

- **All new trees in grass to be supplied with a black strimmer guard.**
- **Water newly planted trees thoroughly (additional during drought periods). As a guide: Each tree to receive 40L of water at each scheduled watering operation to ensure roots are well irrigated. Ensure trees are well irrigated in dry conditions and soil moisture is appropriate to species planted. Refer to annual maintenance operations schedule.**
- Water as necessary to secure healthy establishment and to avoid the need for replacement due to dry periods (less than 30mm rainfall at the end of a four week period)
- Collars in soil at base of tree stems, created by tree movement shall be broken up by fork, avoiding damage to roots. Backfill with topsoil and re-firm;
- Check all trees for firmness and stability in the ground. Check and adjust tree ties, replacing if necessary;

- At all times prevent rubbing of ties and adjust to accommodate growth and prevent chafing. Where chafing has occurred, reposition or replace ties to prevent further chafing. Damage to bark to be cut back neatly with a sharp knife; to prevent further damage;
- Inspect trees regularly for stem wounds, pests and diseases and treat early;
- Prune dead, dying, crossing, rubbing and damaged branches and encourage new leader as necessary;
- Check aeration pipes regularly and clear debris as necessary;
- Trees in Species Rich Lawns shall have mulch circles of 1000mm maintained weed free at all times. Weeding shall be undertaken by hand or weed wiper ensuring that the plants specified under this contract are not affected;
- Bark mulch to be maintained to a depth of 75mm thickness at all times, and inspected three times a year in the active growing season. If mulch is found to be less than an even depth of 75mm, it shall then be topped up. Ensure that mulch does not cover up aeration pipes. Leave a 10cm (4in) collar free of mulch around any woody stems to avoid risk of rotting;
- Fallen leaves are not to accumulate and shall be collected and removed from site;
- Apply a slow release fertiliser in spring; **should be spread evenly according to manufacturer's recommendations in March or April.**
- Control rabbits or other mammalian pests. The contractor will submit a method statement for the approval of the Project Manager and Ecologist;
- Replace any failures of plants within the establishment period with immediate effect with the same species and size.
- Any tree works shall be carried out by a skilled, qualified and approved Arboricultural Contractor in accordance with BS3998: 2010 'Tree Work - Recommendations'. Where possible, and where health and safety constraints permit, and where prior approval of the Project Manager and Ecologist; arisings may be formed into habitat piles within the POS spaces, and standing dead wood maybe left within the woodland to provide additional dead wood habitats to maximise invertebrate biodiversity.

Native Shrub Planting

Native Shrub mix:

- Water as necessary to secure healthy establishment and to avoid the need for replacement due to dry periods (less than 30mm rainfall at the end of a four-week period) water to landscape maintenance to be provided by the landscape contractor;
- At each visit inspect individual plants and firm in and straighten any loose plants.
- Apply a slow release fertiliser in spring;
- water to landscape maintenance to be provided by the landscape contractor

- Weed planting areas by the most appropriate means either by hand, mechanical and chemical use;
- Replace any failures of plants within the establishment period with immediate effect with the same species and size.
- Remove suckers, dead, discoloured, weak or damaged stems, cut back any stems obstructing paths etc. Prune to reduce size if suppressing adjoining species;
- Species specific pruning at appropriate time of year to promote healthy growth and species-specific shape and form. Ensure nursery's recommendations are followed for each particular species. Do not prune during bird-nesting season (February-August).
- Carry out thinning and coppicing to allow trees and shrubs to develop diversity of form and different types of nesting, feeding and foraging habitat and extend the potential life of individual plants. The timing of thinning should be informed by an arboricultural survey, which should include a visual inspection, checking if crowns are overlapping and if thinning is needed. Thin on a phased basis in blocks. Protect coppice stools from rabbit browsing by piling brash over them.
- Monitor coppice periodically, noting any stools that fail to regrow and replant the following autumn. Remove weeds and invasive species as required. A qualified Arboriculturist should plan thinning and coppicing operations in advance by identifying and marking all trees/shrubs for removal and coppicing in winter. All thinning operations should be undertaken outside bird-nesting season, between September and January.

Hedgerow Planting

- All hedgerow planting should be carried out in accordance with BS4428:1989, Code of practice for general landscape operations (excluding hard surfaces). Hedgerow shrubs should either be notch planted or trench planted. Hedge trenches should be dug to a minimum depth of 400mm and width of 600mm, with the plants put into the ground at the same depth at which they had been previously grown in the nursery. All plants need to be well heeled in after planting and watered in dry weather. Most hedging plants are supplied as bare root specimens or instant hedging, and it is important to make sure that the roots do not dry out, therefore it is advisable to keep them under a moist cloth or in a bucket of water during planting. Hedges should only be planted between November and March, while plants are still dormant. Avoid planting in very cold or wet weather;
- Weed Control: between forestry transplants or whips to be carried out by mechanical means or herbicide depending on species and site accessibility. Any arisings are to be removed from site;
- An area of 300mm diameter around each transplant shall be kept free from weed growth. All invasive herbaceous scrubby vegetation, e.g. Bramble & Nettles and non-native or highly invasive tree species shall be cleared and removed from site four times annually;
- To be carried out during the initial 3-5 years of plant establishment, dependant on canopy closure. Base of planting one metre diameter to be kept weed / grass free;
- Eradicate noxious weeds by manual and mechanical means or selective herbicide as appropriate;

- Thinning of planting to be carried out by mechanical or manual means arisings to be shredded and used to mulch were appropriate. Retention of felled material to occur after the second thinning. Once cut down to lengths of between one and two metres, the felled material should be stacked in appropriate permanent locations. Thinning to be carried out during December and January;
- First thinning to be carried out after 10 years to favour climax species removing pioneer and nurse species competing with or affecting growth to enable shrubs to spread and climax trees to grow without competition;
- Second thinning to be carried out after 15 years, additional pioneer and nurse species to be thinned out. The best climax tree out of a group of three is to be selected and the remaining trees removed;
- Clear compartment areas of litter, rubbish and debris. To be carried out on maintenance visits and thereafter on a bi-annual basis;
- Tree protection guards / spirals to be removed once trees are sufficiently established. Larger trees with support stakes to be checked and adjusted on a regular basis to prevent instances of chafing damage to bark. Tree stakes and ties to be removed once trees are sufficiently established;
- Any tree that dies or is necessarily felled, but which is not removed as part of a programme of thinning or coppicing, shall be replaced with a tree of appropriate species and stock size. Such replacement shall be with a tree of either the same or similar species as those existing. The option for replacing with a different species is to allow some flexibility avoiding problems encountered with 'Same Species Disease' and to ensure sustainable tree cover in the interests of visual amenity;

HARD LANDSCAPE ELEMENTS

Surface Materials and Street Furniture

- A suitable foliar acting or residual herbicide is to be applied to all hard surfacing areas, allowing recommended period to take effect before clearing arisings. All litter, leaves and other debris are to be removed from all hard surfaces prior to application of herbicides;
- Mud, silt and debris is to be removed from all surface gutters and channels;
- Drainage gullies are to have traps emptied and flushed clean as required to prevent obstructions;
- Any repairs to the hard surfacing is to be in accordance with the original paving specification;
- Stain removal to hard surfacing is to be in accordance with BS7370-2, table 4;
- Fences and enclosures are to be maintained and inspected monthly and appropriate repairs undertaken as necessary;
- Graffiti removal is to be carried out as soon as damage has been noticed. Method of removal is to be either air abrasion or chemical poultice, depending upon surface and is to be carried out in line with good practice;

- Regular monthly maintenance inspections are to be undertaken of surface treatments for litter, debris and leaf removal (or snow clearance and de-icing in winter months) and repair defects when necessary;
- Inspect street furniture each month and maintain or repair in accordance with manufacturers' recommendations, taking out of commission dangerous or inoperable elements until repair works are complete;

PROCESS FOR MONITORING AND REVIEW

The management of the site is to be reviewed on an annual basis (Years 1-5) and is intended that the implementation of this management plan will help to fulfil the design objectives over the first 5 years. The review process is to ensure that the aims and objectives of the scheme are being achieved and maintenance operations should be refined over the period to respond to industry standards improvements and incorporating any additional operations required.

Each annual review will be coordinated and completed by a suitably qualified representative of the Applicant. The review will include advice from specialist consultants as required, such as a qualified arboriculturist, ecologist and the Landscape Management Contractor. The review should identify any changes to site conditions and circumstances and identify where changes are required to existing management practices and timeframes.

Any strategic enhancements, including new planting should be identified and priorities established for undertaking these works. Within 1 calendar month of the review, a revised Landscape Management Plan shall be produced (if appropriate), and circulated.

After the first five years (Years 5+) the Landscape Management Plan will be reviewed every five years, or as required to ensure the satisfactory management of the landscape indefinitely. The Landscape Maintenance Contractor responsible for the site should keep to the spirit of the original design objectives.

ANNUAL MAINTENANCE OPERATIONS SCHEDULE

(Including contractor's 12 month defects liability period, aftercare period and Management Company responsibilities after handover). This table lists the key routine operations required during the first 5 years after practical completion of the soft landscape treatments and should be used as a guide to timings of specific operations. The maintenance contractor should be prepared to undertake maintenance tasks as required throughout the year to satisfy objectives at the direction of the management organisation.

Task	J	F	M	A	M	J	J	A	S	O	N	D	Notes
General operations:													
Weed control													Daily if required in summer
Watering (all areas)													
Pest and disease control													
Replanting operations													
Remove litter and debris													
Check ties and root firmness													
Fertiliser & mulch application													
Check ties, supports etc.													
Replacement planting (all plant types)													As required
Grass Areas:													
Inspect grass areas													
Mowing													As per suppliers recommendations
Re-seeding and repair work													
Trim edges													
Shrub & Ground Cover:													
Inspections													
Groundcover Shrubs Trimming													
Shrubs Pruning													Varies to suit species
Top up mulch													
Native shrub mix:													
Inspections of planting areas													
Pruning													Varies to suit species
Native Hedgerows:													
Inspections of hedgerow areas													
Native Hedges Trimming													
Top up mulch													
Trees:													
Inspection													
Pruning and remedial work													
Top up mulch													
Watering (all areas) Twice Monthly from April to October													
Management Plan:													
Monitor & adjust objectives													

Note: This list is not definitive list, additional operation's maybe be required.