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**SGN BELVEDERE,
FORMER GAS HOLDERS SITE ON YARNTON WAY**

August 2023

**3153-MA-RP002
LANDSCAPE MAINTENANCE AND MANAGEMENT PLAN**

REV A

FOR PLANNING

Commissioned by
BELLWAY HOMES LIMITED



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1.0 INTRODUCTION

- 1.1 This document is concerned with the management and maintenance of SGN Belvedere, Former Gas Holders Site on Yarton Way. It applies to all areas of hard and soft landscape, including all new areas of development. It does not include buildings, underground services and drainage, roads, lighting, mechanical and electrical installations.
- 1.2 The purpose of this document is to ensure the appropriate short term (first/second year) and longer-term management of the vegetation and other landscape components.

2.0 AIMS & OBJECTIVES

2.1 *Aims*

- The purpose of this document is to ensure the appropriate short term and longer-term management of the vegetation and other landscape components to be managed by the appointed management company.
- To adopt a coherent, strategic and integrated approach to the landscape management and maintenance of the landscape elements within the site.

2.2 *Objectives*

- To ensure successful establishment of the new landscape proposals.
- To ensure the site is maintained to a high standard following the establishment of all new landscape proposals.
- To ensure new tree, shrub, hedge and ornamental planting develops and is maintained in keeping with the context of the site.
- To fulfil legal and planning requirements.
- To create additional wildlife habitats and enhancements to biodiversity.
- To provide and maintain an attractive/visually appealing and robust landscape setting to the development, particularly along the access routes and building frontages.
- To contribute to the value of the green infrastructure on site, and helping provide links with the wider countryside.
- To integrate the nature conservation and recreational aims for the landscape and open space.



3.0 RANGE OF ELEMENTS

To ensure the area is managed appropriately, the site will be considered as comprising of a series of separate but interlinking elements.

Softworks

1. Proposed Tree Planting
2. Hedges
3. Amenity planting
4. Amenity Turf
5. Wildflower Meadow
6. Bark Mulch Surface

Hardworks

1. Hard landscape surface treatments
2. External site furnishings
3. Litter, leaf and other cleaning
4. Boundary Treatments

Descriptions, management objectives and prescriptions for each of these components are detailed in Section 4.

Please refer to drawing sets:

3153-MA-1000 GENERAL ARRANGEMENTS PLAN



4.0 LANDSCAPE SOFTWARES

4.1 Proposed Tree Planting

4.1.1 Description:

See drawings 3153-MA-1000 GENERAL ARRANGEMENTS PLAN

- Proposed trees planted at a variety of sizes and specification appropriate to the locations.
- The works consist of the maintenance and management of new high-quality amenity planting, including trees, shrubs, bare-root transplants, herbaceous planting and turfing areas.
- Prior to, during and after work the Contractor should avoid damage to neighbouring trees, plants and property.
- All works should be in accordance with BS:3998 2010 and Forestry and Arboricultural Training and Safety Council Safety Guides. All operatives undertaking chainsaw work must hold appropriate certification and should be approved members of the Arboricultural Association.
- As a general rule, wherever possible, management should be as minimal as possible, subject to meeting health and safety requirements.
- Any works to the trees is to be carried out in accordance with the legal agreement for the site and therefore following consultation and written consent from the Local Planning Authority (LPA).

4.1.2 Objectives:

- Establishment of tree planting structure.
- Maintain in safe healthy condition.
- Promote attractive appearance.
- Maintain uniform appearance of trees within each species.

4.1.3 Prescription:

- A. After Practical Completion of the main contract the Landscape Contractor appointed shall supply all necessary hose attachments and fittings to keep the plants watered. Watering shall be undertaken upon a weekly basis through years 1 and 2 throughout the growing season to ensure that the plants remain healthy, establish and grow. Monitoring is recommended if there are 10 consecutive days during the growing season at greater than or equal to 25 degrees centigrade.

The quantity of watering for tree planting is to ensure that the full depth of topsoil is wet for all soft landscape areas. The table below is provided for illustrative purposes only and the figures are to be confirmed by an irrigation specialist but provide base levels of irrigation for planting within the site.

Planting Type	Required Litre per week, up to 50-60cm rootball/16-20cm girth	Summer (May, June, July, Aug.)	Winter (Dec., Jan., Feb)	Autumn and Spring (Sept., Oct., Nov., Mar., Apr)
Trees	40	40	20	30

- B. Replace failed or severely damaged trees as specified, subject to investigation and measures to avoid subsequent failure/damage.



C. Pest/Disease management

- Reduce risks to tree population by monitoring and surveying trees of pests and disease.
- Pests and diseases are based upon the Department for Environment Food and Rural Affairs (DEFRA) Tree Health Management Plan and Forestry Commission.
- Contractor to review Forestry commission England Pest and disease symptom guides, report to Forestry commission and Real Estate Management. Treat as prescribed and by qualified Arboriculturist.

D. Carry out formative pruning, removal of deadwood and repair work as necessary.

- Dead, dying, or diseased wood, broken branches and stubs.
- Fungal growths and fruiting bodies.
- Rubbish, wind-blown or accumulated in branch forks.
- Wires, clamps, boards and metal objects, if removable without causing further damage and not part of a support structure that is to be retained.
- Other unwanted objects, e.g. tree houses, swings.
- Climbing plants.

All work to be undertaken by an Arboricultural Association approved contractor.

E. The Contractor should check on a two monthly basis the condition of Tree Stakes and Guys. In addition, further inspections should be carried out immediately after strong winds.

Stakes – replace loose, broken or decayed stakes to original specification. If longer than half of clear tree stem height, cut to this height in spring. Retie to tree firmly but not tightly with a single tie.

Ties – Adjust, refix or replace loose or defective ties, allowing for growth and prevent chaffing. Where chaffing has occurred, reposition or replace ties to prevent further chaffing. Removal of Stakes and Ties – remove stakes and ties two years after planting. Fill stake holes with lightly compacted soil.

The Contractor should check on a two monthly basis the condition of underground guy wires. In addition, further inspections should be carried out immediately after strong winds.

Operations – replace or re-secure loose or missing underground guy wires. Adjust to suit stem growth and to provide correct and uniform tension.

F. When removing branches, remove inward growing, crossing, rubbing, dead and damaged branches. When thinning selectively remove an agreed percentage of secondary and small live branch growth evenly throughout the crown. When cutting make no cuts of more than 50mm diameter. Cut portions of branches back to lateral or sublateral buds or branches without leaving stumps. The appearance should be uniform with a well-balanced structure of branches and foliage. The extent of the works will be as instructed by the contract administrator.

G. Formative Pruning of young trees – This work should be undertaken to ensure the successful establishment of the trees. The works should not be carried out during the late winter/early spring sap flow period.

- Young trees up to 4m high should be crown pruned by removing dead branches and reducing selected side branches by one third to preserve a well-balanced head and ensure the development of a single strong leader. Remove duplicated branches and potentially weak or tight forks. In each case cut back to live wood.
- Extensive pruning of young trees and any surgery to larger trees must be carried out by an approved member of the Arboricultural Association or other approved specialist. Failed or severely damaged trees as specified, subject to investigation and measures to avoid subsequent failure/damage.
- All the tools used should be appropriate, well maintained and sharp. Final pruning cuts – do not use chainsaws on branches of less than 50cm diameter. When using



handsaws, cut in one continuous operation to form a smooth cut surface. Do not use anvil type secateurs.

- When removing branches do not damage or tear the stem.
- Keep wounds as small as possible, cut cleanly back to sound wood leaving a smooth surface, and angled so that water will not collect on the cut area.
- When cutting, cut at fork or at the main stem to avoid stumps wherever possible.
- Large branches – remove only if unavoidable. Remove in small sections and lower to the ground with ropes and slings.
- Dead branches and stubs – when removing do not cut into live wood.
- Unsafe branches – remove epicormic shoots and potentially weak forks that could fail in adverse weather conditions.
- Disease of fungus – give notice if detected. Do not apply fungicide or sealant unless instructed.
- Bark Damage – wounds – do not attempt to stop sap bleeding. Gently remove ragged edges and remove splintered wood from deep wounds as small as possible. Give notice if there is any liquid or flux oozing from apparently healthy bark.
- Cavities in Trees – Cavities should be investigated. Old cavities in mature trees should be left alone subject to health and safety audit. New cavities are likely to have been made by woodpeckers and may reflect nesting in which case disturbance is illegal. Where the extent of a cavity is not visible, there is also a risk a bird or bats may be present. Such cavities should be notified but no further action taken without advice from a suitably qualified ecologist. For new small cavities in ornamental species, where bats or nesting birds are obviously absent, rubbish and rotten wood should be removed. The cavity should be probed to find the extent of any decay, and give notice. The cavities should not be covered.
- Stack all wood arising from the works in neat piles in areas to be agreed with the ecologist to provide invertebrate habitat opportunities.

4.2 Hedges

4.2.1 Description:

- The works consist of the maintenance and management of new high-quality hedge planting.

4.2.2 Objectives:

- To ensure satisfactory establishment and development of new amenity planting material.
- To ensure the design concept envisaged for each area is achieved.
- To maintain planting in a healthy and attractive condition.
- To maximise particularly intended overall effects, plant relationships and individual plant effects.
- To maximise biodiversity value by providing new habitats for wildlife.
- Carry out works when least invasive to wildlife breeding cycle.

4.2.3 First year Prescription:

- A. During and following the establishment of the planting ensure that sufficient water is applied to maintain healthy growth as required. Ensure that full depth of topsoil is saturated. Watering programme should be monitored to ensure that at times of water shortage (e.g. drought), sufficient water is applied to meet the conditions.
- B. Maintain weed free surround to hedge base.
- C. Prune and re-shape transplants at the appropriate time according to individual requirements to promote good form and encourage strong, bushy growth, minimum annually.



4.2.4 Ongoing prescription:

- A. Prune and re-shape hedge species at the appropriate time according to individual requirements to promote good growth and compact form, removing any dead or dying wood.
- B. The Contractor shall, at all times, maintain hedges so that they are neat, tidy, vigorous, dense and do not obstruct or overhang footpaths and roads or encroach on other maintained areas. Cutting shall generally maintain the original profile, both linear and sectional.
- C. All hedges shall be cut using sharp shears, reciprocating hand held cutters or secateurs. The use of hedge cutters during the establishment of new hedges will not be permitted.
- D. All cuts shall be clean and any ragged edges shall be removed using sharp knife or secateurs.
- E. The Contractor shall supply and use planks, trestles or similar where necessary to increase reach.
- F. All hedges shall be cut to leave a clean, even height and well cared for appearance.
- G. 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.
- H. The Contractor shall ensure that the width of the hedge or any vegetation within it, i.e. brambles, does not present a hazard or obstruction to pedestrians, pavements, roads or signs at any time. The Contractor shall allow for this in their tendered rate.
- I. Once commenced, the cutting operation shall continue and be completed without delay.
- J. The Contractor shall give the contract administrator 5 working days' notice of their intention to commence hedge cutting works.
- K. The hedge shall be pruned back to the same height, width and general shape as that which existed at the completion of the last approved pruning. The sides of the hedge shall be slightly inward sloping (i.e. wider at the bottom of the hedge than at the top to give more stability) with the top of the hedge level and at right angles to the ends.
- L. As a general rule, large leafed plants, such as Laurel, shall only be pruned by using secateurs or similar approved equipment.
- M. Water established plants thoroughly during dry periods
- N. No pruning shall take place when the hedges are in flower unless this has been approved by the contract administrator.
- O. Should the Contractor believe that they have been asked to do anything which, in their opinion, is detrimental to the hedge, an obstruction to pedestrians/vehicles, or they consider it appropriate to deviate from the specification, the contract administrator shall be notified prior to the work commencing.
- P. The Contractor shall avoid cutting/pruning in March to July to cause minimum disturbance to nesting birds and wildlife, in compliance with the Wildlife and Countryside Act.



4.3 Proposed Amenity Planting

4.3.1 Description:

- Amenity beds of shrubs, ferns, grasses and perennials.

4.3.2 Objectives:

- Ensure satisfactory establishment and development of new amenity planting material.
- Ensure the design concept envisaged for each area is achieved.
- Maintain planting in a healthy and attractive condition.
- Maximise particularly intended overall effects, plant relationships and individual plant effects.

4.3.3 Prescription:

- A. Water plants thoroughly during dry periods to ensure establishment. After Practical Completion of the main contract the Landscape Contractor appointed shall supply all necessary hose attachments and fittings to keep the infrastructure plants watered.

Watering shall be undertaken upon a weekly basis through years 1 and 2 throughout the growing season to ensure that the plants remain healthy, establish and grow.

The quantity of watering for shrub planting is to ensure that the full depth of topsoil is wet for all soft landscape areas. The table below is provided for illustrative purposes only and the figures are to be confirmed by an irrigation specialist but provide base levels of irrigation for planting.

Planting Type	Required Litre per week	Summer (May, June, July, August)	Winter (Dec., Jan., Feb)	Autumn / Spring (Sept., Oct., Nov., Mar., Apr)
Shrubs and groundcover	15	15	7.5	11.25

- B. Keep beds free of weeds through hoeing and hand weeding. The Contractor shall visit each shrub beds a minimum of 26 occasions equally spaced through the year, i.e. fortnightly visits. The Contractor 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 shall at each visit remove all dead, damaged, infested, reverted or diseased branches and stems using correct horticultural practices. The Contractor shall otherwise prune all plant material at the correct pruning time Any plants grown for winter stem colour or similar effects, as specified by the appointed Management Company shall be pruned at the optimum time to provide the maximum display.
 - All dead shrubs and plants shall be removed and the appointed Management Company advised.
 - The appointed Management Company may instruct the Contractor 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 appointed Management Company within the planting season.
 - 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.
- C. Apply slow-release fertiliser each March /April.



- Planting bed shall be forked over lightly in March and a general fertiliser, approved by the appointed Management Company, with an N.P.K. ratio of 7:7:7, shall be supplied and applied at a rate of 35gm per square metre and incorporated into the surface by fork or hoe.
- D. Carry out dead heading as appropriate. All dead flower heads shall be removed to maintain display and keep a well-cared for appearance.

Herbaceous with attractive seedheads or stems (example: Achillea 'Terracota')

- Do not cut back or dead-head perennial with attractive seedheads or stems, such as evergreen species, grasses, thistles and umbellifers to prolong the interest of the ornamental planting and provide food and shelter for wildlife. Wait until March to carry on with their maintenance.
- E. Prune to promote healthy growth and in accordance with required shape and remove dead, dying, or diseased wood and suckers.
- The Contractor shall prune all plant material at the correct pruning time and in accordance with this Specification.
 - This represents general guidelines for pruning. The Contractor shall note that pruning methods differ with species, cultivar, maturity and the exact position of the shrub. If the Contractor is in any doubt about the appropriate method to be used, then the advice of the appointed Management Company shall be sought.
 - Pruning of individual shrubs shall be carried out using skilled labour only and adopting correct horticultural practice.
 - The purpose of pruning is to build a strong framework, keeping shrubs healthy and vigorous, maintaining the shape and balance, ensuring the maximum amount of flowering wood is produced and that the shrubs do not create a nuisance or danger. All pruning shall be carried out to the highest horticultural standards using secateurs, loppers and other method approved by the appointed Management Company. Cuts shall be made to an outward pointing bud. Suckers shall be removed at their source on the roots of affected shrubs. Reverted branches shall be treated in a similar manner. All areas adjoining footpaths and other surfaces shall be swept/raked following pruning works at the end of each work period, leaving the area neat and tidy.
 - The Contractor shall allow when pruning shrubs in order to prevent obstructions to paths, roads, signs, steps, sightlines, windows, doors and other similar situations, and to allow access.
 - The Contractor shall remove all dead, damaged, infested, reverted or diseased branches and stems, using correct horticultural practices.
 - If a shrub is winter berry-bearing, pruning shall not be carried out until March, or until there are no berries remaining (whichever is the sooner). When pruning is undertaken, care shall be taken to leave as many berries as possible and at least 2" (60mm) of the previous year's growth, to allow flowering the following year.
 - All dead flower heads shall be removed to increase flowering period, maintain display, and keep a well-cared for appearance.

Slow Growing Specimen

- If pruning is required, it will only involve light shaping and shall be carried out February to March.

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.



Most Deciduous/Vigorous Evergreen

- 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.

Remedial Pruning

- The appointed Management Company may instruct the Contractor 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. Some of the techniques are detailed below but this list is not exhaustive and the Contractor shall be required to liaise closely with the appointed Management Company to ensure methods adopted are appropriate to particular situations.

F. Control pests and diseases. The Contractor shall immediately inform the appointed Management Company of all insect or fungal attacks and damage caused by vandalism.

G. Replace poorly established or dead plants.

H. Apply mulch in spring to ensure water retention

4.4 Amenity Turf

4.4.1 Description:

- BS3969: Recommendation for Turf for General Purposes

4.4.2 Objectives:

- Ensure satisfactory management.
- Ensure a well-maintained formal appearance
- Maintain lawns free from undesirable grasses, weeds and herbaceous species.
- Ensure safe pedestrian use.

4.4.3 Prescription:

- A. Mowing with a rotary mower to a height of 20mm when the grass sward reaches 75mm (Weekly during the growing season from March – November).
- B. The Contractor 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. Tractors and ride-on self-powered equipment shall not be operated on sloping ground with the gradient exceeding that recommended by the manufacturer.
- C. Box off cuttings and remove from site. The Landscape Contractor appointed by the Estate Management Company is to remove from the Site and dispose of weeds, prunings, leaves,



litter, rubbish, dirt and other arisings unless specifically described as to be left and spread over beds etc.

- D. The Contractor 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 and fence bases; up to pavement edges or other boundary; tree base or any other obstruction.
- E. Regular strimming or herbicide control where mown grass abuts fences, walls and around trees and obstacles.
- F. Regular reinstatement of damaged or worn areas any top dressing and seeding.
- G. Trees in lawn areas shall be maintained with a cultivated tree ring 600mm in diameter greater than the largest diameter of the tree trunk. All newly planted trees shall be maintained with a cultivated tree ring 300mm in diameter greater than the largest diameter of the tree trunk for the remainder of the contract period. The cultivated tree ring shall be mulched to a depth of 50mm with ornamental grade bark mulch.
- H. The Contractor shall report to the Estate Management Company any damage to the grass surface, fences, walls, street furniture, any plant material or other property caused during grass cutting operations. Should it be determined by the Estate Management Company that the failure of a newly planted tree or shrub is due to the Contractor's negligence in grass cutting operations, then a replacement tree or shrub, approved by the Estate Management Company, shall be supplied, planted and maintained until established, at the Contractor's expense.

Edging operations

- I. All edging operations shall be carried out at the times specified within the regimes for grass maintenance and considered as part of the grass cutting regime.
- J. All finished edges shall be neat and vertical with no grass overhanging the finished edge.
- K. Edging operations shall not change the size of grass areas nor create new channels.
- L. 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.
- M. All channels adjacent to a flowerbed, shrub bed, tree base, etc. shall be maintained so that following each edging operation it is left clean and litter free.
- N. The Contractor shall be required to use a half-moon edging iron, mechanical edge and trim and/or long handled shears or spades.

O. Kerb Edge Maintenance

The Contractor shall cut a clean edge to all grass areas where they meet kerbs; other hard surfaces or gully channels. This operation shall include removing the overgrowth of grass and any soil that is covering the kerb gully channel or any other, hard surface. The frequency of this operation shall be in accordance with the edge requirements of the Grass Cutting Regime specification. All rates quoted for kerb edge maintenance shall include the removal of all weed and grass growth by scraping or brushing all soil, litter and other debris that has accumulated at this junction to a minimum width of 200mm for the entire length of edging. The Contractor shall collect and remove all arisings to a designated location for disposal at the end of the work period.

P. Trimming Grass Edges

The Contractor shall cut the overgrowth of grass at edges of cultivated areas and chemical edging channels with long handled shears or mechanical edge trimmers approved by the Estate Management Company. The grass is to be cut to the same height as the surrounding grass. All



edges will be neat and vertical, with no grass overhanging the finished edge. The rates quoted for trimming must include the collection and removal of all litter, arisings and similar debris from the adjacent channel for disposal. The frequency for trimming will be in accordance with the Regimes for grass or cultivated area maintenance, as detailed within each section of this specification.

Additional works (to be undertaken as required)

- Q. Upon instruction from the Estate Management Company, the Contractor shall supply and apply an approved fertiliser to specified areas. Spring application shall normally be made during March. Autumn application shall normally be made during September.
- R. Upon instruction from the Estate Management Company, the Contractor shall supply and apply an approved selective herbicide to specified areas. Application shall normally be made during April to June. The grass shall not be cut two days prior to, or after, the application.

Variations to the Planned Grass Cutting Schedule

- S. 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.
- T. Contractor shall inform the Estate Management Company of work not completed from the programme. When the weather improves, the Contractor shall resume grass cutting in order to return to the agreed programme of work. The Contractor 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.
- U. Regular maintenance shall include:
- Carry out litter debris and removal.
 - Grass cutting for spillways and access routes.
 - Grass cutting damp meadow grass in and around basin.
 - Management of vegetation and removal of nuisance plants.
 - Remove sediment from inlets, outlet and fore bay. Tidy all dead growth before start of growing season.
- V. Occasional maintenance shall include:
- Re-seed areas of poor vegetation growth, prune and trim trees and remove cuttings and remove sediment from fore bay when 50% full.
 - Repair erosion or other damage by re-seeding or re-turfing. Realignment of riprap, repair and rehabilitation of inlets, outlets and overflows, re-level uneven surfaces and reinstate design levels as required.
 - Inspect inlets, outlets and overflows for blockages and clear as required. Inspect bank sides, structures, pipework etc. for evidence of physical damage.
 - Inspect inlets and facility surface for silt accumulation and establish appropriate silt removal frequencies. Check mechanical devices.
 - Sediments excavated from detention basins that receive runoff from residential or standard road and roof areas are generally not toxic or hazardous material and can therefore be safely disposed of by either land application or land filling. However, consultation should take place with the environmental regulator to confirm appropriate protocols. Sediment testing may be required before sediment excavation to determine its classification and appropriate disposal methods. In the majority of cases, it will be acceptable to distribute the sediment on site if there is an appropriate safe and acceptable location to do so.



4.4.4 Watering

- A. Water plants thoroughly during dry periods to ensure establishment. After Practical Completion of the main contract the Landscape Contractor appointed shall supply all necessary hose attachments and fittings to keep the infrastructure plants watered.

Watering shall be undertaken upon a weekly basis through years 1 and 2 throughout the growing season to ensure that the plants remain healthy, establish and grow.

During periods of prolonged dry weather, the Estate Management Company may instruct the Contractor to water grassed areas, using an irrigation method approved by the Estate Management Company. The Contractor shall provide a rate to ensure that sufficient water is applied to the entire area of grass to moisten the soil to a depth of 125mm. The table below is provided for illustrative purposes only and the figures are to be confirmed by an irrigation specialist but provide base levels of irrigation for the amenity lawn.

Planting Type	Required Litres per week	Summer (May, June, July, Aug.)	Winter (Dec., Jan., Feb)	Autumn and Spring (Sept., Oct., Nov., Mar., Apr)
Lawn	12	12	6	6

4.4.5 Replacement

- A. Bare and damaged patches shall be identified by the Estate Management Company for returfing and re-seeding works to BS 3969 and BS 4428.
- B. The Contractor shall continue all operations necessary, to include top dressing, watering and further over-seeding, to achieve a 100% grass cover within eight weeks.
- C. Where soil has been contaminated by chemicals, oils, etc., the Contractor shall remove to tip all such soil, replacing it with suitable soil, to enable re-seeding or turfing as specified and to ensure the pollutants do not affect the future growth of the vegetation.
- D. If the seed fails, due to any cause whatsoever. He shall be required to make good the soiling and repeat the seeding until a good sward is obtained.
- E. Grass areas will only be accepted as reaching practical completion when germination has proved satisfactory and all weeds have been removed. Management will be necessary to prevent infestation by weed species after seeding an area. A weed species may be defined as a species that is undesirable to the purpose/ objective of the grassland; species considered to be weeds will depend on the grassland type.
- F. 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.
- G. Any settlement below the specified levels during the contract or defects liability period shall be rectified at the Contractor's expense.
- H. The Contractor shall exercise care in the use of rotary cultivator and mowing machines to reduce to a minimum the hazards of flying stones and debris. All rotary mowing machines shall be fitted with safety guards.



4.5 Wildflower Grassland

4.5.1 Description:

- Wildflower planting to areas of public open space.

4.5.2 Objectives:

- Ensure satisfactory establishment.
- Promote a natural appearance.
- Prevent encroachment of non-meadow species.
- Control non-desirable herbaceous species.

4.5.3 Prescription:

The following works will be routinely undertaken:

- A. Year one - Mowing with a rotary mower to a height of 40-60mm regularly in first year of growth to ensure even establishment (Weekly during the growing season by end of July). Use mower without roller. Regular mowing in first year to maintain balance between faster growing grasses and slower developing flowers. Remove arisings to avoid leaving decomposing cut grass.
- B. Year two- Mowing with a rotary mower to a height of 40mm in late July. Use mower without roller.
- C. Strimming or mowing control where meadow abuts pathway or interferes with establishment of trees.
- D. Regular reinstatement of damaged or worn areas by seeding.
- E. Cut grass with an approved strimmer or mower capable of dealing with woody stems up to 25mm diameter.
- F. Damp wildflower banks are to be cut once a year, the cut being in September / October to 70mm, timing subject to whether damp areas are inundated.

4.6 Bark Mulch Surface

4.6.1 Description:

- Granulated bark mulch surface to amenity shrub planting beds.

4.6.2 Objectives:

- Maintenance of attractive uniform surface between shrubs.
- Weed suppression and soil water retention.
- Frost protection
- Reduction water loss from soil.
- Improvement plant growth by adding nutrients or increasing organic matter content

4.6.3 Prescription:

- A. Remove weed growth by manual method.
- B. Keep mulch clear 100mm from trunk. Keep 500mm radius of mulch from tree trunk.



- C. Top-up mulch surfaces (where applicable) with chipped tree bark in late autumn - late winter (Nov-Feb), to a depth of 50mm.
- D. Regularly monitor mulch levels and re-mulch in July to original depth, or when required.

5.0 LANDSCAPE HARDWORKS

5.1 Hard Landscape Surface Treatments

5.1.1 Description:

- See drawings 3153-MA-1000 GENERAL ARRANGEMENTS PLAN

5.1.2 Objectives:

- Provide appropriate surfaces for specific uses
- Ensure surfaces are safe to use
- Ensure surfaces are comfortable to use (relative to role)
- Maintain an appropriate appearance relative to context
- Prevent long term deterioration of surfaces due to wear and differential settlement

5.1.3 Prescription:

- In order to fulfil the management objectives for hard surfaced areas the following works will be undertaken:
 - Cleaning activities as described below
 - Weed control, using contact or translocated herbicides
 - Moss and algae control in known problem areas and in other areas a necessary
 - Maintenance of edge support and base layer drainage
 - Routine surface treatments
 - Repair of surfaces
 - Resurfacing
- The range of work implemented and the relative levels of inputs on hard surfaces to fulfil the objectives will vary particularly in relation to materials used, the situation of any surface and the intensity of use.
- Regular cleaning of hard surfaces will reduce weed, moss and algae control needs. However, even with rigorous cleaning, specific weed control and in some areas moss and algae control will be necessary to maintain a good appearance and safe surfaces.
- From an environmental perspective, the method of weed control will need to be restricted to sprays of contact or translocated herbicide. Both methods require weeds to be present to be treated.
- Manufacturer's instructions are to be followed to ensure appropriate methodology.

5.2 External Site Furnishings

5.2.1 Description:

- See drawings 3153-MA-1000 GENERAL ARRANGEMENTS PLAN
- Timber benches, cycle stands, timber stepping stones, boulders and natural play equipment.

5.2.2 Objectives:

- Ensure good levels of appearance
- Ensure the safety and comfort of users
- Prevent the physical deterioration of components



- Ensure longevity of furniture and equipment

5.2.3 Prescription:

- A. In order to fulfil the management objectives for the furniture and structures the following works will be undertaken:
- Cleaning activities as described below
 - Weed control, using contact or translocated herbicides
 - Moss and algae control in known problem areas and in other areas as necessary
 - Routine inspections for health and safety
 - Resurfacing, surface treatment, painting as appropriate
 - Routine inspections for defective parks or components
- B. All elements, such as bollards, railings, gates, fences, tree grilles/guards, litter bins, benches and all other street furniture elements are to be regularly maintained throughout the year to meet function and health and safety requirements.
- C. The range of work will vary in relation to materials used and the intensity of use.
- D. Manufacturer's instructions are to be followed to ensure appropriate methodology.
- E. Report on necessary repairs and action appropriately.

5.3 Litter, Leaf and Other Cleaning

5.3.1 Description:

- Site wide strategy.

5.3.2 Objectives:

- Ensure good levels or appearance.
- Ensure the safety and comfort of users.
- Prevent the physical deterioration of landscape components.

5.3.3 Prescription:

- Litter collection:
 - All areas to be picked once per week, additional picking to be undertaken when necessary.
 - Measures to be drawn up and implemented according to degree of problem.
- Hard surface sweeping to remove litter collection:
 - Hard surfaced areas in high profile areas will be swept once per fortnight.
 - Hard surfaced areas in other areas will be swept on six occasions per year.
 - Additional sweeping will be undertaken as necessary.
- Other cleaning on hard surfaces include:
 - Special treatments of stains and graffiti.
 - Treatment of spillages.
 - Removal of mud and soil.
 - Leaf collection.
 - High profile areas to be cleared of leaves of two occasions, each Autumn. Other areas to be cleared after leaf fall is complete.



5.4 Boundary Treatments

5.4.1 Description:

- See drawings 3153-MA-1000 GENERAL ARRANGEMENTS PLAN

5.4.2 Objectives:

- Ensure good levels of appearance
- Ensure the safety and comfort of users
- Prevent the physical deterioration of components
- Ensure longevity of furniture and equipment

5.4.3 Prescription:

- In order to fulfil the management objectives for the furniture and structures the following works will be undertaken:
 - Cleaning activities as described below
 - Weed control, using contact or translocated herbicides
 - Moss and algae control in known problem areas and in other areas as necessary
 - Removal of mud and soil
 - Wiped down and disinfected as necessary
- Routine inspections for health and safety
 - Resurfacing, surface treatment, painting as appropriate
- Routine inspections for defective parks or components
- The range of work will vary in relation to materials used and the intensity of use.
- Manufacturer's instructions are to be followed to ensure appropriate methodology
- Report on necessary repairs and action appropriately

6.0 IMPLEMENTATION, MONITORING & REVIEW

- 6.1 The elements covered by this Landscape Maintenance Plan are the subject of the Maintenance Schedule (please refer to Section 7.0).
- 6.2 The Maintenance Schedule incorporates the management objectives and broad prescriptions set out in this Landscape Maintenance Plan and gives detailed programme information. The Schedule also incorporates inspection and monitoring.
- 6.3 The management proposals will be undertaken, with professional landscape design, ecological and landscape management advice. A key person will be identified as responsible for implementation of the Landscape Management Plan and associated inspections, programmes and monitoring.
- 6.4 All materials, workmanship, quality and operations will be in accordance with current British Standards, Codes of Practice and legislation.



7.0 SGN BELVEDERE – MAINTENANCE SCHEDULE

7.1 The maintenance operations described in the following schedule will apply to a period of at least five years. Subsequently, maintenance operations will be reviewed and modified to achieve the long-term objectives described in the Landscape Management Plan.

Element	Operation	Frequency	J	F	M	A	M	J	J	A	S	O	N	D
1 Proposed Tree planting	Check, adjust, remove, support guard	Routine	1		1		1		1		1		1	
	Formative Pruning *	As/when required												
	Pruning/Deadwooding													
	Pest/disease control *	As/when required												
	Watering * - Refer to section 4.1.3	Weekly for at least the first two growing seasons of a sufficient amount, subject to weather and soil conditions.												
	Inspect trees twice a year and remove any dead or dying trees	Routine			1						1			
	Replacements *	As/when required. Should only be within planting season (Nov. – March)												

Element	Operation	Frequency	J	F	M	A	M	J	J	A	S	O	N	D
2 Hedges	Weed control	Routine			1						1			
	Pruning to desirable height 1200-1500mm (H)	Routine: season as appropriate to species		1								1		
	Watering *	As/when required												
	Replacements *	As/when required												



Element	Operation	Frequency	J	F	M	A	M	J	J	A	S	O	N	D	
3 Amenity planting	The contractor should monitor the condition of shrubs and replace any which appear to be diseased or damaged with the same size and species as the original plant schedule	As/when required													
	Ensure that all plants remain upright and firmly bedded in the ground after strong winds, frost heave and other disturbances	As/when required													
	Weed control	Routine			1		1		1			1			
	Shrubs flowering in winter: prune in spring – remove all arisings				1	1									
	Shrubs flowering in spring and early summer – prune immediately after flowering – remove all arisings							1	1						
	Shrubs flowering in summer and early autumn, cut back to old wood – remove all arisings				1	1									
	Pruning * - deciduous herbaceous perennials plants - to be pruned to the base once the foliage has died back. Remove all arisings	Dead heading As/when required											1		
	Pruning * evergreen perennials – tidy up and remove dead material only	Dead heading As/when required			1										
	Pruning * deciduous ornamental grasses – cut back hard in spring	Dead heading As/when required			1										
	Pruning * evergreen ornamental grasses – tidy up and remove dead material only	Dead heading As/when required			1										
	Pest/disease control *	As/when required													
	Watering *	As/when required													
	Replacements	All year – as conditions are suitable to re-plant													

Element	Operation	Frequency	J	F	M	A	M	J	J	A	S	O	N	D
4 Specimen shrubs	Weed control	Routine			1		1		1			1		
	Pruning	Routine; season as appropriate to species			1		1				1			
	Pest/ disease control *	As/when required												
	Watering *	As/when required												
	Replacements*	All year – as conditions are suitable to re-plant												



	Element	Operation	Frequency	J	F	M	A	M	J	J	A	S	O	N	D
5	Amenity Turf	Cut when turf reaches 75mm(H), cut with 40mm rotary mower. Remove all cuttings.	Routine			1						1	1		
		Remove rubbish as required prior to mowing	As/when required												
		Edging – edges to be kept clean and well managed at all times – remove all arisings	Routine			1		1				1			
		Weed and feed	Request instruction				1					1			
		Aerate / Scarify	Routine				1								1
		Top dressing	Request instruction					1							
		Pest / disease control *	As/when required												
		Watering *	As/when required												
		Sweep leaves	Routine										1	2	1

	Element	Operation	Frequency	J	F	M	A	M	J	J	A	S	O	N	D
6	Wildflower Meadow	Pest/ disease control *	As/when required												
		Mowing: cut all plants back to 50mm (during the autumn cut allow for the arisings to disperse their seeds for 1-7 days before collection)	Routine				1				1		1		
		Following annual hay-cut, scratch surface and slot seed areas which have had a poor summer flower show with wildflower mix as specified on planting plan	Yearly routine												
		Sweep leaves	Routine												1
		Remove Rubbish within the meadow as required prior to mowing	As/when required												

In first year; with a rotary mower to a height of 40-60mm regularly to ensure even establishment (weekly during the growing season from March – November)

	Element	Operation	Frequency	J	F	M	A	M	J	J	A	S	O	N	D
7	Bark mulch surface	Weed Control	Routine			1							1		
		Top up mulch*	As/when required					1							
		Remove litter, fallen leaves	Routine	2	2	2	2	2	2	2	2	2	2	2	2



	Element	Operation	Frequency	J	F	M	A	M	J	J	A	S	O	N	D
8	Hard Surfaces	Weed control	Routine			1							1		
		Repair damage	As/when required												
		Sweep	Routine	2	2	2	2	2	2	2	2	2	2	2	2

	Element	Operation	Frequency	J	F	M	A	M	J	J	A	S	O	N	D
9	Furniture and structures	Inspect/report problems	Routine	1	1	1	1	1	1	1	1	1	1	1	1

	Element	Operation	Frequency	J	F	M	A	M	J	J	A	S	O	N	D
10	Litter, leaf and other cleaning	Litter-pick all external areas	Routine	2	2	2	2	2	2	2	2	2	2	2	2

	Element	Operation	Frequency	J	F	M	A	M	J	J	A	S	O	N	D
11	Boundary treatments/gates	Inspect/report problems	Routine	1	1	1	1	1	1	1	1	1	1	1	1

*As/when required for the health and establishment of the planting and the items listed. Replacement planting to be carried out when ground conditions are suitable for the establishment of new planting.