

SOUTHWATER – PHASE 4

LANDSCAPE MAINTENANCE AND MANAGEMENT PLAN

For

BERKELEY HOMES (SOUTHERN) LTD

October 2024

Rev. P01

1.0 INTRODUCTION

- 1.1 This landscape management and maintenance report has been prepared to set out objectives and actions required for the ongoing management for the residential and open space landscape elements of the Southwater development.
- 1.2 The management operations within the report include regular ongoing operations and also cyclical or periodic operations, such as tree inspections, monitoring and subsequent remedial works.
- 1.3 The landscape of the Southwater development has a considerable role to play in creating a positive impression with both residents and the existing wider general community in this area. The landscape led approach will promote the establishment of an attractive setting to the new development, complimenting the architecture and providing valued communal and semi-private spaces for residents and visitors to enjoy. It follows that there is a necessity that the communal areas must be maintained to a high standard to ensure that it reflects the quality of the development as a whole.
- 1.4 Aligned with this is the enhancement of the ecological value of the site, and the landscape strategy must allow the functional, visual and ecological criteria to be balanced.
- 1.5 This document should be used as the basis for long-term management, and to ensure that delivery is in accordance with best practice horticultural standards. By appropriately allocating resources, skills and expertise, the long-term sustainability and success of the residential landscape will be achieved.

2.0 SITE DESCRIPTION

- 2.1 The site lies within the administrative authority of Horsham District Council and forms an extension to previously constructed phases. Kensett Avenue links this phase with the earlier phases leading to Church Lane and Worthing Road, making the town centre easily accessible from Southwater town centre.
- 2.2 Mature trees and hedgerows are associated with site boundaries. Refer to the tree survey report prepared by ACD Environmental for further information.
- 2.3 The site landscape covered by this management plan includes the residential streetscene, boundary vegetation and open spaces. Within the public open spaces there are two local areas of play (LAP) and one locally equipped area for play (LEAP).

3.0 POLICY AND LEGAL PROTECTION RELATING TO THE SITE

- 3.1 The site lies within the administrative authority of Horsham District Council (Local Planning Authority).
- 3.2 No works should be undertaken to the trees during the bird-nesting season, March to September inclusive. Any works are to be in accordance with the Wildlife and Countryside Act 1981.
- 3.3 The legal agreement for the Site covers the trees within, on and beyond the boundaries of the Site. As such, any works required to the trees is to be carried out following consultation and written consent from the Local Planning Authority.
- 3.4 Health and Safety: All work undertaken on the site by contractors, volunteers or direct employees must comply with appropriate legislation relating to health and safety and the control of hazardous substances.

4.0 OBJECTIVES OF THE LANDSCAPE MANAGEMENT AND MAINTENANCE PLAN

- 4.1 Generally, the landscape and ecological objectives for the site are:
 - To provide a green infrastructure which flows through the site providing a strong sense of place and a high quality living environment for residents, which enhances the asset value of the residential area and provides associated benefits linked to adaptability to climate change, health and well being.
 - To provide access to high quality open spaces and access to nature.
 - To provide the opportunities to improve areas of existing ecological interest and link the landscaping and ecology of the site with its environs;
 - To retain the mature trees which contributes to the local amenity value of the site and to put in place a management scheme which maintains a balanced tree stock in perpetuity;
 - To supplement the existing tree population with new tree planting to maintain and enhance the longevity of this resource;
 - To consider the site and create a sense of place and different character areas within the development through the selection and management of tree species;
 - To increase the amount of native planting; and

- To maintain a robust and visually appealing landscape setting to the buildings and a valued amenity /open space resource.

4.2 The broad management objectives are summarised as follows:

- To maintain a high quality, holistic approach to Landscape management, consistent in delivery and flexible to changing site demands;
- To maintain and enhance landscape quality and ensure the highest standards of management and maintenance are implemented across the site.
- To ensure sustainability and effective resource management.
- To ensure all maintenance operations comply with current UK and European legislation in relation to protected species and habitats, including seasonal requirements relating to nesting birds.
- To ensure management of injurious weeds and invasive species in accordance with current UK and European legislation.
- To ensure all maintenance operations comply with current UK and European legislation in relation to management, use and application of pesticides and herbicides.
- To continually monitor and review landscape provision and landscape management
- To undertake essential tree surgery/felling to avoid significant third party risks both internally and to the periphery of the site;
- To maintain health and safety requirements for all areas of public open space for residents and visitors.

5.0 MANAGEMENT OBJECTIVES

5.1 The key objective is to improve and maintain the existing and new landscape structure in perpetuity. This will be achieved through the implementation of this LMP.

5.2 All operations are to be carried out in accordance with the maintenance specification included in this document.

5.3 Throughout the lifespan of this LMP, consultation - should be sought from:

- A qualified arboriculturist / Local Planning Authority Tree Officer in terms of the management of the tree stock and advice on the health and safety of individual trees

- A qualified Landscape Architect.

6.0 MANAGEMENT OPERATIONS - OVERVIEW

- 6.1 This section outlines the general maintenance requirements for all landscaped area. A full maintenance specification is included at Appendix A.

Implementation and Maintenance Works within a 12 month period (Years 0 - 1)

- 6.2 Site implementation, monitoring and maintenance works represent the works required in an initial 12-month period to get the site in a good quality condition for handover from the Landscape Contractor to the LMC.

Landscape Management Works (Years 1 - 20)

- 6.3 These works represent the actions required between years 1 to 20 to maintain and further enhance the Site. The majority of the actions are annual but some, notably the trees works are to undertaken in specific years. Within each year the months, within which the works are to be undertaken, is defined. Works required are illustrated in the tables in Appendix 1 of this document.
- 6.4 Additional Works In addition to the actions specified in the tables, it is suggested that the quality control manager (QCM), as part of the ongoing development, undertake a review of the LMP on an annual basis with advice from consultees where necessary and adjust the schedule of operations as appropriate

Cleansing

- 6.5 A general 'scavenge' of all external spaces should be conducted on a frequent basis (frequency will vary according to perceived intensity of use for each area) and immediately following periods of bad weather, as excess litter and debris may have been blown/washed into the site on a seasonal basis.
- 6.6 'Cleansing' should consist of the routine collection and removal of all litter and debris as described below to be removed offsite by the Landscape Sub-contractor. Litter should include; paper, wrapping material, glass, metal and plastic, with no lower size limit. Other debris should consist of bricks (greater than ¼ brick size), stones (greater than 100 mm in any dimension), concrete, bottles, cans, tipped material, garden refuse (including leaf litter), grass cuttings, all pruning's, dead plants, broken furniture, dead animals, and any other materials whatsoever their composition and by whomsoever deposited, that the Management company considers detrimental to the appearance of the site. Dog/cat/fox faeces, where found, shall be cleared from all areas by the Contractor. Litter and debris

lodged in hedges, fences, climbers and trees shall be removed as part of the cleansing operation.

- 6.7 Any narcotic substances, solvents and associated equipment found in landscaped areas must be reported to the police.
- 6.8 Ensure all personnel are informed work may involve contaminated items. All maintenance personnel to keep cuts and abrasions covered with an impervious dressing. Ensure a strict hygiene culture is enforced prior to eating, drinking smoking. The Contractor should not place hands/ fingers in or behind anything not checked as clear. Sharp protective gloves to be worn, or use tongs and boots with steel both toe caps and mid soles and overalls. Segregate needles and sharps from other rubbish into disposable puncture proof containers. Containers are to be disposed of in accordance with a relevant waste transfer certificate. Should any contact with needles occur remove and encourage bleeding of the infected area Do NOT suck puncture wound. If possible, wash infected area with soap and water. Attend nearest A&E department if necessary.

Vandalism

- 6.9 Any damaged items should be replaced or cleaned as quickly as possible, as experience has shown that damage left untreated will tend to encourage further mistreatment. Any damage caused by vandalism to be reported to the QCM immediately.

Maintenance report sheets

- 6.10 Records shall be kept of each maintenance visit confirming operations undertaken and any observations as to issues arising that may require additional attention/ remediation. Particular attention to issues with a health and safety implication.

Inspections

- 6.11 Throughout the year the grounds will be inspected to monitor use/abuse, to identify any problems or conflicts that may arise with regards to the landscape development and general health and safety issues that need addressing. The inspection shall be carried out independently of any routine maintenance works that may be in progress. The contractor should use a site inspection sheet making specific notes of on-site maintenance issues to report to the Management company. Inspections should cover the following:
- Landscape maintenance issues (resulting in an inability to undertake landscape maintenance operations).
 - Cleansing issues (repeated littering, fouling of water features)
 - Repairs required for all hard landscape elements, site features, furnishings and safety equipment

- Assessment of any potential hazards (water feature H&S, trip/slip hazards)

General Arboricultural Operations

6.12 The following specifications are applicable to all arboricultural works onsite:

- An appropriately qualified operative such as Arboriculturalist or Tree Surgeon must be consulted prior to undertaking any major tree works within the site boundary and approval for all works sought from the management company.
- Formative tree works must be undertaken during the winter months (preferably January – February) outside of the bird-breeding season.
- The removal of a particular branch or limb, for whatever reason, might leave the overall appearance of the crown unsightly. Steps may be required to soften the impact of the works required by judicious pruning of other, adjacent, parts of the canopy to ensure a healthy balance is maintained. Judgements should be made on an individual basis and should consider the individual species concerned to maintain the trees natural form.
- Epicormic shoots resulting from limb removal should be removed where appropriate.
- Remove all basal growth on an annual basis. Any cutting required should be carried out in the winter, during periods of dormancy.
- Carry out inspections of the site every year, act upon any emergency works flagged up by inspections and carry out any required formative pruning, crown lifting/reduction as may be required.
- An appropriately qualified Arboriculturalist should carry out an annual inspection of all trees within or adjacent to areas of public access. These assessments should check for damage and disease to ensure that the tree is in a safe, sound condition, to permit free access and maintain appropriate height clearances for pedestrians, building frontage clearance and vehicular access.

Weed control

6.13 In the interests of best practice for biodiversity, the use of pesticides and herbicides should be minimised wherever possible. Hand weeding and mechanical means to be used where possible. Chemical pest control to be employed only where the continued health of plants are compromised or wider environmental concerns arise.

- 6.14 Between April and September frequent inspections of planted areas should be undertaken, removing weeds wherever necessary by hand pulling to assist the successful establishment of plants.

Disturbance of wildlife

- 6.15 All works in accordance with current legislation and good practice. Operations should ensure that there is no disturbance to wildlife with particular reference to nesting birds and protected species. Any works required during the nesting season only to be undertaken after an inspection to determine any potential harm. Expert advice to be sought as required where there is an identified risk and works can be delayed until after the nesting season.

Use of pesticides and herbicides

- 6.16 The use of pesticides and herbicides to be minimised to promote biodiversity. Weed control to be undertaken by hand and mechanical methods wherever possible.

Irrigation

- 6.17 Manual landscape irrigation should only be carried out in order to ensure the establishment and continuing plant health of any planting that is not yet established, any planting that is not exposed to rainfall or in the event that the rainfall is insufficient.
- 6.18 Supplementary watering (in addition to automatic irrigation) of trees, ornamental shrub/herbaceous planting and lawns may be required during periods of prolonged drought (in excess of 14 days). Particular care should be taken during such periods to ensure sufficient watering is carried out to facilitate healthy growth. Watering should be targeted at the base of plants rather than a general hosing of foliage, which may lead to scorch in sunny weather. Watering should not take place where local water restrictions are in place.

7.0 GENERAL MAINTENANCE CONDITIONS

7.1 Introduction

- The works consist of the maintenance and management of the existing mature trees, hedgerows, together with the new high quality amenity tree and shrub planting, including trees, shrubs, herbaceous planting, wildflower meadow and turfed areas.
- The works shall be maintained by the appointed Landscape Contractor from practical completion for the defects liability period as follows;

- Trees - 12 months from practical completion
- Perennial Shrubs / Herbaceous Planting - 12 months from practical completion or
- Until works are signed over to the appointed LMC. At this point the responsibility will transfer to that party.
- The proposed Landscape Contractor and LMC shall be a full member of the British Association of Landscape Industries.
- The details of the landscape proposals are shown in the drawings which accompany this report.
- The use of the term 'Contractor' applies to the Landscape Contractor initially carrying out the works.
- The use of the term 'Landscape Maintenance Contractor' refers to the contractor responsible for the period 1 - 20 years of the LMP.

7.2 Landscape Architect

The Landscape Architect is:

Charnwood Landscape Design Limited

Quatro House
Lyon Way
Frimley Road
Camberley
GU16 7ER

7.3 Machines and Tools

- Machines and tools are to be used that are suitable for the site conditions and the work to be carried out. Use hand tools around trees, plants and in confined spaces where it is impracticable to use machinery.

7.4 Workmanship

- Method of Work – the method of executing any of the work in this specification and schedules unless specifically mentioned is at the discretion of the Contractor.
- Good Practice – Where and to the extent that materials, products and workshop are not fully specified they are to be suitable for the purposes of the works states in or reasonably to be inferred from the contract documents, and in accordance with good horticultural practice, including the relevant provisions of current British Standard documents.

- Maintenance standards should at all times reflect the development's high quality image. The Contractor shall keep all planting area weed free, plants vigorous and healthy, and the overall landscape environment neat and tidy.

7.5 Chemicals

- Legislation Pesticides include herbicides, insecticides, fungicides and plant growth regulators. The use of pesticides is governed by legislation. The Landscape Contractor must comply with the 'The Control of Pesticides (amendment) Regulations 1997' made under the 'Food and the Environment Protection Act 1985', 'The Control of Substances Hazardous to Health Regulations 2002' made under the 'Health and Safety at Work Act 1974' and any other legislation enacted during the contract period. All pesticides must be products on the current list of Agricultural Chemicals Approval Scheme. All pesticide users shall comply with the conditions of approval relating to use clearly stated on the product label.
- The Contractor must comply with all relevant Codes of Practice issued by DeFRA. In particular where work is near water, drainage ditches or land drains comply with the 'Code of Practice for the Use of Herbicides on Weeds in Watercourses and Lakes'. Written approval from the Environment Agency should be obtained prior to the use of pesticides within these areas.
- Certificates : A recognized nominated storekeeper's certificate of competence (BASIS) is required by a Contractor storing more than 200 litres of pesticides. All pesticides transported or stored in the Contractor's vehicles (regardless of quantity) shall be locked in a separate storage compartment in the vehicle or within a lockable container in 'pickups' that are bolted to the floor of the vehicle. The storage locker must be sealed and clearly marked as containing pesticides and must bear a standard black and yellow hazard sign. A Certificate of Competence (National Proficiency Training Certificate) must be held by the Contractor applying pesticides and handed to QCM prior to commencement on site. Only Certificate of holders shall mix, apply and dispose of pesticides and other chemicals on the site.
- Use of Pesticides : Notification of at least 24 hours shall be given to QCM of the Contractor's intention to carry out application of pesticides. The Contractor shall select the most appropriate and effective method for each particular area or situation or for any particular use or specific work, and shall notify QCM of the type of pesticide, active ingredient, and method and timing of application. 12 The Contractor shall keep a written logbook detailing all uses and pesticide applications carried out and a copy shall be submitted to the Contract Administrator. The Contractor is required to notify the public of any pesticide application. A warning sign shall be posted at the entrance to the areas to be treated. Where contained solely within planting beds the sign shall be placed adjacent to edges in noticeable positions. Details of the application and a contact person shall be indicated on the sign. The Contractor shall in accordance with COSHH Regulations protect employees and other persons, including the public, who may be exposed to substances hazardous to health.

- Disposal : The Contractor shall dispose of waste pesticides and containers in accordance with the control 'Control of Pesticides (Amendment) Regulations 1997', 'Control of Pollution Act 1974', and 'Water Act 1989'. Safe disposal arrangements shall be made before starting to apply pesticides. Concentrated pesticides shall be disposed of in arrangement with the local Environmental Health Department or with a specialist waste disposal Contractor. Empty containers shall not be re-used for any purpose and containers shall be cleaned thoroughly in accordance with label instructions prior to safe disposal.
- Generally : The Contractor shall be responsible for making good and/or compensation for any damage resulting from negligence in the application, handling and storage of pesticides. The Contractor shall be responsible for keeping up to date with all legislation and regulations regarding the use of pesticides. The Landscape Contractor shall inform QCM of any subsequent changes to legislation and regulations that affect the contract.

7.6 Liability for Damage of Existing Vegetation

Existing trees or vegetation damaged during the works shall be replaced by trees or plants of similar size and maturity or numbers considered reasonable by the contractor. The cost of the replacement shall be carried by the Contractor.

7.7 Protection

The Contractor shall in respect of the maintenance works and adjacent areas of the site used by them in the course of the contract ensure that:

- Adequate protection of existing and newly planted/seeded areas is erected and maintained to prevent damage.
- There is appropriate making good on removal of any protective measures on completion.
- There is repair of any damage to adjacent and existing site works and features.
- All paved surfaces used are kept protected, clean and tidy.

7.8 Watering

After Practical Completion of the main contract, the Contractor shall supply all necessary hose attachments and fittings to keep the infrastructure landscape grass, planting and trees watered. Watering shall be undertaken as necessary to ensure the trees, grass and plants remain healthy, establish and grow. Should watering points not be available or emergency legislation restrict the use of water from the mains during drought conditions, the Contractor shall arrange the collection and application of suitable second class water for irrigation

purposes, by bowser or other means, from approved source to deliver to site and apply as specified. This shall be included for in the price for maintenance during the defects liability period.

7.9 Arisings

The Contractor appointed by QCM for all communal areas are to remove from the site and dispose of weeds, prunings, leaves, litter and rubbish unless specifically described as to be left and spread over beds etc.

7.10 Control of Japanese Knotweed

- Spot treat in June and September during suitable weather conditions and when plants are growing vigorously. Herbicide: In accordance with the Environment Agency 'Code of Practice for the management, destruction and disposal of Japanese knotweed'.
- Application: In accordance with the Environment Agency 'Code of Practice for the management, destruction and disposal of Japanese knotweed'. Arisings: Remove

8.0 GRASS MAINTENANCE SPECIFICATION

8.1 The Contractors (Landscape Contractor and Landscape Maintenance Contractor) employed by the QCM shall maintain all grass areas in accordance with the specifications set out below.

8.2 Overview;

- Condition: Maintain a healthy vigorous sward, free from disease, fungal growth, discolouration, scorch or wilt.
- Water logging and compaction: Prevent.
- Damage: Repair trampling, abrasion or scalping.
- Before mowing: Remove litter, rubbish and debris.
- Finish: Neat and even, without surface rutting, compaction or damage to grass.
- Edges: Leave neat and well defined. Neatly trim around obstructions.
- Drought or wet conditions: Obtain instructions.

8.3 Maintenance of grassed areas - general

- Maintain turf in a manner appropriate to the intended use, location and species mix.

- All grass cutting shall be carried out by cylinder machines, unless otherwise specified. The Contractor/LMC shall notify the QCM of the machines they propose to use on each of the regimes. The Contractor/LMC shall ensure that all machines engaged in this contract are sharp, properly set and operated at the speed in accordance with manufacturer's recommendations. All grass shall be cut cleanly and evenly to the same height as specified in the regimes allocated to each site and without damaging the existing surface, or causing a washboard effect.
- The Contractor/LMC shall produce and follow a programme of work approved by the QCM at the commencement of the contract, in line with the submitted method statements, to ensure that all applicable areas are maintained to the standards specified in this section.
- The Contractor/LMC shall complete an entire area (plot) of grass cutting at each cyclic visit within the same day of the first grass cutting operation. The entire area is deemed to include: wall bases; up to hard landscape surfacing edges or other boundary; or any other obstruction.
- Any arisings that 'fly' onto paths or other hard surfaces shall be removed by the Contractor/LMC and distributed evenly over the grass area or, if the arisings are deemed excessive, removed from the premises to a designated location for disposal. This shall take place promptly after grass cutting, in any event within one hour, at the expense of the Contractor/LMC.
- Where a boxed mowing machine is used, the arisings shall be removed from site at the end of each work period and taken to the designated location for disposal.
- The Contractor/LMC shall report to the QCM any damage to the grass surface, walls, street furniture, any plant material or other property caused during grass cutting operations. Should it be determined by the QCM that the failure of a newly planted tree or shrub is due to the Contractor/LMC negligence in grass cutting operations, then a replacement tree or shrub, approved by the QCM, shall be supplied, planted and maintained until established, at the expense of the Contractor/LMC.
- Prior to cutting any area, the Contractor/LMC shall remove all stones above 25mm in any dimension, as well as any litter, twigs, etc. All such material shall be removed to the designated location for disposal. If the amount to be removed is considered excessive and has been deposited as a single load in excess of 1- 2m³ (ie. fly-tipping), the Contractor/LMC shall inform the QCM immediately, who will consider each occurrence on its individual merit and may, in exceptional circumstances, arrange for the debris to be removed in accordance with the Contractor's tendered rates.
- Any herbaceous plant growth, such as clover or flowering stalks of grass and weeds, within an area designated for grass cutting shall be cut as if it is grass.

- Any damage caused to grass areas by the Contractor/LMC negligence shall be made good, as directed by the QCM and to the satisfaction of the QCM, at the expense of the Contractor/LMC. The use of grass growth regulators is not permitted.

8.4 Variations to the planned schedule

- Unless weather conditions as stated below prevail, the Contractor/LMC shall be required to keep to the standards detailed in the regimes.
- In very wet weather, all operations involving grass cutting shall cease until conditions allow operations to continue without damaging the surface level and contours of the ground or creating grass cutting 'divots' from the rollers or cutters.
- If inclement weather, as detailed above prevents the Contractor/LMC from grass cutting, the Contractor/LMC shall inform the QCM of work not completed from the programme. When the weather improves, the Contractor/LMC shall resume grass cutting in order to return to the agreed programme of work. The Contractor/LMC shall be expected to provide sufficient staffing and machinery to catch up if there is a substantial amount of mowing time lost through bad weather.

8.5 Grass cutting standards – Amenity Grass

- Height : 25 – 50mm Cut grass with an approved ride-on or pedestrian guided cylinder mower.
- Trimming/ edging : The Contractor/LMC shall allow for grass edge trimming on at least 12 occasions at fortnightly interval. The Contractor/LMC shall cut smooth curves or use a line to obtain a straight edge. Edging operations shall not change the size of grass areas nor create new channels.
- Finish: All edges shall be neat and vertical with no grass overhanging the finished edge. The Contractor/LMC shall be required to use a half-moon edging iron, mechanical edge and trim and/or long handled shears or spades.
- Arisings: All arisings from edging operations shall be collected and removed to the end of each work period and taken to the designated location for disposal.

8.6 Spiking – to be undertaken as necessary to relieve compaction. Aeration to be undertaken to a depth of 100mm to improve water penetration and alleviate compaction.

8.7 Scarifying – to be undertaken as required to relieve thatch conditions and remove dead grass. Operation to be carried out in October or November, before top dressing. Remove arisings.

8.8 Top dressing – following scarification and aeration, apply sandy loam.

8.9 Reinstatement of worn or damaged lawns.

- Make good by returfing or reseeding, to match existing in appearance and quality.
- Returfing : to BS 7370-3, Clause 12.2
- Reseeding : to BS 7370-3, Clause 12.6
- Protection and watering : provide as necessary to promote successful germination and/ or establishment.

Grass Replacement

8.10 Seeding

- Bare and damaged patches within formal grassed areas shall be notified as part of the site reporting process and agreed with the QCM for re-turfing and re-seeding works.
- The Contractor/LMC shall continue all operations necessary, to include top dressing, watering and further over-seeding, to achieve a 100% grass cover within eight weeks.
- Where soil has been contaminated by chemicals, oils, etc., the Contractor/LMC shall remove to tip all such soil, replacing it with suitable soil, to enable re-seeding as specified and to ensure the pollutants do not affect the future growth of the vegetation.
- Final preparation - in preparation for sowing, the surface shall be lightly and uniformly formed and reduced to a fine tilth of a minimum depth of 25mm by raking. All large stones more than 25mm in any dimension, perennial weeds and rubbish shall be removed from the surface and removed to the designated location for disposal.
- Finished Levels shall be just proud of adjacent hard surfaced areas. There shall be a minimum gradient for run-off of 1:60 and maximum of 1:3, or as indicated on drawings. The area shall be free of depressions.
- Any failed areas shall be required to be made good by soiling (as appropriate) and seeding works to be repeated until a good sward is obtained.
- Grass areas will only be accepted as reaching practical completion when germination has proved satisfactory and all weeds have been removed.
- Damage, failure or dying back of grass due to neglect of watering, especially for seeding out of normal season, shall be the responsibility of the Contractor/LMC.
- Any settlement below the specified levels during the contract or defects liability period shall be rectified by the Contractor/LMC.

- The Contractor/LMC shall exercise care in the use of mowing machines to reduce to a minimum the hazards of flying stones and debris. Any damage/ injury that occurs as a result to be notified to the QCM immediately.
- Fertiliser - The Contractor shall use pre-seed fertiliser on amenity grassed areas only, as approved by the QCM prior to use, which shall be applied at the manufacturer's recommended application rate.
- Initial cut (topping) - The Contractor shall remove all large stones (more than 25mm in any dimension) and roll all flat and terraced areas with a light roller to firm the grass and press in any remaining stones. This shall be done approximately 48 hours prior to topping.

8.11 Turfing

- Turf and Turfing - The Contractor shall comply with British Standards BS 3969 and BS 4428.
- Condition of Turf : The Contractor shall provide good quality lawn turf complying with BS 3969, the grass being of close texture, even density and green in colour. The grass shall be closely mown, so the height does not exceed 25mm and show no visible sign of pest or disease. The turf shall be sufficiently fibrous for turfs to hold together during handling and an excess of fibre of mat is desirable.
- Dimensions : Turfs shall be of a rectangular shape and of uniform thickness. They shall have a minimum soil thickness of 25mm and a width of 300mm, unless otherwise agreed by QC.
- Weedkiller : A selective weed killer shall be applied to the turf no less than four weeks prior to lifting.
- Lifting Turfs : turfs shall not be lifted in frosty weather or when waterlogged. They shall be packed to avoid drying out in transit and shall be rolled or laid flat
- Delivery of turf : turf shall be delivered to site within 36 hours of lifting and offloaded by hand to be stacked to a maximum height of 1m, unless arranged on pallets for mechanical handling.
- Storage : turfs shall be placed grass to grass if stacked. Stacked turfs shall be inspected at frequent intervals for deterioration. If kept for any period, the turfs shall be laid out and maintained as turfed areas.
- Cultivation : The Contractor shall cultivate the area to be turfed to a depth of 100mm, removing all large stones (over 25mm in any dimension), perennial weeds and rubbish to designated area for removal.

- Final Preparation : The Contractor shall reduce the surface to a fine tilth, to a minimum depth of 25mm and lightly and uniformly firm the surface.

8.12 Laying Turf

- Season : Turf shall be laid when weather and soil conditions are suitable. No turf shall be laid in exceptionally dry or frosty weather, or in other unsuitable weather conditions. The Contractor shall give preference to autumn and early winter for this operation.
- Laying : No turf shall be laid until top soiling has been completed to the satisfaction of QC. Turfs shall be laid on the prepared soil bed and be firmed into position in consecutive rows with broken joints, closely butted and to the correct levels. The turfs shall be laid off planks, working over turfs previously laid.
- Dressing : A dressing of finely sifted topsoil shall be applied to the joints and well brushed in. The Contractor shall adjust any inequalities in the finished levels, owing to variation in turf thickness or uneven consolidation of the soil, by raking and/or packing fine soil under the turf. Use of a roller is not permitted.

8.13 Finished Levels

- Finished levels shall, after allowing for settlement, be just proud of adjacent hard surfaced areas.
- There shall be a minimum gradient for run-off of 1:60 and maximum of 1:3 or as indicated on drawings. The area shall be free from depressions.
- Margins shall be laid with whole turfs.

Wildflower grassland/ meadow

8.14

Generally:

- Purpose : to improve/ enhance landscape visual amenity, provide wildlife habitat opportunities and to increase biodiversity.
- Restrictions: use of chemicals. All works in accordance with good horticultural practice.
- Results: establishment of a species rich sward with even consistent coverage and control of invasive weeds.

- Review : to ensure that amenity spaces can accommodate the required level of use and initiate any remedial works that might be required to maintain the balance between usage levels and ecological diversity.
- Year 1 : Mow newly sown meadows regularly throughout the first year of establishment to a height of 40-60mm, removing cuttings if dense. This will control annual weeds and help maintain balance between faster growing grasses and slower developing wildflowers. 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 strimmer 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.
- Year 2 : do not cut between spring and early August (to allow flower period). Main summer hay cut leaving the 'hay' to dry and shed seeds for 1-7 days then remove. Subsequent cuts late autumn (late October) and again in early spring (late March/early April subject to conditions and growth.) Height of cut: 50mm.
- Dig out any residual perennial weeds.
- Any failed areas shall be required to be made good by soiling (as appropriate) and seeding works to be repeated until a good sward is obtained.
- Reseeding of failed areas – ground preparation to be carried out to provide a clean and even tilth prior to seeding. Where area coverage is thin and overseeding is appropriate, remove dead growth, remove compaction and create surface suitable to 'take' additional seed.
- Grass areas will only be accepted as reaching practical completion when germination has proved satisfactory and all weeds have been removed.

Marginal/ aquatic planting

8.11 Generally:

- Purpose : to improve/ enhance landscape visual amenity, provide wildlife habitat opportunities and to increase biodiversity.
- Restrictions: use of chemicals. All works in accordance with good horticultural practice.
- Results: establishment of planting to provide continuous cover using a balanced mix of marginal and emergent species, appropriate to the moisture levels.
- Review : to ensure that species balance is maintained, appropriate to moisture levels.

- Balance : Variation in structure can be achieved by cutting back and removing short sections of vegetation every 2-3 years in rotation. Vegetation removal causes the least disruption to wildlife when carried out between September and November.
- Clearance : as required to ensure that the water body capacity is maintained and outlets/ inlets are not obstructed.
- The LMC shall monitor water quality and the growth of algal blooms and treat if necessary, seeking specialist advice.

8.12 Litter – all waterbodies shall be kept free of litter. Litter coverage shall be maintained below a maximum level of 5%.

8.13 Cutting and removal of marginal plants – the Contractor shall monitor growth and, if vegetation becomes too dominant (80% open water to be maintained within permanent water areas), excessive plant growth shall be addressed by pulling.

8.15 Non-native invasive species – presence of non-native invasive species (e.g Indian Balsam and Japanese Knotweed) to be notified and disposal to be undertaken in accordance with approved method statement.

8.16 Water quality – the Contractor shall monitor water quality and the growth of algal blooms. If water quality appears compromised, seek advice.

9.0 ORNAMENTAL PLANTING: TREES, SHRUBS, HERBACEOUS PLANTING

9.1 With respect to the management of shrub planting beds, the approach should focus on plant health and maintaining a neat and tidy appearance, which should also encourage plant growth. Any failed plants should be replaced as required using like for like species and using the original specification for guidance.

Trees:

9.2 With the exception of clipped or shaped trees, it is the intention to allow trees to develop their natural shape and size.

9.3 Trees to be monitored for any die back and pruned only as necessary to maintain a balanced form and/ or to remove damaged/ diseased growth. Canopy heights and sight lines to be maintained.

9.4 The following operations are to be undertaken;

- Check and re-firm stakes and guys on each visit. After strong winds, frost heave and other disturbances, additional inspections may be instructed. Particular attention to be taken following these occasions. Replace or resecure loose or missing items. Adjust to suit stem growth and to provide correct and uniform tension.
- Refirming trees: to be carried out after strong winds, frost heave and other disturbances. To refirm the Contractor should tread around the base until firmly bedded. Any collars in the soil at the base of tree stems, created by tree movement should be broken up by fork, avoiding damage to roots. The voids should be backfilled with topsoil and refirmed.
- Remove : stakes are to be removed once trees are stable and there is no movement within the tree pit. Generally after 2 years or at the Contractor's discretion.

Shrubs:

9.4 The intention is to encourage the establishment of planting to provide continuous cover using a balanced mix of shrub and herbaceous planting.

- Feed and mulch shrubs in early spring using approved slow release fertiliser in accordance with Manufacturer's recommendations.
- In spring remove any suckers or reverted shoots.
- Pruning of ornamental shrubs should be undertaken in order to clear deadwood, promote healthy growth and produce desired growth of flowers, foliage or winter colour as appropriate.
- Pruning should also include for clearing out crossing and damaged branches. Where the pruning is limited to the extent of the current year's growth, work can be carried out at anytime of year. Extensive pruning works, thinning or coppicing works should however be carried out outside the bird nesting period e.g. between September and February. Inspection to identify the presence of nesting birds should be carried out prior to any work. Pruning should be undertaken by hand with respect to the natural shape/form of the plant.
- In late spring prune winter flowering shrubs. Inspection to identify the presence of nesting birds should be carried out prior to any work.
- At the end of the growing season, check all shrubs and remove dead foliage, dead wood and broken or damaged branches and stems.
- Immediate removal of diseased plants.
- Pruning may be used to rejuvenate shorter living species.

- Replacement planting to be undertaken where shrub stock becomes leggy/ over-mature.
- Any replacement planting to be undertaken to reflect the original design intent and to match the original specification, unless stated otherwise. Replacement planting to be undertaken with care to ensure that the roots or above ground parts of adjacent plants are not damaged. Apply slow release fertiliser to replacement planting.

9.5 General maintenance of shrub/ herbaceous beds

The Contractor/LMC shall undertake the following operations on each visit.

- Remove, using correct horticultural practices, all fallen flowers, leaves and other debris. All cultivated areas shall be cleared of litter and other debris. The Contractor shall ensure that each maintenance visit coincides with a litter removal visit.
- The Contractor/LMC shall prune shrubs in accordance with good horticultural practice and to reflect species requirements in order to prevent obstructions to paths, roads, signs, steps, sight lines, windows, doors and other similar situations and to allow access as directed by the QCM.
- The Contractor/LMC shall at each visit remove all dead, damaged, infested, reverted or diseased branches and stems using correct horticultural practices. The Contractor/LMC shall otherwise prune all plant material at the correct pruning time. Any plants grown for winter stem colour or similar effects, shall be pruned at the optimum time to provide the maximum display.
- The Contractor/LMC shall advise the QCM of all dead shrubs and plants removed during any visit.
- Remove weeds by pulling by hand, hoeing and raking, avoiding damage to stems, branches and plant roots, leaving a clean weed free surface cultivated to a medium tilth. No herbicides shall be used unless otherwise instructed.
- The QCM may instruct the Contractor/LMC to supply and plant new plant material in accordance with the Planting Specification, at the same time as the plant material is removed or as specified by the QCM within the planting season.
- On one occasion in November, the Contractor/LMC shall cultivate all shrub beds not covered by shrub growth to relieve areas of compaction to a depth of 75mm, to maintain a high standard of appearance and to remove free seedlings and other woody weeds by forking or other approved method. Care shall be taken not to damage or disturb roots, branches and stems and avoid excessive treading of the surface. The Contractor/LMC shall break down any lumps and leave the surface weed free with a medium/fine tilth. All arisings shall be collected and disposed of.

- 9.5 Soil aeration – to be undertaken as appropriate to relieve compaction. Care to be taken to avoid damage to existing plants. Soil levels to be adjusted as required.
- 9.6 Maintenance of mulch – maintain minimum thickness of 50mm. Top us every 3 months as required. Remove mulch spilt on adjacent areas.
- 9.7 Pruning Schedule – General
- Spring Flowering : All wood which has borne flowers shall be removed. Young wood shall be retained to ripen and produce flowers in the following year. Thin out crowded and crossing shoots and remove weak growth. Pruning shall be carried out after flowering in May to July.
 - Summer Flowering : Shrubs that bloom after mid-summer are to be pruned in early to mid-spring. Avoid pruning in winter as it may lead to frost damage of new shoots.
 - Most Deciduous/Vigorous Evergreen shrubs : One or two old stems shall be removed completely and the younger flowering shoots shall cut back to the fresh growth of the main branches. Thin out crowded and crossing shoots and remove weak growth. Pruning shall be carried out between November and March.
 - Stem Effect/Marginal Hardiness : The previous season's wood shall be cut back to within two or three buds of the old wood. Thin out crowded and crossing shoots and remove weak growth during March to April

9.7 Remedial/ Rejuvenation Pruning

The QCM may instruct the Contractor/LMC to undertake remedial pruning to shrubs. This work will be assessed on a square meter basis and may include the entire bed or part of it. Examples might include shrubs which have overgrown their position and become too tall, wide or mature. The Contractor/LMC shall be required to liaise closely with the QCM to ensure methods adopted are appropriate to particular situations.

Hedges:

- 9.5 The intension is to maintain hedges so that they are neat, tidy, vigorous, dense and do not obstruct or overhang footpaths or roads or encroach on other areas.
- Maintain to agreed heights with regular top and sides. All hedges to have a clean line, even height and well cared for appearance.
 - Timing to reflect species requirements. The Contractor shall avoid cutting/pruning in March to July inclusive to cause minimum disturbance to nesting birds and wildlife, in compliance with the Wildlife and Countryside Act.

- Hedge cutting will be undertaken according to vigour and type. In any event, low vigour hedges shall receive at least one cut at an appropriate time of year.
- Additional cuts to be undertaken if growth restricts pedestrian or vehicular movement, impedes sightline, or if an unkempt appearance is observed.
- All pruning work in accordance with good horticultural practice. All new hedges shall be cut using sharp shears, reciprocating hand held cutters or secateurs.
- All arisings shall be collected immediately following cutting or at the end of each work period and taken to the designated location for disposal. This includes trimmings hung up in hedges and the sweeping of adjacent hard surfaces

Ornamental features:

9.6 The intention is to maintain strong form and all year visual impact.

- Shaped features/ topiary to be trimmed to maintain form and reflect design intent.
- Generally, allow for minimum 2 cuts annually. First cut after first flush and second cut late September.

Herbaceous/ Perennials:

9.7 The intention is to maintain a balance of seasonal colour/ interest, responding to the horticultural species requirements with regard to pruning, dead heading, thinning and splitting.

- In early-mid spring remove dead growth of half-hardy plants and cut back shrubby perennials.
- In mid-late spring thin dense shoots and 'stop' young shoots as required.
- In summer dead-head spent flowers.
- The Contractor shall carry out a minimum of eight weekly visits for autumn maintenance, at equally spaced intervals throughout November and December. The Contractor shall, on each visit, cut down all growth of the herbaceous perennials that have finished flowering and stems have died back and shall fork over the soil, minimising disturbance to plants.
- Autumn maintenance/ clearance shall be undertaken, as necessary, in accordance with good horticultural practice, and the Contractor shall allow for the gradual

treatment of the entire area over the full eight planned visits. All arisings shall be removed from site at the end of each work period and taken to the designated location for disposal.

9.8 The Contractor may be required to undertake splitting and replacement planting in specified areas between November and March. These areas shall be identified by the QCM.

- Splitting : In these areas, plants shall be dug up and split in accordance with good horticultural practice, removing any perennial weed entwined within the plants. The Contractor shall dig over area disturbed by the lifting and splitting operations, using a spade to a depth of 275mm.
- Replacement/ replanting : The Contractor shall incorporate into the soil an approved, well-rotted, manure. This shall be supplied and applied at a rate of 10kg per square meter and the soil shall then be consolidated and raked prior to planting. The Contractor shall then replant as instructed by the QCM.

Bulbs:

9.9 The intention is to ensure that the balance of stock is maintained and regenerative growth is promoted whilst ensuring beds are maintained in a clean and tidy form.

- Dead-head seasonal bulbs regularly.
- Once flowering finishes do not cut back leaves for several weeks or until they begin to yellow.
- In summer divide and replant congested clumps.

10.0 SCRUB AND NATIVE PLANTING

10.1 Any individual plants that fail within the first year will be replaced in the second year. No other management of this habitat type, apart from monitoring the health of the planting and re-attaching guards/ re-staking is envisaged in the first 5 years.

10.2 Loose or defective guards – adjust, re-fix or replace to original specification and to prevent chafing. Guards and stakes to be checked on a minimum of two occasions per annum.

10.3 Remove guards as soon as they split and before they start to disintegrate (usually after 5-10 years). Dispose of guards and stakes off-site.

10.4 Selective thinning may be required once the scrub planting is 15 to 30 years old and will normally be undertaken every 5 to 10 years in accordance with Forest Stewardship Council guidance and BS: 3998:2010

11.0 MAINTENANCE AND INSPECTION OF PLAY AREAS/ PUBLIC OPEN SPACES

11.1 The LEAPs and LAPS : comprise of informal and natural play elements to be in keeping with the aesthetic of the development.

11.2 Litter : Play areas shall be kept free of litter, so that at no time shall litter coverage of 5% be tolerated.

11.3 Play Elements : equipment comprises of formal equipment and informal play elements. The following applies to all elements and areas.

- All play equipment is to be installed by a certified contractor and signed off by a certified RoSPA inspector before being opened to the public.
- It is the Contractors responsibility that during construction the designated LEAP/ LAP areas are fenced off to ensure no use of the play space happens before the site is ready.
- All items of play are to be installed by a qualified and approved specialist and installed strictly to the manufactures specification.

11.4 Play Area Inspections

The Contractor shall allow a sum to maintain that the play area is inspected fortnightly in accordance with RoSPA Information Sheet Number 24, and any work required is carried out.

- In addition to the above, the Contractor shall allow a sum to ensure that the play areas are inspected annually in accordance with RoSPA Guidance and EN1176/7.
- A report should be written covering site safety and condition of equipment, surfacing and ancillary safety items and compliance with EN1176 where relevant. The report should include any remedial action required with an assessment of the degree of risk.
- If at any stage any equipment is found to be damaged in a way that poses a risk to the users safety these are to be rectified immediately or closed off until such remedial actions can be made.

11.5 Planting within Play Areas

- All planting around the LAP's and LEAP's are to maintained and managed in accordance with the requirements of this document.

- Any planting deemed to pose a risk to public and child safety to be dealt with immediately or fenced off until remedial action can be undertaken.

11.6 Play Bark

- Inspection of the bark surfacing is to be carried out by the Contractor/LMC fortnightly to ensure the surface is clean, tidy and free of any foreign objects – glass, needles, general litter etc. In the event that any of the play surfacing is found in a condition that poses a risk to public safety these are to be rectified immediately or closed off until such remedial actions can be taken place.
- Inspection and grading of the bark safety surface is to be carried out by the LMC monthly to ensure the nominal depth is maintained at a minimum of 300mm. If the depth is found to be less than 300mm additional bark to the original specification must be applied to the effected zones immediately by a qualified contractor.

12.0 MONITOR AND REVIEW

- 12.1 Due to the dynamic nature of plant material, establishment and growth can vary and will also be influenced by ground conditions and microclimate. A monitoring and review procedure is therefore required to enable management operations to be adapted if required.
- 12.2 It is recommended that landscape management operations are reviewed on a five yearly basis in order to ensure they are meeting the overall aims and objectives identified in this strategy and to ensure that it is responding to the current and perceived future needs of the site as it develops.

APPENDIX 1 ANNUAL MAINTENANCE PROGRAMME

[illegible]

	Top dressing & reinstatement	As required												
Wildflower grassland	Scheduled inspection		1	1	2	2	2	2	2	2	1	1		16
	Cut grass/ remove arisings			1					1		1			3
	Autumn leaf removal										1	1	1	3
	Remove rubbish	1	1	1	1	1	1	1	1	1	1	1	1	12
	Dog fouling removal	1	1	1	1	1	1	1	1	1	1	1	1	12
	Invasive weed removal/control	As required												
	Reseed/ repair	As required												
Play Areas	Inspect all elements	2	2	2	2	2	2	2	2	2	2	2	2	24
	Litter clearance & weed control	1	1	1	2	2	2	2	2	2	1	1	1	18
	Repair play equipment	As required												
	Play bark top-up	As required												
	Pressure wash timber seats			1			1			1			1	4
	Repair fencing & gates	As required												