



Soft Landscape Report

Soft Landscape Specification & Maintenance Plan

807 High Road, Tottenham

December 2023

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1 SUMMARY REPORT

This landscape report has been commissioned by F3 Architects in relation to proposed development to 807 High Road, Tottenham, London N17 8ER. The purpose of this report is to provide a detailed specification and maintenance plan for the proposed new landscaping associated with the development.

This report includes:

- Specifications for proposed tree, shrub, and perennial planting.
- Methodology for the preparation and planting of new landscaping.
- General principles to avoid damage to existing trees during proposed landscaping.
- 5-Year post construction maintenance plan.

1.1 Scope and limitations

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1.2 Methodology and guidance

This report has been prepared in accordance with:

- British Standard 8545:2014 Trees: from nursery to independence in the landscape – Recommendations;
- British Standard 8601:2013 Specification for subsoil and requirements for use;
- British Standard 5837:2012 Trees in relation to design, demolition and construction – Recommendations;
- British Standard 3998: 2010 *Recommendations for Tree Work*;
- British Standard 3882:2007 *Specification for Topsoil and Requirements for Use*;

- British Standard 7370:1993 *Recommendations for Maintenance of Soft landscape*;
- British Standard 3936:1992 Specification for nursery stock;
- British Standard 4428:1989 Code of Practice for general landscape operations;
- British Standard 4043:1989 Recommendations for Transplanting root balled trees;
- The GRO Green Roof Code of Best Practice; and
- Horticultural Trades Association - National Plant Specification.

1.3 Relevant plans and documents

As well as any other approved plans and particulars, the following landscape plans are to be read in conjunction with this report.

Document	Drawing Reference
Soft Landscape Layout	220732-TMA-ZZ-DR-L-4000

2 IMPLEMENTATION

All planting as specified within the approved landscape scheme shall be carried out in the first available planting season following the proposed development works.

All works shall be carried out in accordance with the specifications detailed within this report and no variation shall be allowed unless specifically authorised in writing by the Landscape Architect or Local Planning Authority.

All landscape operatives must be appropriately trained, certified, and qualified to undertake the tasks required.

All landscape works are to be carried out in accordance with industry best practice British Standard 4428:1989 Code of Practice for general landscape operations.

2.1 Time of Year for Planting

Planting should be carried out at the correct time of year:

- **Rootballed Trees and shrubs** - Late October to late March.
- **Bareroot trees and shrubs** - Plant in dormant season, between November to March.
- **Dried bulbs, corms and tubers** - September/ October.
- **Herbaceous plants** - September/ October or March/ April.
- **Container grown plants** - At any time if ground and weather conditions are favourable.
- **Amenity turf** – To be laid mid-autumn to early spring.

2.2 Soil and Climatic Conditions

All planting must be carried out into moist (not waterlogged) friable soil when weather conditions are suitable.

Planting operations shall not be carried out when the ground is waterlogged or frozen or during periods of high winds.

2.3 Machines and Tools

Use only machinery and tools suitable for the site conditions and the work to be carried out.

Use hand tools within tree root protection areas, around existing plants, and in confined spaces where it is impractical to use machinery.

2.4 Preparation, Planting and Mulching Materials

Preparation, planting, and mulching materials must be free from toxins, pathogens or other extraneous substances harmful to plant, animal or human life.

2.5 Maintenance

Maintenance of the landscaped areas should be carried out from completion of planting until the end of the rectification period (defects liability period) as specified within this report and in accordance with the relevant conditions outlined within the planning approval.

2.6 Protection of existing trees

All retained trees on the site are required to be protected in accordance with British Standard 5837:2012 *Trees in relation to design, demolition and construction – Recommendations* throughout the proposed landscape operations as recommended by the arboricultural consultant.

No fires will be permitted within 20m of the crown of any tree.

No changes in soil levels will take place within the tree protection zones without prior written consent of the Local Planning Authority.

No materials, vehicles, plant or personnel will be permitted into the tree protection zones at any time without the prior consent of the arboricultural consultant.

Any liquid materials spilled on site will be immediately cleared up and removed from the site. If liquid fuel or cement products are spilled within 2m of the tree protection zone, the contractor will report the incident to the arboricultural consultant immediately.

The contractor will report any damage to trees or shrubs, whether caused by construction activities or from any other cause to the arboricultural consultant immediately.

2.7 Supervision

It will be the responsibility of the landscape foreman to ensure all works are carried out in line with this report and associated specifications.

3 SITE PREPARATION

3.1 Setting out

All plants shall be set out by the landscape contractor in accordance with the details specified within the approved Landscape Plans.

All measurements must be taken from existing fixed points. The landscape contractor must ensure that all setting out conforms to the proposed plan before cultivation and planting works are carried out. Failure to do so may result in the rejection of works by the Landscape Architect and may require amendment at the contractor's expense.

Any alterations to the approved landscape scheme must be approved in advance by the Landscape Architect and Local Planning Authority.

3.2 Intensive Substrate

Lightweight growing medium for intensive green roof planting schemes manufactured to FLL guidelines. Available from Bauder or equivalent approved.

Supply: Depending on size and access of the project the 'substrate' can be supplied by various methods i.e. Tipper, Silo lorry (pumping directly onto the roof area), Big bags, or sacks. Prior to costing this element of the installation the 'Approved Contractor' must contact Bauder Ltd so that they may advise on the best solution on any specific contract.

All substrates are required to be inspected prior to spreading, to have a certificate and warranty from the supplier.

Minimise handling and handle in the driest condition possible. Do not handle or install when wet or frozen.

The substrate should be laid in 150mm layers and then compacting each layer. Gently firm each layer before spreading the next. Allowance should be made for any settlement that may occur. It is recommended that measuring stick markers of the required depth be used around the roof area to ensure that a minimum acceptable thickness of growing medium is achieved.

Depths after firming and settlement (minimum): Full volume of the planting bed for hedgerow, shrub and perennial planting, leave 50mm depth for seed bed substrate for turfed areas. Full tree pit for tree planting. Make sure the substrate is well compacted as per manufacturer's specification to minimise subsidence.

Please allow for an average 10% shrinkage.

3.3 Seed Bed Substrate

Seed Bed Substrate is a top dressing growing medium which is installed at a minimum depth of 25mm over either Bauder Intensive or Extensive substrates, when the roof is to be either seeded or to receive vegetation cuttings.

All substrates are required to be inspected prior to spreading, to have a certificate and warranty from the supplier.

Depths after firming and settlement (minimum): 50mm for turfed areas.

3.4 Cultivation

All planted areas are on green roofs and where no existing soils are present. For imported substrates no cultivation is required prior to installation.

3.5 Weed control and Herbicides

Specified intensive and seed bed substrates are expected to be free of weeds and require no further weed control prior to planting works. However, should this occur, pulling, hoeing, tilling, and digging will often take care of weed problems without the need for chemical sprays. Please use appropriate herbicides only when natural methods have been proved ineffective (refer to section 3.4). All herbicide handling and application should be carried out by a trained contractor in accordance with the manufacturer's specification and COSHH Regulations.

3.6 Fertiliser

Specified intensive and seed bed substrates are ready to use and do not require further ameliorants prior to planting works.

3.7 Finished levels

Final grading of the top 150mm is to be carried out to ensure a true specified level and slope to avoid any dishing or other depression where water may collect.

For shrub and perennial beds adjacent to hard surfaces, the soil should finish 75mm below all finished surfaces, allowing 25mm for shrinkage and settlement and leaving a clear depth of 75mm from finished surface level to take specified mulch.

For turf areas adjacent to hard surfaces the soil level should be 20-30mm above the hard surface to allow for shrinkage.

Please allow for an average 10% shrinkage.

Soil levels should be 150mm below damp proof courses after settlement.

The contractor should liaise with the Landscape Architect while carrying out the works in order to ensure that the correct profiles are achieved.

4 PLANTING SPECIFICATION

4.1 Plant Specification

All plant stock, plant handling and planting to be undertaken in accordance with the following British Standard Specifications and Code of Practice:

- BS 3936: 1992 Part 1 Nursery Stock. Specification for Trees and Shrubs.
- BS 3936-9: 1998 Nursery Stock - Specification for bulbs, corms and tubers.
- BS 4428: 1989 Recommendations for general landscaping operations.
- BS 8545:2014 Trees: from nursery to independence in the landscape.
- Horticultural Trades Association - The Code of Practice for Plant Handling 1985.

Plants not covered by BS 3936 shall be healthy specimens of good shape and balanced branch structure with abundant fibrous roots. Plants are to show vigour of growth within the growing season prior to lifting.

4.2 Plant Stock

Plant stock to be supplied in accordance with the size and description specified on the plant schedule. Plants shall have been grown and handled according to good horticultural practice and according to all current UK Government regulations. The supplying nursery shall be expected to carry out thorough and rigorous production methods to ensure that the stock is of highest standards.

The conditions of all plants shall be materially undamaged, sturdy, healthy and vigorous and be of good shape, without elongated shoots. They shall be grown in a suitable environment and sufficiently hardened off prior to delivery to site. They shall be free from pests, diseases, discolouration, perennial weeds and physiological disorders. Budded or grafted plants must be bottom worked. Plants should be lifted at a time in accordance with good nursery practice.

The root system and condition must be uniform and well developed with fibrous root hairs typical of a healthy tree of the species, age and number of transplantations.

Rootballed trees

Rootball trees should conform with BS 4428:1989 Recommendations for general landscaping operations and BS 8545:2014 Trees: from nursery to independence in the landscape.

Trees shall have a good well-formed rootball with dimensions according to the size of the tree. The minimum diameter of the rootball is required to comply with Table D.5 of BS 8545:2014 *Trees: from nursery to independence in the landscape*.

Girth of tree measured at 1 m	Minimum diameter of rootball	Minimum number of times transplanted/undercut on the nursery
cm	mm	
8 to 10	300	—
10 to 12	300	—
12 to 14	400	3
14 to 16	450	3
16 to 18	500	3
18 to 20	550	3
20 to 25	600	4
25 to 30	700	4
30 to 35	800	4
35 to 40	900	5
40 to 45	1 000	5
45 to 50	1 200	5
50 to 60	1 300	6

Figure 1: Table D.5 of BS 8545:2014.

Rootballed trees shall be adequately supported by wire mesh and hessian, or other suitable material to prevent collapse of the rootball. The rootball shall be of sufficient size to contain the fibrous roots. Trees, which have a collapsed rootball or expose major parts of the root system will be rejected.

Clear stem trees

All clear stem trees shall have a full and well-developed crown with a uniform leaf coverage appropriate to their age and species. All shall bear a single upright straight central leader. Unless otherwise stated, they shall have a 1.8m clear stem height.

Container grown shrubs & hedging plants

All plants will be true to name and character and shall be supplied container grown. They shall have been grown and handled according to good horticultural practice and to all current UK government regulations.

All plants shall be well developed and bushy and shall have been grown in the same container for at least one full growing season prior to delivery.

All specimen shrubs shall have a balanced, well-developed crown with a strong main stem and lateral branches. All specimen shrubs shall be well furnished to ground level, unless otherwise specified.

The root systems will adequately fill the capacity of the container to show clear evidence of the proper establishment of a healthy fibrous root system. Plants showing signs of being pot-bound or waterlogged will not be accepted.

All plants shall show a high degree of extension growth typical of the species or type and appropriate to the specified container size. The requirements given in the plant schedules constitute a guide to the required heights.

The compost will hold sufficient reserves of nutrients to maintain the plant in a satisfactory condition for a reasonable period of time after leaving the Growers Nursery. The compost shall be free from any perennial weeds and have a reasonable moisture content. The compost shall not contain peat from UK sites of Special Interest or the equivalent from other countries. The compost shall contain the additive SusCon Green, mixed in accordance with the manufacturer's recommendations.

4.3 Plant Sourcing and Substitutes

Plants are to be obtained from an approved source and confirmed in writing. The source of plants is to have soil and climatic conditions similar to those prevailing at the site.

Plants, which are unobtainable, are to be clearly identified and alternatives are to be submitted for approval, stating species, size, form and price and how they differ from the specifications. These substitutes must be the equivalent or better quality than the species specified. Such substitutes may not be acceptable, and submission of further alternatives may be required. Obtain approval before making any substitution.

Single species from more than one source must be of the same clonal type and cultivator, and be similar in form, root structure and size.

4.4 Labelling and Information

Plants shall be identified until planting with a label to each plant or group of the same species. Provide each plant/ tree or group of plants/ trees of a single species or cultivar with supplier's labelling for delivery to site, showing:

- Full botanical name;
- Total number of plants/trees;

- Number of bundles;
- Part bundles;
- Supplier's name and address;
- Plant passport number; and
- Employer's name and project reference or order number.

Plant specification in accordance with scheduled National Plant Specification categories.

4.5 Unloading on Delivery

All plant species will be inspected upon delivery to the site. Where significant diseases, defects or disorders that have the potential to impact the future establishment of the plant are observed, these will be replaced with a clean healthy plant by the nursery.

4.6 Predelivery Inspection

All plant stock is to be inspected at the nursery before supplying samples to site for approval. Failure to inspect the nursery stock will not relieve the contractor of his obligations under the specification.

The contractor shall satisfy himself on the quality, health, vigour and numbers of all the stock and its ability to meet the specification and the requirements of the Assignment Agreement (where appropriate). New trees should be selected in accordance with BS 8545:2014 - Trees: from nursery to independence in the landscape.

At the time of the plant inspection visit, at the nursery of origin, it is advised that numbered security tags are provided, for use of identifying the stock for the project and individual specimens. Following approval, plants are to be clearly identified with non-perishable labels as being reserved for use on this project.

4.7 Unloading on Delivery

The contractor or a qualified professional on behalf of the contractor, shall supervise the unloading of the plants and shall inspect the plants at delivery.

Any materials, which in the opinion of the Contract Administrator do not meet the requirements of the Specification, or are unsuitable or defective in any other way, will be rejected. The minimum sizes in the plant schedules will be strictly enforced.

4.8 Plant Handling

All plant materials shall be lifted, bundled, labelled, packaged, transported, temporarily stored and planted in accordance with the procedures and methods illustrated in the publication, 'Handling and establishing landscape plants' (obtainable from the Horticultural Trades Association).

All plants and trees shall be handled with care and protected from frost and mechanical damage, do not subject to shock, e.g. by dropping from a vehicle. Plants, which are not to be planted on the day of delivery to the site, are to be stored as follows or by other approved methods:

- Container grown plant material shall be stored upright in a location on site agreed with the Contract Administrator. Any plant material stored shall be protected from drying winds and watered regularly.
- Rootballed plants that are not to be planted within 24 hours of delivery are to be grouped together and their rootballs covered with moist non-peat organic matter suitable for protecting from frost and from drying out.

Watering should continue to keep all plant roots moist until planting can commence.

All plants will be appropriately maintained until used and be kept away from possible sources of contamination or damage. The drying out of all plants will be avoided by watering of the roots when required.

The contractor shall allow for all costs associated with undertaking correct storage of plant material. The contractor shall operate a method of "just in time" plant deliveries to minimise plant storage on site.

Exposure to adverse weather conditions will be avoided. Plants will not be allowed to dry out and will be stored away from strong winds.

5 PLANTING

5.1 Tree Planting in Soft Landscaped Areas

The locations, specifications, species, numbers and sizes of trees to be specified within the detailed landscape plans.

Only well branched trees with symmetrical crowns and straight stems and leaders will meet the approval of the Landscape Architect. Trees of the same species shall be uniform in size, shape and in good condition. For further details refer to the Plant Stock section above.

It will be the responsibility of the Contractor to ensure that all trees are protected from injury during planting works. If any tree is damaged due to lack of protection, the tree shall be replaced at the Contractors own expense.

Formative pruning, which includes the removal of any dead, damaged, diseased or crossing branches must be carried out on all tree species prior to planting. These works must be undertaken in accordance with BS8545:2014 Trees: from nursery to independence in the landscape – Recommendations.

Any dead, damaged, diseased or girdling roots must also be removed prior to planting operations.

All pruning works must be carried out with the use of a sharp clean secateurs and must not to change the natural habit or shape of the trees concerned. All tree work shall comply with the recommendations set down in BS3998: 2010 Recommendations for Tree Work.

All arisings are to be removed from site by the Contractor and disposed of accordingly.

Tree pits will be square and excavated at least two times the width of the rootball diameter. The planting pit should be no deeper than the existing rootball or container depth.

The tree should be planted at the correct depth taking into account the position of the root flare and the finished level. Allowance should be made for settling of the soil after planting. The rootball or root–stem transition should be level with the existing host soil or surface.

Tree pit sides should not have compacted, glazed, or smeared from digging. Sides of a planting pit that have been smeared during excavation should be scarified to allow root penetration.

During excavation of the tree pit, substrate removed should be placed to one side. There must be no standing water within the tree pit.

Following pit excavation, soil should be replaced back into the hole to ensure that the final depth of the planting pit is the same depth as the rootball of the container that is to be planted. The natural thickening between the trunk and the root collar ('root flare') shall be at the finished top surface of the planting medium.

The tree will be carefully placed into the hole and held upright in the middle of the pit.

Prior to backfilling with substrate, the tree will be double staked as detailed within Section 5.18.

To backfill, soil should be added gradually, in layers of 150mm to 230mm depth, ensuring the tree is held upright. At each stage, the fill should be firmed in to eliminate all air pockets under and around the root system, but with care being taken not to excessively compact the soil.

The final layer of backfilling should not be consolidated but should be of a sufficient depth to allow for settlement and mulching.

After planting, the tree pit should be watered to field capacity before applying a 75-100mm layer of organic mulch which extends beyond the tree's root spread. The layer of mulch should not bury the root flare of the tree.

5.2 Underground Anchoring System

In line with good arboricultural practice, BS4428: 1989 and BS 8545:2014 newly planted trees are to be adequately supported.

Trees are to be secured by an underground earth anchoring system in full accordance with the manufacturer's instructions.

Trees are to be secured by an underground earth 'ArborGuy' anchoring system or similar. 2 no. AnchorPlate are to be set into the bottom of the tree pit in a triangle formation to secure the wires. The root ball is to be secured to the AnchorPlate with cable guys and a top strap with ratchet tensioner.

Looping the D ring of each cable over onto itself to create a slip knot noose, feed over the AnchorPlate and pull tight. One cable to each AnchorPlate, centred.

Bring the cables up towards the root ball and thread the top strap through the top loops of each cable. Tighten the ratchet on the top strap to tension both strap and the cable ties as per 'ArborGuy AnchorPlate System'. Webbing Strap, slip knot cables and ratchet tensioner supplied by 'GreenBlue Urban' product code SASAP04A.

The Contractor is to ensure that the anchoring system is tensioned in accordance with the manufacturer's instructions.

GreenBlue Urban or similar approved

Northpoint, Compass Park, Bodiam, TN32 5BS

Telephone: 0808 503 6826

Sales and Service: estimating@greenblue.com

Technical Assistance: technical@greenblue.com

5.3 Tree irrigation

An irrigation and aeration system as manufactured by 'GreenBlueUrban' is to be installed into each tree pit at the time of planting – RootRain metro (Refer to GreenBlue Urban for product codes and lengths required) in landscape areas or similar.

RootRain Metro Plastic with chain.

Loop the free end of the 35mm perforated irrigation pipe around the root system approximately 250mm below finished level.

Plug the pipe into the bracket bottom cap. Nail the bracket to the tree stake to prevent theft. Backfill the rest of the tree pit. It is important to ensure the inlet pipe and top cap protrude between 10mm and 50mm from the finished surround levels. The main bracket section should not be visible.

2.5m pipes will be used for standard trees (8-10cm girth as specified), available from GreenBlue Urban or similar approved.

5.4 Hedge Planting

Container grown plants to be true to the type and the size specified on the planting schedule. No substitutions are to be expected unless previously agreed with the landscape architect.

Container grown hedge plants can be planted all year round provided ground and weather conditions are favourable but will need regular watering between May and September.

For Single row hedge, Plants are to be spaced in a single row at 250mm centres.

Pits for plants shall be of a sufficient size to take rootlets without breaking, bending or cramping. Planting pits shall be excavated 100mm wider than the root spread.

Bottom of planting pits to be forked over to a forks depth to alleviate and compaction.

A slow-release fertilizer such as fish blood and bone shall be added to planting holes and back filled after planting and firmed down.

The surface of the bed is to be left cultivated and free from weeds, debris and stones.

Apply a layer of bark mulch of 50mm depth. See Mulch section of this specification for more details.

Plants to be supported with a cane and brown recycled rabbit guard. Available from Greentech or similar.

Guards and canes should be removed when plants are established (usually after 3-5 growing seasons).

5.5 Shrub and Herbaceous Perennial Planting

The locations, specifications, species, numbers and sizes of shrubs and herbaceous perennials to be planted are detailed on the Soft Landscape Layout 220732-TMA-01-DR-L-4000.

All planting to be carried out in the first available planting season following the proposed development works.

The delivery, handling and storage of plants will be carried out as specified within Section 4.

All plants will be inspected prior to planting and if required, formative pruning will be carried out to remove, dead, broken or diseased growth.

Prior to planting, all plants will be laid out in their planting location either by the landscape architect directly or by the contractor as detailed within the landscape architect's specifications.

All excavation works within the Root Protection Areas of existing trees must be carried out manually with the use of hand tools.

No planting will be carried out when the soil is waterlogged or frozen.

The depth of the planting pit excavated will equal that of the pot or root size to be planted, while the width of the planting pit will be excavated 25% greater than the diameter of the root size.

The plant will be positioned in the pit and roots gently teased out to ensure root girdling is not occurring. The soil will be backfilled in 150mm layers and firmed down accordingly to eliminate air pockets.

Once planting has been carried out, the area will be watered to field capacity and a 50-75mm layer of organic mulch will be applied.

5.6 Turf areas

Turf should be a healthy, vigorous grass sward, free from the visible effects of pests, weeds and disease. In appearance, a closely knit, continuous ground cover of even density, height and colour.

Turf is best laid in mid-autumn but can be laid any time between mid-autumn and early spring, as long as there are no extreme weather conditions the soil isn't too wet or frosty.

All turfing operations to conform with 'British Standard 3969:1998 Recommendations for Turf for General Purposes'.

Prepare ground to a fine tilth breaking up and clods of earth and rake to contours. Stone pick the area removing any material 50mm and over.

Lightly roll or firm the soil to avoid any soft areas and repeat until the ground is evenly firm and level (but not compacted).

The area to be turfed will be watered prior to laying turfs.

Turf to be laid on day of delivery. Turf to be supplied in rolls, not dried out or yellowed, to be undamaged without holes or torn or ripped edges. Turf grown on any nylon matting will not be accepted. Turf will be weed free and of a uniform size and thickness.

Turf must be laid butt jointed with no gaps or overlapping, laid from suitably sized running boards so not to damage turf. Walking over or standing on the turves will not be allowed until fully established.

The finished surface level of grassed areas is set above the height of adjacent hard surfacing to a minimum 10mm compacted level above adjacent hard surface levels or sufficient to enable effective mowing of the grass without the potential for damaging mower blades against kerbs.

Turf areas should be watered immediately after laying as necessary to ensure the establishment and continued thriving of turfing areas. Thereafter for the first week turf should be water once a day. In hot weather conditions, for best results, watering should take place twice a day. Wet to full depth of substrate.

Fencing erected on completion of turfing to communal areas. Chestnut pale fencing to BS 1722-4, 1.2 m high. Removal after grass is well established. The fencing will remain the property of the contractor.

Turf supplier: Paynes Turf or similar approved

Hill Top Nurseries, Clacton Road, Weeley, Clacton-on-Sea, Essex, CO16 9DN

Tel: 01255 830325 or email: info@paynesturf.co.uk

6 MAINTENANCE & MANAGEMENT

The landscape plan will be implemented, maintained and managed by a client-approved landscape contractor in accordance with the drawings and specification supplied by the Project Landscape Architect.

Year 1 (Defects liability period)

The soft landscape will for the initial year after practical completion, be maintained by the Landscape Contractor responsible for implementation of the works in accordance with the maintenance schedule in Section 7. The contractor will include defects liability clause to ensure replacement planting is carried out and successful establishment achieved.

Year 2 to year 5

Thereafter a maintenance contractor will be organised. The maintenance schedule in Section 7 provides information on the general techniques and methods to be adopted for the ongoing maintenance operations.

Any necessary amendments to the implemented landscape proposals will be discussed with the landscape architect and written approval obtained from the Client.

The regime should be altered in order to respond promptly to changing circumstances such as natural or man-made changes in the environment which effect the landscape types (e.g. tree disease). Prescriptions provided should not be set in stone and can be altered if required.

The landscape contractor will be responsible for the management and maintenance of the following landscape components:

6.1 Trees

Newly planted trees will be maintained for the first 5 years after planting. This will include inspecting and formatively pruning for crown structure as required, mulching and irrigation.

Fallen branches and debris will be cleared and trees respected after high winds.

All tree pruning works will be carried out by a reputable tree surgeon and in accordance with BS 3998:2010 Tree Works - Recommendations.

A 75mm layer of mulch will be applied to the rooting areas of all trees as part of the initial landscape works post development. Mulch will be reapplied on an annual basis to ensure a 75mm layer is maintained.

Where trees die or require removing for health and safety purposes, new trees will be planted within the first available planting season to maintain the tree canopy cover throughout the site.

The selection of new trees for planting must take into consideration the current risks posed by pests and disease, climate change and site-specific conditions and constraints. The overall aim must be to create and maintain a diverse tree cover throughout the site.

6.2 Hedgerows

Hedgerows will be pruned annually to maintain their formal shape.

Where individual species within the hedgerow die, or become diseased, these will be removed, and replacement planting carried out within the first available planting season. Similarly, where gaps within the hedgerow arise, new planting will be carried out to maintain the continuity of the hedgerow.

The pruning of hedgerows should be undertaken outside the bird nesting season, this runs from 1st March to the 31st of August. Where this is not possible the hedgerow must be inspected for nesting birds prior to works commencing.

6.3 Planting areas

Planting areas are to be regularly maintained as required throughout the year. The maintenance activities will depend on time of year and weather conditions.

Annual maintenance activities will include the pruning/coppicing of shrubs and herbaceous plants, irrigation requirements during periods of drought and to enable establishment of newly planted species, hand weeding and reapplying mulch to planting beds.

Mature shrubs that outgrow their location and suppress surrounding vegetation will be removed, and replacement planting carried out as part of a long-term landscape strategy.

Gaps arising from plant death, disease or poor growth and establishment will be removed and replacement planting carried out with more suitable species.

The selection of plant species must take into consideration site specific constraints and soil types as well as ensuring that seasonal interest is maintained.

6.4 Turf Lawn

For turfed areas, the turf needs to be watered every day for the first week, and three times a week thereafter through to the end of October (weather conditions dependant).

Existing grass areas shall also be included in the maintenance regime as detailed below.

Regular grass cutting helps create a healthy dense sward. Mowing is most needed frequently in the warm, moist conditions of early and late summer; this is the time frame that the grass

will grow most quickly. In conditions such as this a regime of one cut once a week/fortnight should be implemented.

Grass should be kept between 35mm and 65mm between the months of April and October. Cuts should not remove more than one third of the leaf growth at any one time.

During drought conditions it is best to either not to mow or to set the mower to a higher cut of around 65mm. As a general rule, cuts should not remove more than one third of the leaf growth at any one time.

During the winter months cuts should be occasional, removing only the growing tips 'Topping'.

In high utility areas it is best to allow growth to reach and be maintained at around 35mm high. This allows for conservation of energy from the plant through the leaves as well as protecting surface underneath from wear and tear.

Avoid cutting grass in frosty or wet conditions. If the grass is cut sporadically and drastically, it will struggle to recover after each mowing and there will be a noticeable decline in the lawn's equality.

Lawn edges to be cut with lawn edgers to create a crisp profile every time the grass is cut. Do not allow grass areas to encroach onto footpaths.

6.5 Wildlife and habitat considerations

All tree and hedgerow works will be carried out in accordance with the Wildlife and Countryside Act 1981 (as amended) and the Habitat Regulations 2010. These regulations make it an offence to;

- Intentionally or deliberately kill, injure or capture protected species.
- Deliberately disturb protected species.
- Damage, destroy or obstruct access to a structure used for shelter or protection by a protected species.
- Take, damage, disturb or destroy the nest of any wild bird while it is in use or being built.
- Take or destroy the egg of any wild bird.
- Damage, destroy or obstruct access to bat roosts whether or not bats are using roosts at the time.

It is the responsibility of the contractor to ensure that no protected species are harmed whilst carrying out site clearance or tree surgery works.

6.6 Arisings

All arisings from tree, hedgerow and shrub pruning will be removed from site upon completion of works.

6.7 Mulch

Well composted organic mulch will be reapplied on an annual basis to ensure a depth of 75mm around the rooting areas of all trees and 50mm within all planting areas is maintained to benefit plant growth, health and vitality.

6.8 Litter

Litter and rubbish will be picked up and removed from within all public open areas throughout the year. All rubbish collected will be removed from site.

6.9 Irrigation

All areas of new planting will require irrigation throughout the growing season.

Water requirement will be dependent on species, soil types and weather conditions, however, as a guide, newly planted standard trees up to 18-20cm in girth will require approximately 30litres per day from April to September.

Watering will be carried out using a hose pipe fitted with a fine rose (subject to local restrictions).

Irrigation will be carried out for the first three growing seasons to ensure good root establishment.

Irrigation will be carried out first thing in the morning or late in the afternoon to avoid excessive evaporation or leaf scorch.

Water is to be provided for communal areas by the Landscape Maintenance contractor using a water carrier.

Refer to best practice guidance BS 4428: 1989 and with BS8545:2014 *Trees: from nursery to independence in the landscape – Recommendations*.

7 MAINTENANCE SCHEDULE

ITEM	ACTION	SEASON / TIME OF YEAR	FREQUENCY
Trees	Check plant survival and replace if necessary.	All Year	As required
	Check mulching depth and reapply to a depth of 75mm. Maintain a 1m diameter circle and increase to 1.5m on year 5.	Spring	Annually
	Formatively pruning young trees and recommended management of mature tree if necessary.	Winter / mid-Summer	As required
	*Irrigation.	Spring to Autumn	As required
	Weeding.	Spring to Autumn	As required
	**Fertiliser. Apply a slow-release fertiliser such as 'Fish Blood and Bone' to manufacturer's instructions.	Spring to Autumn	Year 5 or as required
	Visual tree inspection.	All Year	As required
Hedgerows	Check plant survival and replace if necessary.	All Year	As required

	Formatively prune hedgerows, check for nesting birds if undertaken inside nesting seasons.	September to February	Annually
	Check mulching depth and reapply to a depth of 50mm.	Spring	Annually
	Remove Spiral guards and canes once plants are deemed established to prevent water collection in guards.	Summer	Year 1 or as required
	Irrigation.	Spring to Autumn	As required
	Weeding.	Spring to Autumn	As required
	Fertiliser. Apply a slow-release fertiliser such as 'Fish Blood and Bone' to manufacturer's instructions.	Spring to Autumn	Annually
Planting areas	Check plant survival and replace if necessary.	All Year	As required
	Check mulching depth and reapply to a depth of 50mm.	Spring	Annually
	***Pruning/coppice shrubs and plants.	Winter / mid-Summer	As required
	Irrigation.	Spring to Autumn	As required

	Weeding.	Spring to Autumn	As required
	Fertiliser. Apply a slow-release fertiliser such as 'Fish Blood and Bone' to manufacturer's instructions.	Spring to Autumn	Annually
Plants in raised planters	Slow-release fertilizer or a liquid feed such as Osmocote Controlled Release - 6 months (or similar) in spring, or Fish Blood & Bone every six weeks between April and August. Broadcast fertilizer around the base of the planting at the manufacturer's recommended rate.	Spring or Spring to Summer	Annually Or Every 3 weeks between April and August
	* For all other maintenance works, refer to Planting areas above		
Lawn	Cutting / mowing	Spring to Autumn	Week / fortnight as required
	Topping (removing only the growing tips)	Autumn to Spring	As required
	Irrigation	Spring to Autumn	As required
	Fertiliser. Apply proprietary spring feed to manufacturer's instructions.	Spring	Annually
	Leave removal	Spring and Autumn	Twice a year

Arisings	Remove all arising from site once working operation is complete	All Year	As required
Litter	Remove litter and rubbish from public open areas.	All Year	As required
* Water requirement will be dependent on species, soil types and weather conditions, however newly planted standard trees up to 18-20cm in girth will require approximately 20litres every two weeks from April to September. This can be gradually increased to maximum every other day in the height of summer when prolonged dry spells. Equally it can be reduced in prolonged wet spells. Irrigation will be carried out for the first three growing seasons to ensure good root establishment. ** Some trees and the conditions that they are planted in will thrive on being annually fed. This can be down to many reasons such as soil type, soil condition, rootball restrictions and hydrological properties amongst others. This is very site specific and should be monitored and undertaken based on its immediate context. Fertilising / feeding a tree in low nutrient soils can also be seen as a method of growth control. *** Berry plants to be pruned in spring allowing berries to be available to birds for the autumn and winter months.			

