



OTTERFIELD ROAD YIEWSLEY

SOFT LANDSCAPE MANAGEMENT & MAINTENANCE PLAN



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Contents

1.0 Maintenance Objectives	1
2.0 Management Principles	2
3.0 General Maintenance Operations	3
4.0 Existing Trees	7
5.0 Grass and Wildflower Areas	10
6.0 Planting Beds	13
7.0 Trees	17
8.0 Hedgerows	19
9.0 Play Area	20
10.0 Biodiverse Green Roof	22
11.0 Maintenance Schedule	24
Appendix 1:	26

Revision	Date	Details	Revised

1.0 Maintenance Objectives

- 1.1. These maintenance objectives apply to the whole site in perpetuity. The main aims are:
 - To provide an enhanced landscape quality.
 - Improved landscape visual amenity.
 - Opportunity for recreation
 - Provide wildlife habitat and increase biodiversity.
- 1.2. The results should aim to ensure establishment and continued healthy growth through to maturity of all soft landscape areas. The site is to have a clean, tidy condition and appearance of all external areas.
- 1.3. This landscape soft management and maintenance plan should be made available to domestic owners to outline the maintenance objectives, strategies, and operations. This is to ensure that domestic owners maintain areas within their ownership in line with this landscape management and maintenance plan. This should ensure consistency between various parties' maintenance across the site.

2.0 Management Principles

- 2.1 Failures of Plants: The Contractor shall replace any trees, shrubs, or other plants as required. Replacement of plants shall take place as many times as is necessary to maintain a complete cover of plants and to maintain the scheme as designed by the Landscape Architect, and within the correct season for the type of plant, tree, shrub, and grassland mix, as outlined in the original specification.
- 2.2 Maintenance Period: The Maintenance Contractor will carry out the maintenance of all soft landscape areas, to which the contract relates.
- 2.3 Following installation and after transfer the landscape shall be the responsibility of and maintained in perpetuity by:
 - Domestic Owners.
 - Bugler Developments and their appointed Management Companies (should these be contracted out).
- 2.4 The agreement shall be set up by Bugler Developments, who shall confirm in writing to the Principal Planning Officer of Hillingdon Council when the maintenance agreement is completed and is operative. Refer to ACD drawings BUG24699-11 and BUG24699-13 for an overview of the site and roof landscaped areas. Domestic Owners shall maintain private balconies and ground floor private domestic gardens.
- 2.5 The Developer shall ensure that any Maintenance Contractor shall carry out the periodic maintenance of all soft landscape areas, other than any areas which are conveyed or sold to third parties, such as adopting authorities or domestic owners. Inspection checks shall be carried out at a minimum of monthly intervals and the appropriate work carried out. Either inspection checks shall be carried out by a competent person, a member of the British Association of Landscape Industries (BALI) or the Landscape Institute (LI).

3.0 General Maintenance Operations

General Operations

- 3.1 **Reinstatement:** Any damage or disturbance to soil structure, planting, grass, or other areas of soft landscape is to be reinstated to original condition as shown on detailed landscape proposals.
- 3.2 **Control of Mammalian Pests:** Any control of mammalian pests is to be undertaken humanely. The contractor is to submit proposals for approval.
- 3.3 **Control of Invasive Plant Species:** Any control of invasive plant species is to be undertaken by a specialist firm or competent/ certified person. The contractor is to submit proposals for approval.
- 3.4 **Watering all Planted Areas (excluding trees):** All planted areas, including grassland and wildflowers, are to be watered to the full depth of topsoil, evenly and without damaging or displacing plants or soil. Watering is to be undertaken as necessary during growing season, to ensure the establishment and continued thriving of all plants. Any compacted soil is to be loosened or scooped out, to direct water to the root zone. If the water supply is or is likely to be restricted by emergency legislation, do not carry out planting until instructed. If planting has been carried out, obtain instructions on watering.

3.5 Watering of Trees: All trees are to be watered for the first three years after planting to aid establishment. Watering is to be undertaken as necessary during growing season, to ensure the establishment and continued thriving of all plants. If the water supply is or is likely to be restricted by emergency legislation, do not carry out planting until instructed. If planting has been carried out, obtain instructions on watering. Watering is to be undertaken in line with the following volumes:

Size of Tree	Volume of water per week
12-14cm girth	25 litres
14-16cm girth	35 litres
16-18cm girth	80 litres
18-20cm girth	80 litres
20-25cm girth	100 litres
25-40cm girth	120 litres

3.6 Disposal of Arisings: Unless otherwise specified, disposal of arisings will be undertaken as follows:

- Biodegradable arisings: Remove to a recycling facility.
- Grass cuttings: Remove to a recycling facility.
- Tree roots and stumps: Chip on site and remove to a recycling facility.
- Shrub and tree prunings: Chip on site and remove to a recycling facility.
- Litter and nonbiodegradable arisings: Remove to a recycling/waste disposal facility.

3.7 Litter: Extraneous rubbish not arising from the contract work is to be collected and removed from the site immediately as part of the monthly maintenance operations.

3.8 Cleanliness: All soil and arisings are to be removed from hard surfaces. All areas are to be left in a clean, tidy condition at completion and after any maintenance operations.

3.9 Plant Substitutions: No plant substitutions are to be made without the prior written agreement from the Contract Administrator.

- 3.10 Removal of Dead Plant Material: At the end of the growing season, check all plants and remove dead foliage, dead wood, and broken or damaged branches and stems.
- 3.11 Diseased Plants: Diseased plants are to be removed as soon as possible and replaced in the next suitable planting season.
- 3.12 Weed Control Generally: At all times, weed cover is less than 5% and no weed is to exceed 100mm in height. Do not damage adjacent plants, trees, and grass.
- 3.13 Hand-Weeding: Weeds are to be removed entirely, including roots. Remove the minimum quantity of soil, and disturb plants, bulbs, and mulched surfaces as little as possible. On completion, rake over the area to a neat, clean condition and reinstate the mulch to the original depth.
- 3.14 Herbicide to Kill Regrowth: A suitable foliar-acting herbicide can be used to kill regrowth, allowing a recommended period for the herbicide to take effect before clearing dead weeds. Do not apply herbicide in windy conditions or near water courses. Ensure that herbicide does not come into contact with shrubs, perennials, climbers, trees or grass areas. Any herbicide and its application must adhere to safe use as outlined by the Health and Safety Executive.
- 3.15 Soil Aeration: For compacted soil surfaces the soil is to be aerated down to root areas and to break surface crust. The soil crumb is to be reduced and the area levelled off. Ensure that plants and their roots are not damaged.
- 3.16 Soil Level Adjustment: The level of soil/ mulch at the edge of beds is to be reduced to 75mm below the adjacent grass or hard surface, to prevent mulch from spilling onto adjacent areas. Any arisings are to be spread evenly over the bed.
- 3.17 Leaf removal: Fallen leaves are to be collected by hand raking and removed from the site for recycling.
- 3.18 Maintenance of Loose Mulch: Mulch is to be maintained to 75mm thickness and is to be topped up every three months throughout the year. Any mulch spill on adjacent areas is to be removed. Any weeds growing in mulch are to be removed by hand.

- 3.19 Nesting Birds: Works to scrub/ trees/ shrubs carried out during September to February are outside of the main bird breeding season. If works are required during March to August, then a nesting bird check is required prior to these works. If any active bird's nests are found then works should stop in the area and an appropriate buffer zone (usually approximately 5m) must be established around the nest and the nest left until the young have fledged. The buffer must remain intact until it has been confirmed that the young have fledged and the nest is no longer in use. However, it must be noted that, due to climate change, the season for breeding birds is no longer as predictable, with species such as blackbird and robin now known to nest as early as January.
- 3.20 Ecology enhancements: Depending upon ecology inputs, grass clippings and arisings from works to trees and shrubs may be suitable to create vegetation piles within edge habitats to provide opportunities for herpetofauna, hedgehog and invertebrates.
- 3.21 Pollution Prevention: The works will be carried out in accordance with Guidance for Pollution Prevention (GPPs) to prevent pollutants from entering the water table and other habitats and to appropriately deal with any pollution incidents should they arise.

Biosecurity

- 3.22 Any planting material that shows signs of issues which is mentioned on the high-profile pests and diseases list:

(<https://planhealthportal.defra.gov.uk/pests-and-diseases/high-profile-pests-and-diseases/>)

should be quarantined and reported to DEFRA:

(<https://planhealthportal.defra.gov.uk/pests-and-diseases/reporting-a-pestdisease/>)

4.0 Existing Trees

- 4.1 No existing trees, shrubs, or grass shall be removed or cut without specific instructions from the Contract Administrator and written agreement of the Local Planning Authority Tree Officer. Existing trees are to be retained, protected, and undisturbed throughout the contract.
- 4.2 Tree Works Generally: Before starting work agree which trees, shrubs and hedges are to be removed and pruned. Avoid damage to neighbouring trees, plants, and property. All works to comply with BS3998: 2010 Tree Work Recommendations. Branches are to be removed using vertical cut, with no more slope on the cut surface than is necessary to shed rainwater. Trees are to be left with a well-balanced natural appearance. Any chainsaw work must be carried out by operatives who hold a certificate of competence and carried out by an approved member of the Arboricultural Association.
- 4.3 Should any defective, diseased, unsafe, or weak parts of trees be identified, the contractor is to give notice to the Contract Administrator and wait for further instruction.
- 4.4 Prevention of Wound Bleeding: To BS3998: 2010 Tree Work Recommendations.
- 4.5 Prevention of Disease Transmission: To BS3998: 2010 Tree Work Recommendations.
- 4.6 Cleaning Out and Dead wooding: Remove dead, dying or diseased wood, broken branches, stubs, fungal growths and fruiting bodies, rubbish, windblown or accumulated in branch forks, wires, clamps, boards and metal objects and any other unwanted objects.
- 4.7 Heavy ivy infestation is not recommended in development situations, where wind risk may be a concern. The form of the tree can also be affected, and it is therefore proposed to remove any dense infestation of ivy if evident or to simply sever any ivy stems at the base of the tree.

- 4.8 Cutting and Pruning Generally: All tools are to be appropriate, well-maintained, and sharp. Chainsaws are not to be used on branches of less than 50mm in diameter. Hand saws are to be used to form a smooth cut surface and anvil-type secateurs are not to be used. Removed branches are to be cut and care is taken not to damage or tear the stem. The wounds are to be kept 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. Cutting is to be undertaken at the fork or at the main stem to avoid stumps wherever possible. Large branches are to be removed in small sections and lowered to the ground with ropes and slings. When removing dead branches or stumps do not cut into live wood. Any unsafe branches are to have epicormic shoots and potentially weak forks that could fall in adverse weather conditions removed. If any disease or fungus is detected give notice to Contract Administrator and await instruction.
- 4.9 Bark Damage: Do not attempt to stop sap bleed. Damage to bark is to have ragged edges removed using a sharp knife. Any splintered wood from deep wounds. All wounds are to be kept as small as possible.
- 4.10 Cavities in Trees: Remove rubbish and rotten wood. Probe the cavity to find the extent of any decay and give notice. Any water-filled cavities are not to be drained and any sound wood inside cavities is not to be removed.
- 4.11 All trees on site should be visually checked annually. These checks should be staggered so that the trees are inspected at different times of the year. If any tree displays signs of decline, distress, or damage then a competent person should be instructed to carry out a tree inspection where necessary. A comprehensive inspection of all the trees on site should be carried out by a competent person at a maximum interval of every three years.
- 4.12 Removing Trees, Shrubs and Hedges: Trees, shrubs and hedgerows are to be removed in line with BS3998: 2010 Tree Work Recommendations. Before works are undertaken check for below and above-ground services and give notice if they may be affected. Shrubs and smaller trees are to be cut down and roots grubbed out. Tree stumps are to be cut as close to the ground as possible and killed by applying

a suitable herbicide into drilled holes immediately after felling. Any damage to neighbouring trees, plants and property is to be avoided. Where tree canopies overlap and in confined spaces generally, take down trees carefully in small sections to avoid damage to adjacent trees that are to be retained. Holes are to be filled using as-dug materials and/ or imported soil as required and lightly consolidated and graded to integrate with the surrounding ground level.

4.13 Crown Reduction/ Shaping: Cut back selectively to lateral or sublateral buds or branches to retain flowering branch lines without leaving stumps in line with the Arboricultural Schedule of Works.

4.14 Crown Lifting: Remove branch systems to give clearance, 2.5m above footpaths, 3m above cycleways and 5.5m above vehicular carriageways.

4.15 Crown Thinning: Remove inward growing, crossing, rubbing, dead and damaged branches. Thinning is to be selectively undertaken by removing secondary and small live branch growth evenly throughout the crown, in line with the Arboricultural Schedule of Works. No branches larger than 50mm in diameter will be removed. Branches are to be cut back to lateral or sublateral buds or branches without leaving stumps. Branches and foliage are to be left with a uniform and well-balanced structure.

5.0 Grass and Wildflower Areas

5.1 Maintenance of Grass Areas: Grass areas are to be maintained to BS7370-3: 1991 Grounds maintenance- Recommendations for maintenance of amenity and functional turf (other than sports turf). Appropriate maintenance to each category of turves is to be undertaken, as follows:

- Objectives to BS7370-3, Table 6
- Programme to BS7370-3, clause 11
- Mowing methods to BS7370-3, Table 3

5.2 Grass and flowering lawn Cutting Generally: All litter, rubbish and debris are to be removed before mowing/ cutting. The area is to be left neat and even, without surface rutting, compaction, or damage to grass. Grass and wildflower edges are to be neat and well-defined, and any obstructions are to be neatly trimmed around. All adjoining hard surfaces are to be swept clean and arisings removed. If drought or wet conditions occur obtain instructions before proceeding.

5.3 Tree Stems: Do not allow nylon filament rotary cutters and other mechanical tools closer than 100 mm to the stem of any tree. Complete operations close to stems using hand tools.

Amenity Grass

5.4 Amenity Grass Cutting: The maximum height of growth at any time is 75mm. All debris, litter, stones, and earth clods (larger than 25mm in any dimension) are to be removed before cutting. Amenity grass is to be cut when necessary to a height of 35mm during the growing season. All arisings are to be removed. Edges of amenity grass areas are to be trimmed to maintain straight or smooth curves as shown on detailed landscape proposals. The amenity grass areas are to be substantially free from broad-leaved weeds using an application of a suitable selective herbicide. Should any level changes occur high spots are to be removed and fill hollows with fine soil. Watering is to be undertaken as necessary to maintain healthy grass sward.

- 5.5 Rolling of Amenity Grass Areas: Amenity grass areas are to be rolled (using the contractor's roller of choice) after all risks of frost heave have subsided this is to lightly consolidate the turf and reduce frost heave.
- 5.6 Aeration: Amenity grass areas are to be aerated using spiking in February or March, after rolling, to a minimum depth of 100mm to aerate and improve surface water penetration.
- 5.7 Scarification: Amenity grass areas are to be scarified in October or November before top dressing application to a depth of 25mm to relieve thatch conditions and remove dead grass. All arisings are to be removed.
- 5.8 Top Dressing: Top dressing of Bathgate fine lawn and top dressing, as supplied from Green-Tech Ltd or similar, is to be applied in November, following scarification and aeration at a medium application rate of 4kg/m².
- 5.9 Edges to Amenity Grass Areas: All grass areas are to be edged once the grass sward has been established. Edges are to be clean-cut in either straight lines or smooth curves with the back edge of the soil drawn back to permit edging. All arisings are to be removed.
- 5.10 Levelling Hollows and Bumps in Grass Areas: In line with BS7370-3 1991 Grounds maintenance- Recommendations for maintenance of amenity and functional turf (other than sports turf), clauses 12.4 and 12.5, as required.
- 5.11 Relieving Surface Compaction in Turf: Compaction to be relieved to BS7370-3: 1991 Grounds maintenance- Recommendations for maintenance of amenity and functional turf (other than sports turf), as necessary.
- 5.12 Selective Herbicide: A selective herbicide should be applied to all grass areas that combines a weed and feed mix and is suitable for suppressing perennial weeds. Avoid all bulb and corm planted areas when in leaf, wildflower areas and planting beds.

- 5.13 Fertiliser: A suitable organic slow-release fertiliser is to be applied to grass areas (not wildflower areas) in spring and autumn, at a suitable rate to ensure the fertility of soil and continued thriving and vigour of sward.
- 5.14 Reinstatement of Grass Areas: Any damaged or worn grass is to be removed to a depth of 40mm, and the substrate is to be cultivated to a fine tilth. All works are to match the quality and appearance of the existing sward. Reinstatement areas are to be protected as necessary to promote successful establishment.

Species Rich Flowering Lawn

- 5.15 Wildflower Areas (with Perennial Wildflowers): All debris, litter, stones and earth clods (larger than 25mm in any dimension) are to be removed before cutting.
- 5.16 Wildflower areas are to be initially cut in either March/ April. Flowering lawn is to be cut when necessary to a height of 40mm during the growing season. To permit flowering, mowing can be relaxed from late June. Cut again when the sward gets untidy (after 4-8 weeks). Mowing may be suspended earlier in the year to allow cowslips to flower. Heavy quantities of cuttings should be collected and removed from site. Edges of wildflower areas are to be trimmed to maintain straight or smooth curves as shown on detailed landscape proposals. Watering is to be undertaken as necessary to maintain healthy grass sward.
- 5.17 Reinstatement of Wildflower Areas: Any damaged or worn wildflower areas are to be removed to a depth of 40mm, and the substrate is to be cultivated to a fine tilth. All works are to match the quality and appearance of the existing sward. Reinstatement areas are to be protected as necessary to promote successful establishment.
- 5.18 Any hollows which appear shall be filled in low-nutrient topsoil and reseeded using the same specification as the original wildflower area.

6.0 Planting Beds

General

- 6.1 Thinning by Removal of Surplus Plants: Should thinning of plant material be required this is to be undertaken in line with BS7370-4: 1991 Grounds maintenance- Recommendations for maintenance of amenity and functional turf (other than sports turf). The material should be thinned when the foliage of adjacent plants has begun to touch. Disturbance to roots is to be minimised, any holes within topsoil are to be refilled to leave an even-graded surface. Mulch is to be maintained as original specification. Any minor damage to plants is to be made good immediately.
- 6.2 Establishment of New Planting: Beds are to be kept free from weeds by hoeing, maintaining the full thickness of mulch and use of suitable herbicide (only where appropriate). A weed-free area is to be maintained around each tree and shrub, minimum diameter of 1m on the surface of the original planting pit. Beds are to be forked over to keep the soil loose, with gentle cambers and no hollows. Care is to be taken not to reduce the depth of effect of mulch. Watering is to be undertaken as necessary to ensure the healthy growth of plants.
- 6.3 Establishment of New Planting Fertiliser: An organic slow-release fertiliser is to be applied and spread evenly in March or April at a rate in line with the manufacturer's recommendations.

- 6.4 Pruning Generally: Pruning is to be undertaken following good horticultural and arboricultural practice. Branches are not to be damaged, and stems or bark are not to be torn. Wounds are to be kept as small as possible and cut cleanly back to sound wood. Any cuts are to be above and sloping away from an outwardly facing healthy bud, angled so that water will not collect on the cut area. Larger branches are to be pruned neither flush nor leaving a stub but using the branch bark ridge or branch collar as a pruning guide. The appearance of each specimen is to be appropriate to its species, location, season, and stage of growth, leaving a well-balanced natural appearance. Only clean, sharp secateurs, hand saws or other approved tools are to be used. All ragged edges of bark or work are to be trimmed off with a sharp knife. If any disease or infection is noted give notice. Growth retardance, fungicides and pruning sealants are not to be used unless instructed.
- 6.5 Pruning of Excessive Overhang: Excessive overhand is to be pruned as required to maintain sightlines, desire lines, infrastructure corridors or as instructed. Growth encroaching onto grass areas, paths, roads, signs, sightlines, and road lighting luminaries is to be removed.
- 6.6 Pruning of Excessive Height: Excessive height is to be removed as instructed.
- 6.7 Groundcover Plants within Visibility Splays: Species planted within visibility splays are not to exceed 600mm in height and excessive height should be removed to maintain a maximum height of 600m.
- 6.8 Pruning Trees and Shrubs: To BS7370-4: 1991 Grounds maintenance- Recommendations for maintenance of amenity and functional turf (other than sports turf).

- 6.9 **Reinstatement of Shrubs/ Herbaceous Areas:** Any dead or damaged plants are to be removed. Mulch/ mulch matting is to be carefully moved to one side and soil dug over, leaving it fit for planting. Do not disturb the roots of adjacent plants. Planting pits and plants are to be replaced to the original specification or to match the size of adjacent or nearby plants of the same species, whichever is greater. Incorporate organic slow-release fertiliser into backfill material.
- 6.10 **Fertiliser:** A suitable organic slow-release fertiliser is to be applied to all planting beds in spring and autumn, at a suitable rate to ensure the fertility of soil and the continued thrive and vigour of plants.

Perennials

- 6.11 **Perennial Beds:** Perennial plants that require support are to be supported using peony rings, as required. Any gaps in planting are to be refilled by replanting. All perennials are to be watered as necessary for the continued thriving of all planting. Older flowering stems of herbaceous perennials, redundant plant supports, litter, debris and arisings are to be trimmed at the end of the growing season. Beds are to be forked over, taking care not to cause undue disturbance to plants. A suitable fertiliser is to be applied to the soil and mulch topped up, as necessary.
- 6.12 **Flowering Beds Generally:** Dead flower heads, fallen leaves, litter and debris to be removed. Weeds are to be removed from flower beds by thoroughly hand-weeding, then cultivated with a light hoe. Edges to flowering beds are to be trimmed. Fungicide and insecticide are to be applied as directed and as necessary.

Ornamental Shrubs

6.13 Pruning Ornamental Shrubs: Prune to encourage healthy and bushy growth and desirable ornamental features, e.g. flowers, fruit, autumn colour, and stem colour. Suckers are to be removed by cutting back level with the source stem or root. All risings removed.

6.14 Pruning Flowering Species of Shrubs and Roses: Flowering species of shrubs and roses are to be pruned at the appropriate time of year:

- Winter flowering shrubs: Spring
- Shrubs flowering between March and July: Immediately after flowering.
- Shrubs flowering between July and October: Back to old wood in winter.
- Roses: Early spring to encourage basal growths and a balanced, compact habit.

Climbing Plants

6.15 Climbing Plants: Remove excessive growth, to ensure that signs, light fittings, doors, and windows are always kept clear. Any insecure growth is to be reattached to support wires or structures using expandable plant ties. Any support structures are to be checked and repaired as necessary.

7.0 Trees

- 7.1 Formative Pruning of Young Trees: The type and timing of pruning operations are to suit the plant species. Young trees are not to be pruned during the late winter/early spring during the sap flow period. For young trees that have reached a height of at least 4m crown prune 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. Any duplicate branches and potentially weak or tight forks are to be removed. Whips and feature trees are not to be pruned. Formative pruning of young trees is to be carried out by a member of the Arboricultural Association.
- 7.2 Tree Stakes and Ties: All tree stakes and ties are to be inspected monthly and immediately after strong winds. Loose, broken, or decayed stakes are to be replaced to the original specification. If longer than half of clear stem height, the stakes are to be cut to height in spring and re-tied, but not tightly with a single tie. Ties are to be adjusted, refixed or loose or defective ties are to be replaced, allowing for growth, and preventing chafing. Where chafing has occurred, reposition, or replace ties to prevent further chafing. Stakes and ties are to be removed five years after planting or when instructed.
- 7.3 Re-firming Trees and Shrubs: Trees and Shrubs are to be re-firmed after strong winds, frost heave and other disturbances. Re-firming is to include treading around the base of the tree or shrub until firmly bedded. Collars in the soil at the base of tree stems, created by tree movement, are to be broken up by fork, avoiding damage to roots, then backfilled with topsoil and re-firmed.
- 7.4 Tree Guards: Loose or defective tree guards are to be adjusted, re-fixed or replaced to the original specification to prevent chafing.
- 7.5 Tree Grilles: Grilles are to be lifted, weeds removed, levels adjusted as necessary and lightly compacted. Grilles and intervening spaces are then to be re-fitted and lightly compacted to the correct level. Levels are to be made up using sharp sand.

7.6 A formal assessment of young tree health and development shall be undertaken annually. This assessment shall include foliar appearance, leaf size and leaf canopy density, extension growth, and incremental girth development. Trees shall also be assessed continually throughout the year on an ad hoc basis. Wherever practicable the performance of young trees shall be assessed by testing leaf fluorescence and leaf chlorophyll content.

8.0 Hedgerows

- 8.1 Hedge Trimming: Allow hedgerows to reach planned height as rapidly as possible, trimming back lateral branched moderately until the intended form and height are reached.
- 8.2 Trimming Ornamental Hedgerows: Ornamental hedgerows are to be cut back hard in June and September (after a nesting bird check) to encourage bushy growth. Allow hedgerows to reach planned dimensions only by gradual degrees, depending on growth rate and habit.
- 8.3 Trimming species-rich mixed native hedgerows: For the first three years any native/field and ecologically sensitive hedgerows are to be cut annually to aid the establishment of bushy growth and a healthy hedgerow structure. Trimming is to be undertaken outside of the nesting bird season i.e. October to February. After the first three years growth then, annual maintenance is to continue.

Mixed native hedgerows are to be managed on a two or three-year cycle to deliver ecological benefits. This is to enable trees and shrubs to flower but avoiding the removal of buds that annual trimming removes. This cyclical regime should provide flowers, berries and nuts to be produced. When trimming hedgerows in rotation, the height of the trim should be altered to increase a little each time (i.e. 100mm), this is to avoid hard knuckles forming in the hedgerow structure.

- 8.4 Any dead plants must be removed and replaced in the next available planting season.
- 8.5 Hedge Heights: Hedges are to be maintained in a neatly clipped form to a maximum height of:

Ornamental Hedgerows: 1m as shown on original landscape proposals.

Mixed native Hedgerows: 1m and 1.8m adjacent to site boundaries

- 8.6 Temporary protective fencing within hedgerows is to be removed once the hedgerow has been established, typically after five years. The temporary fences are to be removed from the site.

9.0 Play Area

- 9.1 Routine visual inspections are to be undertaken daily, by a competent person. Inspections are to be recorded including details of any vandalism, use of the facility, and weather conditions.
- 9.2 Any litter that is present during the routine visual inspections, is to be removed from the facility immediately. Any vandalism is to be reported to the local planning authority and if any equipment is deemed unsafe due to an incident of vandalism this is to be rectified immediately or the facility closed until the equipment can be made good. During the routine visual inspections, the following operations are also to be undertaken:
 - Remove any objects which do not belong in the playground. This is to include cleaning of the surface and litter.
 - Inspect for missing or broken parts and if necessary, lubricate or replace components.
 - Inspect frames, structures, and joints and retighten as necessary.
 - Inspect moving or wearing parts, nets, and ropes and repair and replace them as necessary.
- 9.3 Operational inspections for the operation, stability and wear of equipment and surface are to be conducted every three months. Any repair is to be reported to the Contract Administrator. Any repair works are to be undertaken as a matter of urgency to maintain the safe, functionality of the play facility.

9.4 An annual inspection is to be undertaken which consists of a technical check of equipment or features for long-term wear. This could be undertaken by an independent specialist or qualified engineer. Any equipment that is deemed unsafe due to long-term wear is to be replaced or made good as a matter of urgency to maintain the safe, functionality of the play facility. During the annual inspection the following operations are also to be undertaken:

- Inspection of the support structures and foundations for rust or rot, take appropriate action when necessary.
- Inspect painted wood components, plywood, and metal parts and apply a new finish in line with the manufacturer's recommendations and with BS EN1176 Playground Equipment and Surfacing, where necessary.

10.0 Biodiverse Green Roof

- 10.1 Ornamental Planting in raised planters are to be managed as outlined in **Section 6.0**.
- 10.2 Routine visual inspections of the green roof are to be undertaken monthly that note the following:
 - Wildflower establishment.
 - Diversity of new species present.
 - Weed spectrum and control requirements (if any).
 - Drainage of roof and function of drainage outlets.
 - Performance of roof and retention systems (if present).
 - Water and irrigation requirements of roof.
 - Feeding requirements.
 - Remedial requirements.
 - Physical damage caused by weather or transit.
- 10.3 Localised spot weeding of invasive or damaging weeds to be undertaken by hand and safely removed from the site.
- 10.4 Re-seeding and remedial patching of roof areas caused by the poor establishment, (not adverse weather effects or insufficient irrigation.)
- 10.5 Inspection and assessment of irrigation systems (if present) with irrigation and watering operations adjusted to suit weather conditions to ensure continual growth of sward.
- 10.6 Visual inspection of drainage channels and clearing of exposed outlets if any debris, litter, or silt has accumulated. This is to be removed from the site.
- 10.7 A visual inspection should be undertaken for any control measures for nesting birds.
- 10.8 Spent flowers, seed heads, perennial weeds, and grasses are removed annually from wildflower roofs.

10.9 Application of herbicides are to be weed species-specific, low impact and used only as a last resort to tackle invasive or widespread weed problems.

10.10 To ensure that the diversity of the roof is high, wildflower roofs should be mown to control the species that populate the roof. The amount and timing of mowing will vary throughout the establishment of wildflower systems, in line with the following:

- For new wildflower roofs, mowing is to be undertaken in the first year after establishment and should be mown to a height of 50- 80mm four times a year. Once mowing operations have been undertaken the arisings are to be left for a few days to allow seeds to drop, ready for the next year. After this, however, the arisings should be removed to keep the nutrient levels in the soil down and stop the wildflower roof from becoming a monoculture.
- For established wildflower roofs, mowing operations should be undertaken in late summer in perpetuity. This is to help the wildflower roof to maintain its place in the meadow and to avoid the roof becoming dominated by grass species. For wildflower roofs that are designed to attract bees and butterflies the mowing operations should be undertaken in September. Once mowing operations have been undertaken the arisings are to be left for a few days to allow seeds to drop, ready for the next year. After this, however, the arisings should be removed to keep the nutrient levels in the soil down and stop the wildflower roof from becoming a monoculture.

10.11 A strimmer may be substituted if a mower cannot be utilised on the roof landscape.

11.0 Maintenance Schedule

Maintenance Item	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
<u>General Maintenance Operations</u>												
Reinstatement Works, as necessary	X	X	X	X	X	X	X	X	X	X	X	X
Watering to all planted areas, as necessary				X	X	X	X	X	X			
Watering to all trees, as necessary				X	X	X	X	X	X			
Removal of litter from all areas	X	X	X	X	X	X	X	X	X	X	X	X
Removal of dead plant material										X	X	
Removal of diseased plant materials	X	X	X	X	X	X	X	X	X	X	X	X
Weed control, as necessary	X	X	X	X	X	X	X	X	X	X	X	X
Soil Aeration, as necessary	X	X	X							X	X	X
Leaf removal										X	X	X
Mulch maintenance			X			X			X			X
<u>Existing Trees</u>												
Works to existing trees	X	X	X							X	X	X
<u>Grass and Wildflower Areas</u>												
Amenity grass cutting				X	X	X	X	X				
Rolling of amenity grass areas			X									
Aeration of amenity grass areas	X	X										
Scarification of amenity grass areas										X	X	
Application of top dressing to amenity grass areas												X
Form edges to amenity grass areas				X	X	X	X	X				
Levelling hollows and bumps in amenity grass areas	X	X	X	X	X	X	X	X	X	X	X	X
Application of fertiliser to amenity grass areas			X	X						X	X	
Flowering Lawn cutting (perennial wildflowers)			X	X	X	X		X	X			
Levelling hollows and bumps in wildflower areas	X	X	X	X	X	X	X	X	X	X	X	X

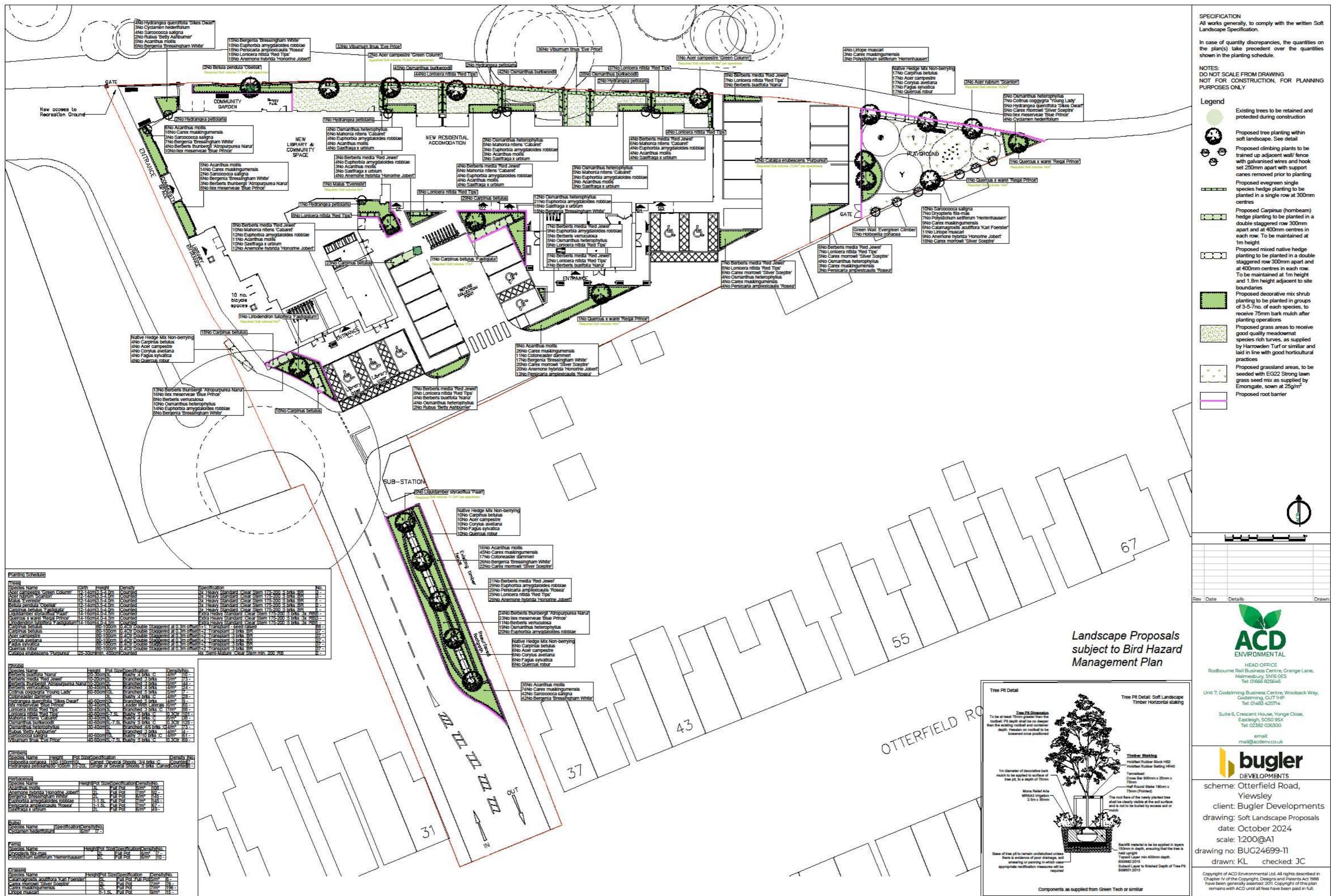
Maintenance Item	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
<u>Planting Beds</u>												
Thinning by removal of surplus plants										X	X	X
Application of fertiliser to planting beds			X	X								
Reinstatement of plants	X	X	X							X	X	X
Pruning of winter flowering shrubs			X	X	X							
Pruning of shrub flowering between March and July			X	X	X	X	X					
Pruning of shrubs flowering between July and October	X	X								X	X	X
Pruning of climbing plants			X	X	X	X	X	X	X			
<u>Trees</u>												
Formative pruning of young trees			X	X	X							
Inspection and make good of tree stakes and ties	X	X	X	X	X	X	X	X	X	X	X	X
Re-firming trees and shrubs	X	X	X	X	X	X	X	X	X	X	X	X
Formal annual assessment of young tree health									X			
<u>Hedgerows</u>												
Trimming of ornamental hedgerows							X			X		
Trimming of mixed native hedgerows	X	X								X	X	X
<u>Play Area</u>												
Routine daily visual inspection	X	X	X	X	X	X	X	X	X	X	X	X
Removal of litter, remediation of vandalism, making good of all parts, structures and moving parts	X	X	X	X	X	X	X	X	X	X	X	X
Annual inspection										X		
<u>Roof Gardens</u>												
Visual monthly inspections and maintenance of roof gardens	X	X	X	X	X	X	X	X	X	X	X	X

Any amendments to the landscape management plan required should be submitted to the Contract Administrator for approval. The Contract Administrator may draw the contractor's attention to defects in the maintenance or failure to comply with the landscape management plan and require that the contractor rectify these defects or apply for a variation to the landscape management plan.

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Appendix 1:



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